

Just a phase in life? School students and part-time work

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ABSTRACT

This is an empirical investigation of Australian secondary school students who have part-time jobs. It is based on analyses of national longitudinal data covering a period of almost twenty years, from the late 1970s to the mid 1990s. Data from four separate age-based cohorts of young people are analysed, with a focus on the youngest cohort, that born in 1975, as well as additional data from a more recent sample of students who were in Year 9 in 1995.

The extent of student involvement in part-time work is described, with reference to rates of employment and to average hours worked per week. Although there is some variation by age and year level, by the early 1990s one third of senior school students spent an average of nine hours per week in a part-time job.

The background characteristics of student-workers are examined. Students who were lower school achievers were less likely to be employed, as were those from lower socioeconomic status backgrounds. These patterns, matching observations from other countries in which there are comparable or higher rates of student employment, indicate that some students may be disadvantaged in this part-time job market.

Students had generally positive perceptions of their jobs. A large proportion enjoyed their work, and the money and the independence that it gave them, and they believed it would improve their future employment prospects. Apart from these subjective views of students, the longitudinal nature of these data enabled the outcomes of in-school employment to be investigated.

Part-time work was not found to be harmful to educational outcomes, measured by school completion, final year results, or transition rates to tertiary study. Significant benefits were found in the post-school labour market, where student-workers experienced less unemployment in the first few years after leaving school than did non-workers. Such findings lend support to the argument that early experience in the labour market is one way of achieving a smoother transition from school to work.

DECLARATION

This is to certify that

- 1) the thesis comprises only my original work;
- 2) due acknowledgement has been made in the text to all other material used; and
- 3) the thesis is less than 100,000 words in length, exclusive of tables, figures, bibliography and appendices.

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When it's not too early, it must be too late

I sit on the bench flicking through *Woman's Day*. More stuff on Di and Charles. I glance up at the clock. 8:45pm. Only 15 minutes to go. Time to start packing up.

It's Friday night at Tuckerbag: I'm working in the deli. For the last hour I've had one customer. I don't know why they don't close earlier.

I spend my time reading magazines and re-wiping spotless benches. With 15 minutes to go I can start packing up, but not before, in case the manager comes down. I start to move quickly. If I don't hurry I won't get out on time then the manager will complain that I'm too slow. You see, he has to pay me overtime. In his mind, I either pack up too early or finish too late.

"Yes.... um, hmm, let's see," she says slowly. "Could I, um, have a taste of that fetta cheese?" The clock says 8:57pm. "Ah, no, a bit too salty for me. I know, I think I'd like some mortadella."

There's no mortadella sliced. I'll have to clean the slicer again. "Sure, how much would you like?" I say through clenched teeth. "Ah... let's see, Bill will want some for lunch tomorrow, and so will Peter, oh no he won't he's going on an excursion tomorrow, but Susie might, you never can tell with Susie." "How much would you like?" 8:59pm. Emma would've said we were closed. "Make it five slices," she says decisively. I start slicing. "Actually make it six"

I wrap the mortadella and push it over the counter. "Will that be all?" "Ah, I think I'll make pizza for tea tomorrow night, so I'd better get some olives."

It's 9:13pm when I give her the olives and she finally leaves. "Thanks very much," she says. "Have a nice night." I sigh and get ready to pack up, again. The manager walks in and looks up at the clock.

Jess Hurley is in year 11 at Princes Hill Secondary College.

(The Age, 17 July, 1995)

It's just a Friday night shift at the supermarket but **Jess Hurley** is caught between a rock and hard place.

I spread out the garbage bags over the meat in the display cabinet. I clean the slicer. I wrap the containers of olives and fetta cheese. I go out the back to fill up the mop bucket.

"Excuse me. Is anybody here?" I hear somebody calling. Oh no! 5 minutes to closing. I walk out and smile. "Hello. May I help you?"

INTRODUCTION

Many of the youthful part-time workers encountered in supermarket delicatessens, hot bread shops and fast food outlets throughout Australia are also full-time secondary school students. They are student-workers like Jess, who provides the preceding anecdote about learning time management skills on the job. Over the past three decades in this country, the increasing number of students who combine study at school with part-time employment out of school hours has been widely observed, although there have been varied estimates of how many school students have jobs. Furthermore, while the trend has been well recognised, its implications have frequently been overlooked. Consideration of the student-worker phenomenon gives rise to a number of questions about the incidence, nature and effects of part-time work among teenage school students - issues that are of concern to students, their parents, educators (both policy makers and practitioners) and the wider community. Such questions are the subject of this investigation.

THE IMPORTANCE OF PART-TIME WORK BY STUDENTS

In most industrialised countries, including Australia, the tendency for students to stay on at school longer than they did in the past, together with changes in the opportunities available in the labour market, have resulted in growing numbers of teenagers who are both full-time students and part-time workers.

There are several interlocking reasons why this trend should be the focus of a thorough investigation. The nature of the transition from school to work has changed in that it is now becoming the norm for young people to begin working on a part-time basis before leaving school; it is occurring against a background in which governments have made strong policy commitments to strengthening the links between school and work; and there is increasing interest in the learning that occurs in the workplace. Each of these developments prompts other questions about student involvement in part-time work, especially the potential effects of such activity. Together, these trends, which have occurred in many industrialised nations, provide the impetus and rationale for this study of student-workers in Australia.

Changes in the transition from education to work

The transition from adolescence to adulthood, as it has traditionally been understood by sociologists and psychologists, involves a number of connected processes, including those associated with moving into the labour market, with attaining economic independence, with establishing a household, and with family formation. On the basis of Australian and international studies over a lengthy time period the attitudes and aspirations of young people have been demonstrated to be 'conventional' in the sense that the majority see work as important (Dwyer, 1991; Hannan, Ferguson, Pollock, & Reeders, 1995; Looker, 1993) and access to employment as a major goal in their lives - whether this be a 'steady job' (Dwyer, Harwood, & Tyler, 1999), or a secure, interesting and well-paid full-time job (Bowers, Sonnet, & Bardone, 1999).

In the past, getting a job has been regarded as the first step in the 'standard biography', which typically consisted of establishing financial independence, partnering - getting engaged and then married - then saving for and moving into ones' own house, before having children. At a theoretical level there is much debate about both the usefulness of this standard biography in explaining the experiences of young people today (Beck, 1992), and even more fundamentally about the validity of the concept of youth as a developmental stage in life (Wyn & White, 1997). Sociologists now question the assumption of a natural linear process of development, from childhood through youth to adulthood, arguing that such a linear progression is too simplistic, and many researchers have become sceptical of the relevance of age as a social category (Wyn & White, 1997).

The concept of the normal biography, which, in keeping with the developmental model, involved a traditional sequencing of life events in a linear pattern, with movement from (childhood) dependence to (adult) independence occurring within predictable social structures and institutions, has also come under scrutiny (Beck, 1992; Giddens, 1990; Looker & Dwyer, 1998). Beck (1992) has argued that in the 1990s the normal biography of the industrial era is less appropriate as a framework for understanding social processes than the idea of a choice biography in which individuals determine their own pathways. According to this view, in this time of late modernity, as more choices become available to the individual, transition to adulthood is no longer predictable; there is greater complexity as everyone must negotiate their

own way through life, constructing their own social biographies. Furthermore, because there are more choices, there are attendant levels of risk and uncertainty, and individuals must be more skilled in decision making (Beck, 1992).

While differing theoretical perspectives and explanatory models may be called upon to describe and attempt to explain the broad process of transition to adulthood, it is undeniable that changes have occurred in the transition from education to working life. Evidence from the OECD has shown that during the 1990s in many countries this transition is commonly taking longer, or covering a wider age span, than it did a decade ago. This trend is due mainly to the increasing proportions of young people who are staying longer in full-time education, both completing upper secondary education, and continuing into tertiary study. Extended participation in education has been attributed to a combination of factors. Among the main reasons are structural shifts in the labour market, with a downturn in employment prospects for youth; the belief that educational qualifications are a sound investment in the future; the reform of curricula and teaching methods making schools more attractive to a broader range of students; and government-backed financial support to make education more appealing than unemployment (Bowers et al., 1999). Delays in moving from one level of education to another, variously caused by a shortage of tertiary places or the desire of young people to take time off from study, may be other factors contributing to a lengthened transition (OECD, 2000).

One of the major social effects on young people of this protracted transition between education and work is the continuation of certain features of adolescence, particularly prolonged economic dependency on families; the term 'dependulncy' has been used to describe the status of such young people (Hartley, 1993). Among the consequences of this increased dependency, housing transitions are more difficult, and young people are now staying on longer in the parental home (Bowers et al., 1999; Maas, 1990). Another result has been added pressure for young people to enter the part-time labour market, in order to help finance their extended education. However, this is not to deny that young people are purposeful social actors, and that personal agency also plays a role - in this case, with respect to their decision to take on part-time work while they are students.

Sociologists recognise that the relationship between consciously chosen action and external constraints is complex, so that it is not easy to disentangle the two, to identify the extent to which young people take an active role in shaping their own futures (Dwyer, Harwood, & Tyler, 1998; Wyn & Dwyer, 2000). Rudd, (1998) in a study of young peoples' transitions in the UK, refer to both micro (personal) and macro (structural) factors influencing the extent to which these youth have agency; while Wyn & White (1997) point to the importance of context in understanding agency. Dwyer et al (1999) suggest a 'continuum of control' to describe the range in young people's feelings about their capacity to control their lives, and their concomitant levels of satisfaction or dissatisfaction.

For a variety of reasons, in which both structural factors and personal agency may be implicated, students now are more likely to combine school or post-school study with work. Research evidence shows a considerable amount of overlap between the two life spheres of education and work among post-school age young people in Australia. The Life Patterns project provides a ten year profile of young people from their time of leaving school in 1991, with a focus on those who did further study; a large proportion of this cohort engaged in various combinations of work and study during the decade (Dwyer et al., 1998; Dwyer et al., 1999). This blending of study and work is not confined to post-school students; a part-time job while at secondary school is the means by which many young people gain their earliest experience of the labour market (Ashenden, 1990). Australian teenage student-workers '*get to know the labour market at grassroots level*', just as do their counterparts in the Netherlands and elsewhere (du Bois-Reymond, 1998:67).

Hence, as well as taking longer, the transition from education to work is also becoming more blurred. The shift from full-time student to full-time worker is less sharp than it was in the past, when education and work were considered to be mutually exclusive domains. This blurring between the classroom and the workplace is also being encouraged by education systems, through the promotion of school-organised workplace experience programs at the secondary level, and at the tertiary level, not only through the more traditional structures of apprenticeships, but also more recent initiatives such as 'sandwich courses' that incorporate a period of employment into university study (Hakim, 1998).

The old linear model of transition, involving the movement from full-time student to full-time worker, is an outmoded one; there is clear evidence that combining study and work is a common pattern among young people. The latter is an instance of how the indicators of adulthood are now achieved incrementally, some occurring earlier and others later (Dwyer et al., 1999; Wyn & Dwyer, 2000). Yet despite such changes the assumption of linearity persists, wherein “school is seen as the *prior* educational setting where ‘learning’ occurs and work is the *subsequent* setting, where learning is ‘applied’ and “educational policy remains locked into a view of secondary schools as a realm, separate from ‘life’, where young people are prepared *for* life” (Wyn & Dwyer, 2000:156).

Public policy commitment to linking education and work

A major emphasis of current education policy, at both federal and state levels in Australia, and in OECD countries more generally, is on the role of schools in preparing students for the workforce. Across the OECD member countries, national strategies aimed at improving the school to work transition have concentrated mainly on the supply side of the labour market, with policies and programs seeking to enhance the employment prospects of youth by making sure that they develop the skills that are needed to get and keep a job. Efforts to increase the employability of young people have included three types of initiatives - those aiming to strengthen vocational education, to shape the curriculum in ways that reflect changing work tasks and employer needs, and to provide experience for students in work settings (Bowers et al., 1999).

Steps to integrate vocational and general education have involved developing the vocational stream within general education, to make schooling more diverse and meet the interests of the widest possible range of students and thereby increase school retention. As part of this process, the introduction of pathways which provide qualifications leading to both work and tertiary study is one method that has been adopted to counter public perceptions of vocational education as a less desirable option (Bowers et al., 1999). Attempts have also been made to link the content of education to work skills, for instance through unified qualifications frameworks. A third way in which policy makers have sought to improve young people’s employability is through the promotion of programs that give students experience in a

work setting while they are still involved in education. Work-based learning in schools is claimed to have a number of benefits, enabling students to acquire knowledge and skills related to employment in particular occupations and industries, to engage in career exploration, and to develop greater personal and social competence related to work (Bowers et al., 1999; Stone, Stern, Hopkins, & McMillion, 1990).

Recent OECD research, a thematic review of the transition from initial education to working life, drew on data from 14 member countries and sought to identify the types of national policies and programs associated with successful transition outcomes (OECD, 2000). Indicators of the latter, for the purpose of the review, were conventional economic measures, such as rates of school completion and levels of unemployment after leaving education. One of the several key features shown by the review to be linked with effective transition systems was the existence of opportunities for young people to combine education with workplace experience - be this through apprenticeships, school-organised work experience programs or paid part-time work. The review noted that 'comparative data shows a clear correlation between the opportunities for teenagers to combine their study with work, in whatever way, and employment rates among young adults.' (OECD, 2000:Exec summary). A healthy economy with a 'youth friendly' labour market, and learning pathways and recognised qualification frameworks that were clearly defined and tightly connected to a range of post-school destinations were among other features found to be associated with successful transition outcomes.

Turning from the general situation across OECD countries to the more specific Australian context, it can be observed that students in this country gain first hand exposure to the workplace via two main avenues. They may do so formally, through organised, school-based programs: these include work experience, generally during the compulsory years of secondary schooling, and, in the post compulsory years, more extended vocational programs which incorporate work placement. Policy commitment to programs at both of these levels of schooling is exemplified by the report of the 1997 federal government inquiry into the factors that influenced the employment of young people, which recommended that schools be encouraged to adopt high quality workplace education programs for Year 11-12 students, and extend workplace education and career guidance for students in Years 7-10 (House of Representatives Standing Committee on Employment, Education and Training, 1997).

The second way in which students acquire workplace experience is through informal, 'naturally occurring' means - from their school holiday jobs or part-time work after school. But while policies aimed at improving the work readiness of students have been pursued in schools, policy makers have failed to recognise that large numbers of those young people have already entered the labour market on a part-time basis.

It has not been easy, in the past, to directly compare the extent of student exposure to the workplace under these formal and informal arrangements. To do so requires information not only about both the numbers of students participating in school-organised workplace programs and the numbers gaining informal experience of work as a result of their part-time employment, but also about the amounts of time spent in the workplace by students in each category. Furthermore, considerable overlap between the two could be expected. However it seems reasonable to assume that the proportion of students who spend time in a workplace as paid part-time employees is relatively greater than the proportion who are involved in school-based programs that take them into the workplace. And this appears to be confirmed as the data with which to make such comparisons become available.

The value of workplace learning

In addition to the economic imperatives that have driven policies to increase the vocational content of schooling, there has been growing recognition by educators and others of the benefits that students can derive from contextualised learning in the workplace. This acknowledgement of the value of the worksite as a place for learning therefore provides added impetus to investigate the incidence and nature of the part-time work of students.

Vocational education embodies the principles of integrating theory with practice, allowing the opportunity to apply skills in real situations and thereby optimising learning. Workplace learning is seen as an important ingredient for quality outcomes in vocational education. In a survey of the literature regarding workplace training Harris, (1998) observed that both the literature and policy enacted during the 1990s assumed that integration of on- and off-job training was desirable. This assumption was reinforced by the view from cognitive psychology that procedural knowledge and

strategic knowledge – that is, techniques, and how to decide what to do when – are best learned in the workplace.

Sweet (1995), a strong advocate of school-based vocational education, claimed that workplace learning can also enhance learning in general by inverting '*the traditional relationship between theory and practice, between concept and experience, between the classroom and the world outside it*' (Sweet, 1995). He argued that one of the attributes of workplace learning is that the direction of learning can occur from practical problem solving to basic principles – in this way, vocational learning reinforces general educational objectives (Sweet, 1993). Ryan (1997) noted some consensus in the U.S. research literature that vocational education could be used to enhance academic skills.

Researchers such as Resnick (1987) described the characteristics of school programs that were effective in teaching problem solving and thinking skills. These features, which were also common to work-based learning, included moving from the particular to the general, setting learning in context, and building competence step by step. She argued that certain aspects of work experience, like teamwork, should be incorporated into schooling more generally.

With respect to school-based vocational programs as they currently operate in Australian secondary schools, Billett (1998) has argued that access to authentic workplace experiences is essential, regardless of whether the programs aim to develop an awareness of the world of work, or to develop specific vocational knowledge. Although there are problems in implementing the work placement component of VET in schools programs - especially in accessing sufficient numbers of work sites and accommodating placements within the school timetable (Ainley & Fleming, 1997; Cumming & Carbines, 1997; Misko, 1998; Spark, 1998) - it appears that work placements produce beneficial outcomes for students.

Perceived benefits of workplace learning

A range of benefits to students has been identified empirically. Grosse (1993) found that students in work placements gained portable skills and personal confidence, as well as developing an understanding of the workplace and its links to their own learning careers. An evaluation of TRAC, a vocational program in retail and commerce which included a significant workplace component, highlighted the learning benefits for

students (Scharaschkin, 1995). The advantages that TRAC provided over traditional classroom learning were that it involved engaged (rather than detached) learning, flexible (not fixed) times, an adult work ethos (in contrast to teenage peer norms), tangible rewards, immediate (not delayed) feedback, and authentic (not limited) consequences. The researcher concluded that TRAC students developed knowledge and skills that were both generic and specific, were based on reflection and action, integrated theory and practice, and had both immediate and enduring value. Favourable outcomes for students included increased motivation, confidence, satisfaction, and personal and practical skills. Large scale surveys have also generally found students reporting very positive views of their work placements, which provided them with a means of '*gaining useful job skills*', '*building self-confidence*' and '*enhancing confidence in finding work*' (Teese, Davies, & Ryan, 1997).

The views of others confirm that students benefit from work placement programs. According to teachers, parents, and employers, the major advantage for students may not be the vocationally-specific skills that they develop, but the social and personal skills – especially confidence, self-esteem, maturity, independence, and self-reliance. Teachers also report students having increased motivation to learn, which is reflected in improved school attendance and behaviour and lower attrition, as well as in the acquisition of key competencies for lifelong learning (Lepani & Currie, 1993; Malley, Frigo, & Robinson, 1999; Spark, 1998).

Against this background knowledge of the ways in which students may benefit from school-based programs that involve time in the workplace, it is desirable to weigh up the experiences of student-workers who are in paid part-time jobs, and the consequences which that employment might have for them.

The potential effects of part-time work

Perhaps the most important issue pertaining to part-time work concerns the effects on students of spending time in a job while they are still at school. The current policy commitment to strengthening the links between education and work is built on the assumption that work experience during schooling enhances later employment prospects. However the positive outcomes that are claimed for part-time work in terms of experience in the post-school labour market must also be considered in the

light of other possible effects. There is a substantial literature on this subject, particularly from North America, where the incidence of student-work is high. This literature reveals shifts in emphases over time as to the significance assigned to consequences of such work, as well as differences according to the perspective and discipline of the researchers conducting the studies.

During the 1970s it was asserted by several different United States government advisory bodies that early work experience would smooth the transition from youth to adulthood. The President's Science Advisory Committee argued that this transition was delayed by schools, which isolated adolescents from adult contexts, and to remedy the situation work and school needed to be more closely integrated (President's Science Advisory Committee, 1973). The report of this committee, and others like it, such as the National Panel on High School and Adolescent Education (1975), the Work-Education Consortium of the National Manpower Institute (1978) and the National Commission on Youth (1980), recommended policies that would increase the opportunities for youth to combine school and work, but they did so in the absence of empirical evidence about the supposed benefits of youth work (Phillips & Sandstrom, 1990; Ruhm, 1997; Stern, McMillion, Hopkins, & Stone, 1990). Their advice was based on widely held perceptions that the experience of work had desirable character-building effects, enabling students to develop independence and a sense of personal and social responsibility, as well as a positive orientation to work by learning 'good' work habits in the 'real' world - assumptions that also underpin education and training policy at the present time.

However during the 1980s there was a reappraisal of this positive view when a number of researchers - most notably, Greenberger and Steinberg and their associates - began to examine the educational and psychosocial consequences of in-school employment. Various studies found part-time work was more likely to interfere with rather than enhance schooling, and to have harmful effects on adolescent development (D'Amico, 1984; Finch & Mortimer, 1985; Greenberger & Steinberg, 1986; McNeil, 1984; Steinberg, Greenberger, Garduque, & McAuliffe, 1982a; Steinberg, Greenberger, Garduque, Ruggiero, & Vaux, 1982b). Public concern raised by such studies highlighting the potential costs of youth work led to efforts to restrict it - at the local level, through negotiation between school administrators and employers, and at the

state and federal level, by moves to strengthen child labour laws (Graves, 1992; Helms, Bills, & Ozcan, 1994; Ruhm, 1997).

Educational effects

From a theoretical perspective, the potential effects of part-time work on schooling may be positive or negative. The claims that part-time work had a detrimental effect on school performance were based on the idea of a zero-sum model (Marsh, 1991) which suggests that time adolescents spend on non-academic activities necessarily erodes time devoted to academic tasks. According to this view part-time work contributes to poor school performance because the student is unable to complete homework and study requirements; other leisure activities financed by the job may be a further distraction from study. Following this line of reasoning the amount of time spent in the job is a crucial variable in assessing its possible harmful effects. Some researchers have argued that time spent working is not the only element to consider, but that other constructs, particularly academic self-concept, and involvement in school, also play a part, with commitment to school being undermined by commitment to the workplace (Greenberger & Steinberg, 1986; Marsh, 1991). However, regardless of whether the impact is on time available for school work, or on the level of engagement in schooling, part-time work is seen by these critics as subverting traditional academic goals.

Conversely, as claimed by the proponents of workplace learning, academic outcomes may actually improve as a result of students having a job. This may be a direct effect, because useful knowledge and skills may be learned, and because the workplace provides the opportunity and incentive to apply what is learnt at school, or occur indirectly, because increased self-concept and greater responsibility and motivation acquired through employment lead to better school performance. Alternatively, although less commonly argued, there may be a 'scare value' in part-time work. The job itself may be a negative experience, but nevertheless induce greater motivation on the part of the student, and therefore, indirectly, lead to improved school performance. Ashenden (1990:30) cites some anecdotal evidence for this, quoting from a study by Wilson et al (1987) a teacher's belief that 'Some students are motivated to work harder so that they don't have to be shelf-fillers for the rest of their lives.'

If part-time work influences academic performance, either positively or negatively, then it may also effect the likelihood of school completion, and, indirectly, post-school destinations. Progression into higher education or into further education and training is dependent on school completion and academic performance, especially in the final years of schooling, hence tertiary study options may also be effected by part-time work while at school. The overseas literature provides a considerable amount of evidence about these educational outcomes, but few such hypotheses have been tested empirically using data from Australian students.

Effects on adolescent development

It has also been argued that the experience of part-time employment can have effects on young people's social and psychological development. Researchers interested in adolescent development have focused on the effects of part-time work in helping young people to learn to take on adult roles. They have suggested that a part-time job could contribute to this process in two main ways - by providing opportunities for young people to acquire autonomy and self-reliance, and to develop interpersonal relationships (Safyer, Leahy, & Colan, 1995). The workplace is a setting in which students can exercise decision making skills and demonstrate competence, and thereby feel more 'grown up'. It is also a place where they can interact with other people in various ways, especially in learning from adults and working cooperatively in teams.

Some studies, even those that have been critical of youth work, have concluded that it is associated with personal attributes such as punctuality, dependability, and responsibility, as well as high levels of self-reliance (Greenberger & Steinberg, 1986; Steinberg & Dornbusch, 1991). However Greenberger (1986) also argued that in-school employment did not promote the development of interpersonal relationships because for most student-workers the workplace tended to be age segregated and peer saturated, so that they had little contact with adults, but only superficial relationships with their peers. The researchers were concerned that youth work interfered with what they saw as one of main tasks of adolescence - the development of identity. According to their view, student-workers risked losing a 'moratorium' period in which they could explore alternative interests and identities; instead, deprived of opportunities for psychological growth, young workers were forced into 'adultoid' behaviour for which they were not ready (Greenberger & Steinberg, 1986). Further

studies also drew attention to other costs of youth work, claiming that it fostered unhealthy behaviour, such as tobacco, alcohol and drug use, and undermined family relations (Bachman & Schulenberg, 1993; Steinberg & Dornbusch, 1991; Steinberg, Fegley, & Dornbusch, 1993). While many of these earlier conclusions have been disputed by other researchers, an association between alcohol use and long hours of part-time work was demonstrated in one recent study (Mortimer & Finch, 1996).

Effects on vocational development

Besides having an influence on educational outcomes and on psychological and social development, it has also been postulated that the experience of part-time employment in the adolescent years may have an effect on the career development process. Active engagement in work roles could influence adolescent thinking about the potential rewards from work, so clarifying job preferences and work values, and it could help in career decision making. Part-time jobs may therefore operate as a kind of unofficial work experience program for many students, outside of the planned programs conducted by their schools, but nevertheless influencing their decisions about what sort of career to follow and what sort of study to undertake after leaving school.

However the evidence concerning the effect of part-time employment on these two aspects of career development is not conclusive. Steinberg et al (1982b) claimed youth work resulted in cynicism and a preoccupation with the material rewards of employment. This finding was rejected by Skorikov (1997), who showed that for student-workers the intrinsic motivation to work increased, while other extrinsic aspects, such as prestige, were valued less; therefore youth work, it was argued, promoted more realistic work values. But Mortimer, Pimental, Ryu, Nash, & Lee (1996) concluded that neither work status itself, nor the intensity or hours of work, had an effect on occupational value formation. However the researchers found that the conditions of work - that is, the quality of the job, and the opportunity to acquire skills on the job - strengthened the intrinsic orientation to work, and also the extrinsic as well (Mortimer et al., 1996). This finding emphasises the importance, when attempting to assess the effects of part-time work, of considering the types of jobs which students do.

While significant others, especially parents, teachers and careers advisors, are among major influences on young people's decision-making with regard to employment and

careers, work experience or part-time work is also acknowledged by young people as being of some importance in this regard (ANOP, 1990). However there is little research evidence to support this view. Skorikov (1997) found no connection between part-time work and career decidedness among students. It may be that part-time work does not play a major role in career exploration because students work primarily to earn money, and they see their jobs as irrelevant to future career plans.

The preceding discussion canvassing some of the potential and demonstrated effects of part-time work - effects on schooling, and on vocational and adolescent psychological development - highlights the importance of examining the issues associated with student-workers, with a focus on the experience of student-workers in Australia. It might be argued, however, that among the various consequences of student-work that have been identified, in the current climate in which the focus of education and training policy is on preparation for the workforce, post-school labour market outcomes have the most salience. For a combination of reasons, therefore, the effects of part-time work on school students is a subject that merits investigation. And the incidence of part-time work among students, the characteristics of students who work, and the nature of their jobs are contextual questions when investigating those effects.

THE DATA

This empirical investigation of the student-worker phenomenon in Australia is based on a uniquely comprehensive longitudinal database. The focus on young people who combine two activities - study at school and a part-time job - necessitates information about the two domains of education and the labour market, at the individual record level. In the past, in Australia as elsewhere (Hakim, 1998), official data collections such as national labour force statistics adopted a single coding of activity, with economic status usually given priority over social status, an exception being for students in full-time education who were coded first to this status, and hence assumed to be economically inactive, regardless of whether they were employed or not. Although more recent official data collections have acknowledged the labour market participation of students, and allowed for multiple statuses, they do not provide individual level information which can be cross-referenced to other background characteristics and to outcome measures.

Most previous Australian research studies of student-workers have been small-scale and localised, providing little indication of the overall extent of student labour force participation at a national level. While Australian Bureau of Statistics (ABS) data do not suffer from this limitation, they cannot be used to tell us anything about the personal characteristics of school students who are also part-time workers, or about the sorts of jobs that students have. Most significantly, nor can ABS data address the issue of what might be the impact of part-time work on students. By contrast, *Longitudinal Surveys of Australian Youth* provides a large-scale database that can be analysed to investigate such questions.

Longitudinal Surveys of Australian Youth (LSAY) is the name of a consolidated program of surveys that has been conducted by the Australian Council for Educational Research (ACER) over more than twenty years. It includes three separate but similar programs - *Youth in Transition* (1978-1998), the Australian Youth Survey (1989-1998) and the most recently established LSAY component, which began in 1995. All were based on probability samples of the student population, selected using a stratified cluster design - in the case of *Youth in Transition*, the samples were of persons of the same age, and in the case of LSAY, they are of students who were in Year 9 at school in a particular year. Statistical analyses of the data use sample weights calculated to adjust for sample design and sample attrition, and results can therefore provide national estimates. Weighted results are reported in *all* of the tables that are included throughout this study.

Youth in Transition

The *Youth in Transition* (YIT) project consisted of a series of longitudinal surveys of four age-based cohorts of young people. It began in 1978 with the survey of a national sample of more than 6000 young people who had been born in 1961. In later years (1981, 1985 and 1989) three other samples of similar sizes from the 1965, 1970 and 1975 birth cohorts were added to the survey program.

The design of the *Youth in Transition* surveys was initially influenced by existing samples and data. In 1975 and again in 1980, in each of two phases of a national testing program, nationwide samples of 14-year-old and 10-year-old students had completed standardised achievement tests in basic reading and mathematics. The

surveys of the first three groups - the 1961, 1965 and 1970 birth cohorts - were established as follow-up surveys of the students who had been tested by ACER in 1975 as part of the Australian Studies in School Performance (ASSP) project, and in 1980 as part of the Australian Studies in Student Performance project (Bourke & Keeves, 1977; Bourke, Mills, Stanyon, & Holzer, 1981; Keeves & Bourke, 1976). The first of the longitudinal surveys, which began in 1978, was based on the sample of the 1961 cohort who had been tested in 1975 at age 14 as part of the ASSP project. In 1981, the sample of 10-year-olds tested in 1975 reached age 16, and became the second sample in the longitudinal studies program. And in 1985 the sample of students who had been 10-year-olds when they were tested in 1980 in the second phase of the ASSP project were surveyed for the first time as part of *Youth in Transition*. The follow-up of these three samples exhausted the potential of the ASSP studies to provide already-tested samples. In 1989 standardised tests were designed and administered to a national probability sample of more than 5000 students born in 1975 and then aged 14; these students became the fourth *Youth in Transition* cohort.

Annual surveys of these four age-based samples yielded information (up to 1994) covering ages 17 to 33 years for the 1961 cohort, 16 to 29 years for the sample born in 1965, 15 to 24 years for those born in 1970, and 14 to 19 years for the sample born in 1975. Figure 1.1 illustrates the structure of the program to 1994, showing sample age and survey year for each of the four samples. (In the case of the 1961 cohort, the two gaps in the otherwise annual cycle of surveys indicate where resource constraints precluded a survey - in 1985 and 1988.)

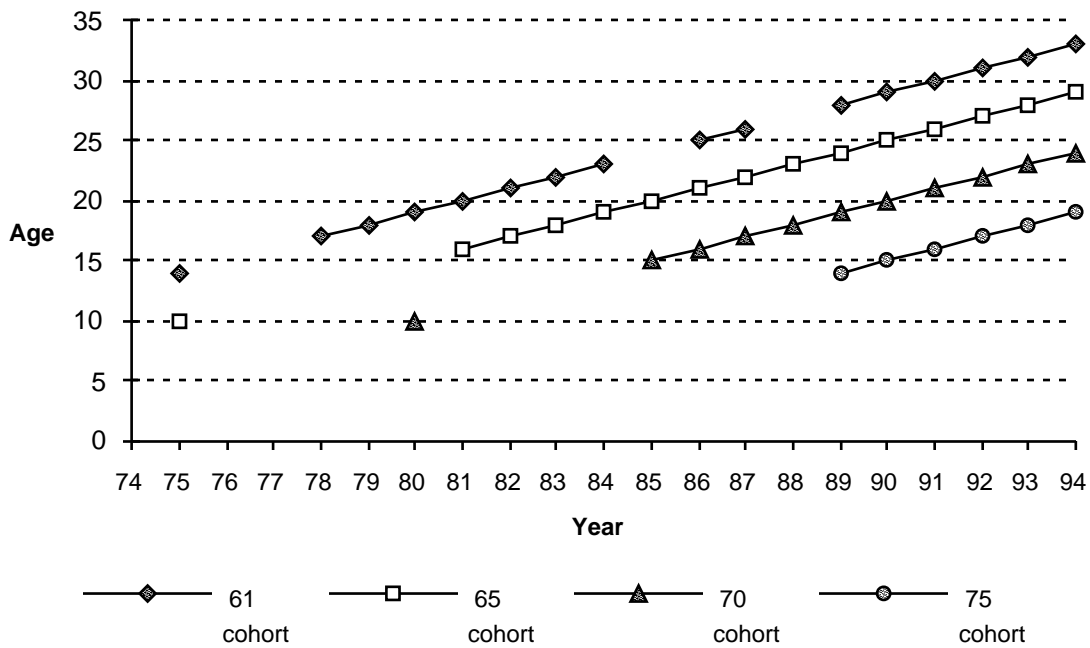


Figure 1.1 *Youth In Transition* samples surveyed by year and age

Longitudinal Surveys of Australian Youth

The sampling method was revised slightly in the mid 1990s, with a change from age-based to school Year-based samples. In 1995 a large nationally representative sample of Year 9 students was selected. Numbering more than 13000, these students completed tests in reading and mathematics and a questionnaire in their schools. They have been surveyed annually since that time (initially by mail, and subsequently by telephone), as they have moved through school and into further education and the labour market, while a new Year 9 cohort of a similar size was established in 1998.

The analyses in this study draw most heavily on the *Youth in Transition* cohorts. Data from all four birth cohorts are used, with a focus on the 1975 birth cohort. Reference is also made to the LSAY 1995 cohort as a source of more recent information, and because it provides additional insight into the work-related experiences of younger students.

Major focus of the data

For each sample, the initial phase of the survey program provided important data on school achievement of sample members, in the form of results on standardised tests. Basic demographic data, encompassing information such as the country of birth of respondents and their parents, language used at home, parental education and parental occupation, were also collected in the early stages of the survey, by means of self-enumerated questionnaires. The ongoing data collection was primarily concerned with participation in education and the labour market. The annual questionnaires included a core of repeated measures, consisting of:

- **Status, month-by-month.** Respondents were asked to indicate their educational and/or labour force status in each month. Multiple responses within columns were legitimate, enabling the recording of a single status or a combination of statuses. The status distinctions made were those between full-time and part-time work, full-time and part-time education, unemployment, and being out of the labour force.
- **Educational participation.** Details of course of study, institution attended, qualification sought, major area of study, participation full-time or part-time, and when course was commenced and to be completed, were asked in a question referenced to the month of October.
- **Labour force participation.** Details of type of occupation, income, hours worked per week, and weeks worked in October.

The context of this educational and labour force participation was measured by additional questions, some of which appeared in one year only, while others were repeated over several years. Among the latter were a regular series of questions about respondents' living arrangements, including household composition, and a set of items designed to measure respondents' perceptions of their quality of life.

Hence there is available year-by-year information on education and labour force participation, information that is comparable within and between samples across years. Therefore, as well as being able to examine educational and occupational participation within any one sample both at any one point in time, and as the birth

cohort ages, it is also possible, by looking at differences between samples, to explore the way in which the dynamics of this participation have changed with changing social and economic conditions during the 1980s and 1990s.

THE RESEARCH QUESTIONS

For the reasons that have been outlined at the start of this chapter, the part-time work of school students is a topic of some importance. Hence this investigation of student-workers in Australia. For the purpose of the analyses that were undertaken, student-workers were defined as secondary school students who participated on a part-time basis in paid employment during the school year. Students who did unpaid jobs, or helped with household chores, or had a job during school holidays only, were excluded. This was because, although other research has shown that informal unpaid work done by students is considerable (Aronson, Mortimer, Zierman, & Hacker, 1996; Victorian Industry Education Partnerships, 1999; Wilson, 1989), the context of such activity is different to that in which paid employees operate, as is the motivation for working, hence making interpretation of results much more problematic. Similar concerns apply to vacation employment, which differs from academic year employment in incidence, nature and impact (Bentley & O'Neil, 1984; Schoenhals, Tienda, & Schneider, 1998).

Based on analyses of the LSAY data, especially that from *Youth in Transition*, the study sought to answer five specific questions about Australian student-workers.

1. What is the extent of student participation in part-time work, and how has it changed over the past two decades?

It is necessary to know more about the extent of part-time work - both the proportion of school students employed in part-time jobs and the number of hours they work - in order to gain an understanding of the dimensions of the phenomenon. This significant change in the pattern of transition from education to work must be more fully appreciated by policy makers; information about the extent of student participation in the labour market is one means by which they can be made more aware of the issue, and the implications that it has for schools.

This question is addressed in Chapter 3 by drawing on data from each of the four YIT cohorts, and focussing on school students who were aged 17 in 1978, 1982, 1987 and in

1992. Employment rates and hours worked per week each provide measures of the extent of student participation in the labour force. Data from one group - the 1975 birth cohort, and covering the period from 1989 to 1992 - are also used to look at how the incidence of part-time work is related to the age and year level of students, and a further indication of this is obtained from information collected from the LSAY Year 9 sample in 1995.

2. What are the personal and educational characteristics of student-workers?

It is important to have an understanding of the social and academic backgrounds of the students who are working. Such information is relevant because, when investigating the possible effects of job-holding on school performance, it is essential to have some knowledge of the prior level of educational achievement of student-workers. Furthermore, information about social background is necessary if equity questions are to be considered. On the one hand, if employment has a negative effect on school performance, and students from lower socioeconomic status backgrounds are more likely to have part-time jobs, then the educational disadvantage of that group could be exacerbated. On the other, if employment has positive effects, and lower socioeconomic status students are less likely to be employed, then their relative disadvantage is compounded.

Analyses to identify the sorts of students who are most likely to have part-time jobs refer to a number of student background characteristics in two broad categories — personal and family characteristics (gender, ethnicity, socioeconomic status, and location) and educational factors (school type, early school achievement, self concept of ability, and educational aspirations). Within this range of characteristics, there is a focus on the social background of student-workers, and their educational achievement, because of the equity implications which are attached to those two aspects of background.

The results of the analyses are presented in Chapter 4, which uses data from student-workers who were 17 years old in 1978, 1982, 1987 and in 1992, from each of the four *Youth in Transition* cohorts. Additional insights into the educational orientation of younger student-workers is obtained from students who were in Year 9 in 1995.

3. What are students' perceptions of being a part-time worker while at school?

The effects on students of their having a part-time job is perhaps the most significant question to be canvassed as part of this study. Yet effects can be manifest in various ways. One approach is to consider students' own perceptions of their experiences as workers, including their reasons for working, and their views of the impact of working on their study and other aspects of their lives. These subjective assessments, by students who were aged 17 in 1992, are discussed in Chapter 5.

Another method of investigating consequences, made possible by the longitudinal nature of the YIT data, is to examine the relationships between part-time work while at school and actual outcomes that are measured at a later point in time. The outcomes that are designated as central to this study are related to the two broad domains of educational performance and success in the post-school labour market. (While it has been argued that part-time work might have many other outcomes - on adolescent psychological development, for instance - an examination of those effects is beyond the scope of the data and of this study.)

4. What are the educational outcomes of part-time work?

Students' part-time employment has caused concern elsewhere, particularly in the United States, over possible harmful effects on schooling. Information from the 1975 birth cohort about a number of aspects of students' educational experience -- including school completion, end of school performance, and post-school study destinations to the age of 19 in 1994 - is analysed in Chapter 6 to determine whether part-time work while at school has any discernible effects on those outcomes.

5. What are the post-school labour market consequences of part-time work?

The nub of this question is whether students derive benefits from part-time work while at school that carry over into the post-school labour market. In Chapter 7, measures of success in the labour market after leaving school are investigated up to ages 19 and 21 for the 1975 birth cohort. The indicators of labour market success that are adopted are the likelihood of being employed rather than unemployed, and to a lesser extent, other aspects of employment, such as occupational type, and income. To complement the findings for the 1975 birth cohort, which relate to the mid 1990s, additional parallel analyses are conducted for the 1965 birth cohort, thereby also

providing evidence about the efficacy of part-time work for young people in the previous decade.

In seeking to answer these research questions, the study aims to improve our knowledge of what is happening in one aspect of the lives of a large and growing number of Australian secondary school students, as they combine full-time study with part-time work. Before the results of the analyses that address these questions are presented in Chapters 3 to 7, however, Chapter 2 provides the background to this empirical investigation by describing the educational, economic and policy context of the study - a context which both accounts for the growth in the numbers of student-workers, and is the setting against which findings from the analyses must be interpreted. Because there are strong policy-oriented reasons for this investigation. A better understanding of the experiences of student-workers establishes a sounder basis for deciding on the most effective strategies for promoting the work preparedness of young people and for helping students make the transition from school to post-school employment.

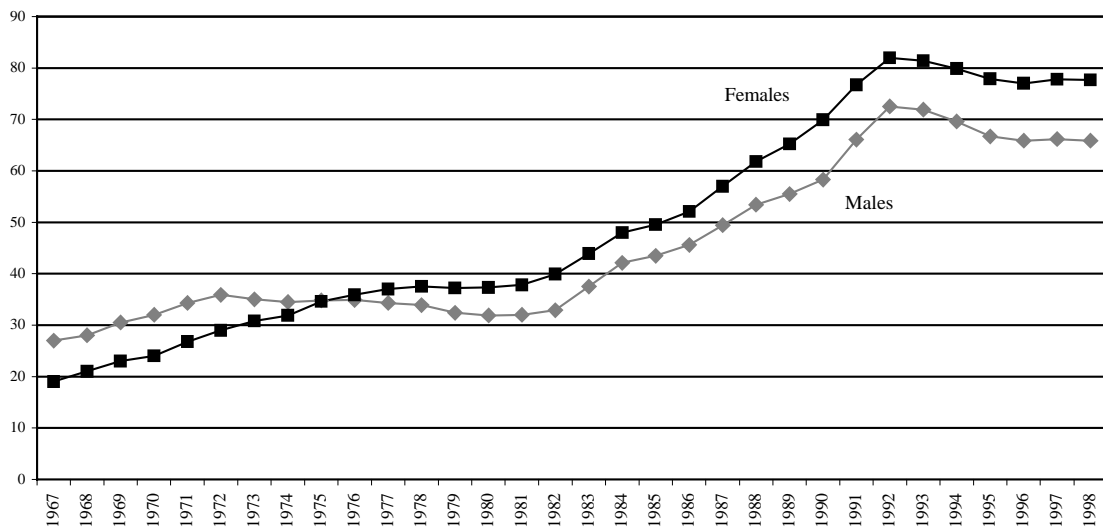
THE EDUCATIONAL, ECONOMIC AND POLICY CONTEXT

Two major and interrelated changes that occurred over the last three decades of the twentieth century together provide the context for this study of student-workers in Australia. On the one hand, there was an enormous increase in the school participation rate, especially during the 1980s, and at the same time significant changes in the youth labour market, with the disappearance of a high proportion of full-time jobs and an equally large growth in part-time employment. The precise nature of the relationship between these two sets of changes is not easily determined, and has been the subject of some debate. Nevertheless, throughout the period, a consistent response in government policy in the domains of education and the labour market has been to emphasise the importance of schooling as preparation for work.

CHANGES IN SCHOOL PARTICIPATION RATES

During the 1990s more Australians than ever before were staying at school beyond the compulsory years. One way to measure the extent of this participation is to look at the proportion of those aged over 15 who attended school in any one year - that is, the age participation rate. Comparisons across time of the proportion of 15-19 year olds in schools show this figure growing rapidly — from 35 per cent in 1980 to 44 per cent in 1990 (Department of Employment, Education and Training, 1991a). Two years later, in 1992, almost half (49 per cent) of all young people in this age group were attending school (Australian Education Council, 1993).

Another indicator of this phenomenon of increasing educational participation is the apparent Year 12 retention rate, which is the number of Year 12 students enrolled in any year as a percentage of the cohort that had commenced secondary schooling the appropriate number of years previously. (It is an apparent rate because a range of factors including grade repetition and net migration influence the actual figure.) Nationally, this school retention rate rose dramatically during the 1980s - from 34.8 per cent in 1981, to 48.7 per cent in 1986, and 71.3 per cent in 1991 (Ainley, 1998) - that is, almost doubling in the space of a decade.



Source: Derived from the *Schools Australia* (Catalog No. 4221.0) series, published by the Australian Bureau of Statistics.

Figure 2.1 Apparent retention to Year 12, by gender, Australia 1967-98 (per cent)

The retention rate to Year 12 for the period 1967-1998, for males and females separately, is displayed in Figure 2.1. It shows that the proportion of students who stayed at school to Year 12 had begun to rise during the 1960s, particularly for females, and had reached 35 per cent by 1976. There was a slowing of this growth in the second half of the 1970s, but it increased markedly again throughout the 1980s, especially in the second half of that decade. By 1990, 64 per cent of students (70 per cent of females, and almost 60 per cent of males) stayed on to do Year 12 at school. The retention rate continued to climb in the first two years of the 1990s, peaking at 77.1 per cent in 1992 (Ainley, 1998). These very high levels of school retention had a major impact on educational policy and planning. Many more students who would previously have left at the end of Year 10 remained at school for the post compulsory years, thus changing the composition of the senior school population and creating increased pressure to provide programs that catered for a broad range of students, not only those seeking university entrance.

Reasons for increased school participation

There are many possible explanations for this increase in participation in post compulsory schooling, and they have been canvassed extensively in the research literature. Social factors have played an important role. Williams et al (1993) argued that during the 1980s a number of elements combined to make staying on to complete

Year 12 the expected norm for almost all students. Among these were changes in community expectations, with increased ability to invest in education resulting from greater affluence, and also generational effects, whereby parents held higher educational aspirations for their children.

Government policies designed to increase school retention rates constituted another set of factors that operated to make schooling more attractive to young people. These policies included specially targeted programs which directed funds to schools where retention rates were low. The income support schemes introduced in the 1980s - the Secondary Allowance Scheme from 1974, and AUSTUDY from 1987 - provided means-tested financial assistance for students to continue with their schooling. And to try to ensure that there were no financial disincentives to educational participation among young people, changes were made in the relativities of unemployment and study benefits (Williams et al., 1993).

In addition to policies that were instituted at a national level, there were changes in the senior secondary school curriculum in a number of states during the late 70s and the 80s. Variation in Year 12 retention rates between states has been attributed to differential changes in the upper secondary curriculum - changes that were introduced as a response to increasing retention, but which may also have had the effect of encouraging other students to stay on at school (Vickers, 1995, cited in Keating 1995b).

However, among all of the elements which impacted on school retention, economic factors may have been the most influential. Rising educational participation during the 1980s coincided with the collapse of the full-time youth labour market - hence the claim that the major reason that young people decided to stay on at school was because of their declining employment prospects in the labour market (Sweet, 1987). It has been argued that if educational participation had not increased there would have been an even sharper rise in the numbers seeking full-time employment (Sweet, 1990; Sweet, 1991).

The exact nature of the relationship between trends in school retention and trends in the youth labour market have not always been clear-cut - for instance, for a period in the 1970s, despite high youth unemployment, school retention rates fell, whereas, under the impact of the 'discouraged worker effect', they could have been expected to

have risen (Keating, 1995b; Sloan & Wooden, 1984). However there appears to be a consensus that it was the marked decline in full-time jobs that fuelled the increase in educational participation, both in secondary and in higher education (Wooden, 1998). Regression analyses of ABS data for the years from 1970 to 1995 indicate a significant association between school participation and employment conditions (Lewis & Koshy, 1998), findings that are consistent with other econometric studies (Larum & Beggs, 1989; Merrilees, 1981). Lewis and Koshy (1998) also concluded that student allowances had an impact on school enrolments, but that other factors - including youth unemployment benefits, junior wages, and household income - did not. Young people remained at school in the belief that investing in extended education would enhance their long term employment opportunities.

The focus in the foregoing discussion has been on changes in school participation up to 1992, mainly because the *Youth in Transition* data that are used in most of the analyses in this study refer to students who were at school in that period. After 1992, Year 12 retention rates declined somewhat, falling to 71.3 per cent in 1996, with the decline being greater for males than females (Ainley, 1998). As Sweet has noted (1998:10) this 'has occurred in the face of a continued fall in full-time employment opportunities. As a consequence it is not possible to argue that young people have been attracted out of school by an expanding labour market'. Lamb's (1996) investigation of the downturn in school retention involved analyses of unit-record data from the Australian Youth Survey; he showed the impact of social background on school completion, and that retention declined most among males from families in unskilled occupations. Lamb (1996) speculated that the fall in school retention was due in part to changes in young peoples' perceptions of the value of remaining at school, particularly associated with disappointment resulting from unmet demand for places in higher education.

CHANGES IN THE YOUTH LABOUR MARKET

While more and more young people were staying on at school in the last quarter of the twentieth century, there were also, as has been noted above, major changes occurring in the labour market. Changes in the Australian economy had significant labour market consequences, particularly for young people, and affected both full-time and part-time employment opportunities. It is now clear that these changes were not a cyclical event, but represented a fundamental change in the structure of the labour

market, and that the restructuring of the economy has produced a long-term decline in the need for unqualified job entrants, especially those looking for full-time work. Most of the entry level jobs that young school leavers once occupied now no longer exist.

The decline in the level of full-time employment among teenagers was evident from the mid 1960s, a trend that accelerated during the 70s, and continued through the 80s. Between 1980 and 1989, full-time employment among teenagers fell by 16.1 per cent, in contrast to the situation for the labour force overall, where full-time employment rose by 16.3 per cent (Sweet, 1990:3). A summary measure of the decrease in the availability of full-time jobs for young people is provided by the full-time employment to population ratio; for 15-19 year olds, this ratio fell from 39.5 per cent in 1980 to 27.9 in 1990, and also continued to decline during that decade, to 15.6 in 1997 (Lewis & Koshy, 1998:7).

At the same time, there was a large growth in part-time employment among 15-19 year olds. This increase in part-time employment occurred throughout the 1970s, and accelerated in the 1980s. The part-time employment to population ratio, which was 11.2 in 1980, rose to 20.0 in 1990, and reached 29.1 by 1997 (Lewis & Koshy, 1998:7). The proportion of teenage employment that was part-time almost doubled in the 1980s, from 22 per cent at the start of the decade to 39 per cent of total employment at the end of it (Sweet, 1990:2). In 1991, 22.5 per cent of all employment in Australia was part-time (National Board of Employment, Education and Training, 1992), indicating that the expansion in part-time employment among teenagers, while generally consistent with wider labour market trends, was also much greater than that which occurred in the labour force as a whole. Wooden (1996) compared the incidence of part-time employment among teenagers in 1995 with that in 1966 and found a more than 9-fold increase; while 5 per cent of male and female teenage workers were in part-time employment in 1966, the figures in 1995 were 51 per cent for males and 72 per cent for females.

The gender dimension of these trends in the youth labour market should also be noted. Teenage women experienced a much higher loss of full-time jobs than teenage males. During the 1970s, full-time employment among teenage males decreased more slowly than among females; between 1970 and 1979, the number of teenage males holding full-time jobs fell by 2.8 per cent, whereas the decrease for teenage females was 25.9

per cent (Sweet, 1990). And it was full-time jobs for young women that fell most during the 1980s as well. The period of economic growth in the second half of the 1980s saw the total number of males in full-time jobs grow by 12 per cent between 1984 and 1989, and the number of teenage males in such jobs rise by 9 per cent. Yet while there was a growth of 22 per cent in full-time jobs for all females over the same period, the number of full-time jobs held by young women fell by 4 per cent (Polk & Tait, 1990:19).

On the other hand, the expansion of part-time employment was also greatest in female-dominated occupations, most notably those in the retail industry, where restructuring meant that there were about four new part-time jobs created for every one full-time job lost - with potential career positions replaced by insecure part-time jobs (Polk & Tait, 1990:20).

Reasons for the loss of full-time jobs

The reasons for the contraction in full-time employment for teenagers through the 1970s and 80s have been the subject of extensive discussion and debate. High youth unemployment rates in the late 1970s were the focus of a controversial report by researchers in the Bureau of Labour Market Research (Bureau of Labour Market Research, 1983) which sought to test the hypothesis that unemployment was related to increased youth wages. The study concluded, despite little supporting evidence, that, although it was difficult to quantify the relationship, it was likely that youth employment fell if youth wages rose. The claim that teenagers lost jobs because their wages were too high was refuted by Sweet (1987, 1990), whose analyses drew attention to a number of methodological flaws in the BLMR case - especially the mismatch between the brief time (1972-mid 1974) that youth wages ran ahead of adult wages, and the period that was used to test for effects of these changes - wage and employment data for the years 1976-81. According to Sweet, the major reason that teenagers lost their place in the full-time labour market was not because of economic recession, but because of changes in employment patterns and improved productivity. Nevertheless young people were hit especially hard by the economic recession of 1991, as loss of full-time jobs was greatest amongst this group (Sweet, 1991).

Sweet (1987, 1990, 1991) has been one of a number of commentators who have sought to explain trends in the youth labour market. He has argued that a variety of factors operated together to cause a loss of full-time jobs for teenagers. The effects of many of these factors were felt most severely in industries and occupations where female school leavers had traditionally begun their working lives, thereby resulting in greater job losses for females than for males.

During the 1970s, industrial restructuring exacerbated the decline in manufacturing employment already underway; for instance, machinist jobs were lost in the textile, clothing and footwear industries, where competition from Asian imports followed the reduction in tariff protection in 1973. Even more far-reaching effects resulted from technological changes, particularly in offices and the communications industry, which meant fewer jobs for workers such as typists, stenographers, business machine operators and telephonists; approximately 35 000 jobs were lost in these occupations by teenage women between 1971 and 1981 (Watson, 1994:387). This trend continued throughout the 1980s. It is estimated that between 1986 and 1992, the number of teenage women in clerical jobs was almost halved, from 82 000 to 44 000 (Watson, 1994:391).

Technological innovation and structural changes during the 70s and 80s were not the only reasons for ongoing job losses, particularly among teenage females. Higher entry qualifications, especially in nursing, and competition from more experienced and better- educated entrants to the labour force - that is, from adults - were two other contributory factors. Some protection from this competition between junior and adult workers was provided by the apprenticeship system, a benefit which was therefore available much more readily to males than to females, the latter being under-represented as apprentices. A study of recruitment to the public service found that, during the 1970s, teenagers lost the share of entry level clerical jobs that they had held previously in this sector to better qualified adults, although the study concluded that the qualifications required were screening devices rather than a prerequisite for satisfactory performance in the jobs (Kalisch & Stretton, 1984).

The growth of part-time jobs

While the disappearance of full-time job opportunities was a consistent feature of the youth labour market in the 1970s and 80s, the massive expansion in part-time employment was another. One of the underlying causes of this change in the balance between full-time and part-time employment was the shift in the economy from manufacturing to service sector jobs, although the relative impact of this shift has been re-evaluated in the light of some more recent analyses.

The various factors which accounted for the changes in the youth labour market in the twenty years between the mid 1960s and the mid 1980s were summarised by Sweet, with a focus on the importance of structural factors in the organisation of work, especially the service sector, that encompassed 'better scheduling of labour in relation to demand, product standardisation, automation, and a more specialised division of labour' (Sweet, 1987:19).

The main growth industry for teenage workers throughout the period was retailing, but extensive changes in employment practices in that industry occurred from the 1970s onwards. The trends towards self-service, pre-packaging, product standardisation and the use of computerised cash registers reduced the skill levels required of sales workers - for instance cost calculations were automated, and skill in selling and detailed product knowledge were no longer essential. At the same time employers were preferring to use larger numbers of workers for shorter time periods, in order to match labour supply with variable demand at different times of the week and of the day, a preference that increased with the extension of retail trading hours. These changes were estimated to have resulted in an overall reduction of 30 000 full-time jobs in retailing in the 1970s, and the introduction of about 100 000 part-time and casual positions (Rosewarne, 1984, cited in Watson 1994). Within a relatively short time span, between 1980 and 1986, the ABS estimated that full-time employment in the retail industry increased by about 0.5 per cent, while part-time employment grew by 44 per cent (Department of Employment, Education and Training, 1989).

While the casualisation of the retail industry was a major contributor to the growth in part-time jobs for teenagers, especially for females, many other part-time jobs were also created in the hospitality and entertainment areas of the service sector.

However, a number of studies (Chapman, 1990; Dawkins & Norris, 1990; Lewis, 1990) emphasise that the continuing growth of part-time employment during the 1980s was due not only to a shift to the services sector - that is, to the growth of industries that traditionally have high proportions of part-time labour - but also to a more general change in employment patterns within most if not all industries. A review of the empirical evidence available from the literature (National Institute of Labour Studies, 1999) shows that more recent research has played down the role of structural change, concluding that the change in the industrial composition of employment accounted for a smaller proportion of the growth in part-time employment than did the increased propensity of employers to hire part-time workers. It has been suggested that there are a number of factors which may account for greater demand for part-time workers. These factors include technological changes that have enabled the simplification of work tasks, and extended trading hours resulting in increased demand for labour outside 'normal' hours, both of which have been conducive to the greater use of part-time staff. Other demand-side factors that have been identified are cost considerations (especially lower non wage costs for casual workers), and employer preference for casual workers that is motivated by a desire to avoid dealings with unions, as well as a weakening of union opposition to casual employment (National Institute of Labour Studies, 1999; Norris & Simpson, 1995).

Student participation in the labour market

There may have been some debate about the relative importance of the various reasons for the growth in part-time employment over the last three decades, but what is clear is that the rapidly increasing numbers of part-time jobs in the 1970s and 80s were largely taken up not by school leavers seeking longer term careers but by groups of workers wishing to combine workforce participation with other commitments - especially adult women entering or re-entering the workforce, and students still completing their school or post-school education.

The focus of this study is on the increased participation of school students in the labour market, a trend which has been documented elsewhere by various researchers, drawing on ABS data. Bentley and O'Neil (1984) noted that labour force participation by students grew dramatically in the 1970s, from a rate of 3.6 per cent of school students aged 15-19 at the start of the decade (in June, 1971), to 23 per cent by 1980;

this was characterised as ‘one of the most radical changes in labour supply behaviour witnessed during the 1970s’ (Bentley & O’Neil, 1984:146). At the beginning of the 1970s, 28 per cent of all part-time jobs held by 15-19 year olds were held by school students, but by 1980 the figure had risen to 62 per cent. Sloan and Wooden (1984) showed that part-time employment growth among teenagers between 1971 and 1983 was dominated by those attending school, and was strongest for females. Ross (1988) also used ABS data to chart the growth in labour force participation rates and employment and unemployment rates among teenagers during the 1980s. He showed that, between 1983 and 1988, a time of economic recovery, employment rates for both males and females aged 15-19 who were attending school rose more rapidly than they did for those who were not at school. For males who were at school, the per cent employed (in the month of March in each year) increased from 14.3 in 1983 to 19.2 in 1988, and for females the increase was even larger - from 17.6 to 27.0 (Ross, 1988:12).

The tendency to combine full-time education with part-time employment continued into the 1990s - by 1997, 28.3 per cent of those aged 15-19 attending school also had a part-time job (Lewis & Koshy, 1998). However during the decade there was a slowing of the growth in the proportion of students who comprised the part-time labour force; Sweet (1998) pointed out that in the 1990s, unlike in the two previous decades, non-students accounted for a larger share of the growth in part-time teenage employment. Although the data do not distinguish between school and post-school students, Wooden (1998) cited census and other ABS figures which illustrated this trend; among teenagers who were working part-time the percentage who were students increased from 73 per cent in 1976, to 78.3 per cent in 1981, and 82 per cent in 1986, but then levelled out in 1991 to 82.1 per cent and even fell slightly to 81.2 per cent in 1996.

An international trend

Increased educational participation, as a response both to adverse labour market conditions and a belief in the value of investing in education, occurred throughout most OECD countries in the 1980s and 90s. And as educational participation grew students comprised an increasing proportion of all young workers. Between 1984 and 1994, across the OECD, the proportion of students among 18-year-old workers rose from 15.7 per cent to 25.1 per cent for males, and even more substantially, from 14.4 to 30.2 per cent, for females. This trend, and the gender difference, was evident even in

countries where traditionally students had not been workers; in France, for instance, the growth in the proportion of workers in this age group who were also students was, for males, from 1.9 per cent to 15.6 per cent, and for females, from 5.7 per cent to 27.6 per cent. (OECD, 1996). Comparable figures for Australia over that decade showed only a small growth in the proportion of students among 18-year-old male workers, although from a high base - from 41.7 per cent to 43.9 per cent - but a large increase for females, from 21.8 per cent to 51.8 per cent.

Reasons for increased student participation in the labour force

Why did substantial proportions of full-time students also become part-time workers? An underlying factor was the increase in school participation. The large numbers of young people staying on at school, many of whom previously would have left and gone into employment, provided a ready pool of part-time workers. (This is not to say, however, that students who were most likely to be early school leavers were the ones most attracted into becoming student-workers.) There was some suggestion that the income test on unemployment benefits during the 1970s was an economic disincentive for unemployed teenagers to undertake part-time work (Gregory & Duncan, 1980). But this view - that unemployment benefits had a major influence on labour supply, as unemployed school leavers were discouraged from taking part-time jobs, thereby creating a gap that was filled by school students - was disputed by Bentley and O'Neil (1984). Drawing on insights gained from their South Australian research study of student participation in the labour market in the period 1980-81, they claimed that the rapid movement of school students into the labour market occurred primarily because employers increasingly sought school students to fill part-time positions, and because students were increasingly active in seeking part-time jobs. That is, there was a congruence between demand and supply-side factors.

Considering the characteristics of the majority of teenage part-time jobs (generally low hours per week, starting and finishing times outside of school hours, low levels of weekly payment, and involving tasks that require little experience or training), Bentley and O'Neil (1984) argued that these were more likely to be consistent with the aspirations of school students rather than those who had left school and were seeking employment. In addition, the researchers pointed to the evidence of an increasing desire on the part of students to undertake paid work - for reasons that included the

desire to achieve financial independence and to improve their post school prospects by demonstrating their suitability to future employers.

School students were motivated to become workers, and their goals were compatible with the conditions that part-time employment offered. They were willing to accept flexible hours, and work at times, such as weekends, in order to schedule their work around school commitments, and were not restricted by family responsibilities. They were also willing to accept low wages - because most lived at home, they were not dependent on their income from their job to support themselves. Furthermore their focus was on the short-term financial benefit from a job, rather than on a long-term career, and so lack of security and lack of opportunity for career development in relatively low skilled jobs were not causes of concern to them.

The advantage that students enjoy over non-students in terms of employer preference is also a potent factor in accounting for the growth in the numbers of student-workers. Ashenden (1990:20) speculated that employers may prefer students 'because they come at the right price, the right time and in the right condition' - this last point a reference to perceptions by employers that, in comparison to school leavers, students have a better attitude, and are keen and focused on the job. Earlier, Bentley and O'Neil (1984:148) had surmised that 'employers are attracted to school students because they are more reliable and uncritical employees', while Sweet (1987:19) suggested employers preferred students because they were more likely to have a 'cheerful, youthful image'. The employers interviewed in a recent study indicated that they took on students because they were willing to work shifts and because they were 'motivated, open to learning and on track in their lives' (Hull, 1999:40). Students met those employers' immediate needs for flexible labour to cope with extended trading hours, and at the same time the employers accepted, and valued, the fact that students had career goals beyond their current jobs.

Further information about employers' perceptions of the relative merits of student-workers and school leavers as employees was gathered as part of a more general survey that investigated the recruitment practices and selection criteria used in the fast food and supermarket industries (National Institute of Labour Studies, 1999). Based on responses from over 100 store managers, the survey found the factors most commonly cited as reasons for employing teenagers compared with other age groups

were young peoples' eagerness to work and to learn, their desire to give young people a start in life, and, because wage rates in most awards are tied to age, the relatively low wages associated with teenage employment. (Such findings are consistent with those of another much larger-scale survey of over 2000 employers conducted by the Confederation of Australian Industry, which identified the relative importance that employers gave to various factors in their decisions to employ young people (National Institute of Labour Studies, 1999)). The supermarket and fast food outlet managers surveyed in 1997 were also asked to consider a number of attributes of employees, and to rank the average student-workers and the average early school leavers employed in their stores on those attributes. Student-workers were ranked more highly on most attributes. For instance, 81 per cent of employers regarded student-workers as 'good' or 'very good' when it came to teamwork skills, while 49 per cent of managers held that view of the school leavers they employed. Similar results were found for other attributes - customer service skills (57 per cent compared with 39 per cent); personal appearance (72 per cent compared with 58 per cent); ability to multiskill or work on variety of tasks (55 per cent compared with 41 per cent) and disposition (74 per cent compared with 61 per cent). When compared with student-workers, early school leavers were ranked higher by employers only on their willingness to work flexible hours (National Institute of Labour Studies, 1999).

Employers' favourable perceptions of student as workers is therefore clearly a major contributory factor in explaining the growth in student-worker numbers. Another point of interest that emerged from the survey was that the managers were much more likely to perceive their female staff as having good customer service skills and better personal appearance than their male staff (National Institute of Labour Studies, 1999). This is consistent with the trend in the youth labour market in which part-time employment among females grew much more rapidly than among males - a pattern that can also be demonstrated to have occurred among student-workers.

THE POLICY CONTEXT

During the last thirty years in Australia the growth in educational participation and the changes in the youth labour market that have been described in the preceding sections of this chapter coincided to produce a large rise in both the number and proportion of school students who were also part-time workers. Throughout this time

government policy - particularly the rhetoric, but also the practice - was increasingly directed at strengthening the connection between education and work. There is some irony, therefore, in that while priorities were being announced and policies promulgated which ostensibly aimed to better prepare young people for the world of work, the fact that many more students were gaining greater exposure to the workplace through their part-time employment out of school hours was largely ignored. To some extent this oversight can be explained by the discrepancy between the goals of education policy as they are espoused nationally and the reality of the policy formulation process for the domain of school education, which is largely a state responsibility. It is only in recent years that education systems and policy makers at both national and state levels have begun to acknowledge the student-worker phenomenon, and attempts to integrate students' out of school employment experience into school programs have been canvassed.

The evolution of federal government education and training policy

As Rumberger noted (1997a: 246) 'education and training will always serve a variety of social and economic goals. At different points in history, some goals will be stressed more than others'. In Australia, as in other OECD countries, economic goals have come to predominate over the last few decades, with education policy increasingly being driven by economic needs.

While the education and training policies of various OECD countries may share common aims in seeking to produce a skilled workforce and provide a smooth transition for young people into the workforce, cross-national studies of this transition from initial education into work highlight the differences between countries in the contexts in which the transition occurs (Bowers et al., 1999). The nature of the interface between the education and training system and the labour market varies, so that the pathways between the two may be seen to range along a continuum from tightly connected to loosely coupled. In the apprenticeship or 'dual system' that is characteristic of German-speaking countries, a vocational pathway in which young people combine school-based education and workplace training is taken from an early age. These structured pathways from school to work ensure non-university bound students a good start in the labour market. By comparison, Australia and United States represent countries where the pathways are less clear. There is little vocational

training at the initial level of education (although provision within schools is growing); in the past there has been an assumption that skills can be acquired through on-the-job training, and linkages between education and employment are more informal and individualised (Bowers et al., 1999).

Two particular characteristics of the Australian situation must be borne in mind when considering the influences on the development of vocational education in schools. One is the federal political structure, in which there is a division of powers between the Commonwealth and the states and territories - the former having responsibility for economic policy, and the resource capacity through taxation to pursue its established national education and training priorities, while the latter have legislative control over education and vocational training. A second cause of complexity is found within the states. There have traditionally been separate arrangements within each of the states for school and vocational education, based on the perception that 'education' and 'vocational education' were distinct activities for young people. Historical divisions between the institutional, curriculum, certification and expenditure arrangements for school education on the one hand and for vocational education through apprenticeships and TAFE on the other have had a strong impact on the way in which vocational education has developed in schools (Sweet, 1994).

Since the 1970s concerns about Australia's competitiveness in the global market, rapid technological change, and labour market skill levels have led to a greater focus on the vocational relevance of education. The Williams Committee of Inquiry into Education and Training (1979) produced one of a number of commissioned reports in that decade that argued that education should have a more instrumental role in providing a skilled labour supply and developing attitudes appropriate for the workforce.

As a response to high levels of youth unemployment in the recession of the early 1980s there were various calls, both federally and within most states, to increase the vocational relevance of the school curriculum in the post compulsory years. The senior school curriculum was seen as having a focus that was too narrowly academic, designed mainly to prepare students for higher education. A broader curriculum was advocated as a means of catering for a more diverse student population, as well as a way of improving the employability of young people (Blackburn, 1985; Commonwealth Schools Commission, 1984; Karmel, 1985). For instance, following

similar reports in other states (Beazley in WA, and Swan and McKinnon in NSW) the Blackburn report in Victoria emphasised the importance of links from post compulsory education to a range of post-school destinations - to work, to TAFE, and to higher education. It also recommended that the curriculum include significant, practical, work-related studies, but within a framework of continuing general education - explicit vocational preparation was not favoured. There was a commitment to the view that senior schooling should serve the needs of all students, not only those wishing to pursue an academic path to university, but that this should occur not through separate curricula streams.

Apart from the so called 'traditional' vocational subjects, such as typing and technical drawing, there were various other work-related activities available to school students in the second half of the 1980s. One review of these activities (Cole, 1987b) identified three broad categories, which were designated as achievement-oriented, experience-oriented and enquiry-based programs. The first referred to activities designed to maximise student participation and collaborative action, and included two sub-categories: programs in which students provided services to individuals (working with the elderly, or tutoring primary school students, for instance) or to the community at large (for example, producing a community newsletter), and mini-enterprises, which aimed to give students an insight into the economic considerations involved in running a business. Experience-oriented programs consisted primarily of work experience programs, as well as industry simulation programs, such as practice firms, in which students could gain insights into roles not generally available to them in the workplace. The third category, enquiry-based programs, were those which engaged students in researching various questions regarding work (technological change, or unionism, for example) and took place both within school and in the workplace.

During the decade, work experience, designed to give students a first-hand taste of the workplace, and perhaps to help to shape and test their career choices, but without a planned program of skill development, had been widely adopted by schools as part of the Year 10 curriculum. Survey evidence showed that 84 per cent of a national sample of 16 year olds in 1986 had taken part in such programs (Fullarton, 1999). However it was recognised that these programs had many limitations; they were of short duration, students had little part in decision-making, and did not relate their experience to their

school curriculum, employers were generally unsure of their role, and the programs tended to reinforce gender and class stereotypes (Cole, 1987a). It is some cause for concern that these criticisms can still be made, with equal validity, of many work experience programs which operate in schools at the present time.

In addition to these programs, a number of specific initiatives that connected the curriculum and work were sponsored by the Commonwealth through the Participation and Equity Program (Hughes, 1987). Nevertheless, at the end of the 1980s, vocational programs continued to remain outside of the mainstream curriculum structures of the school education authorities of the states and territories (Malley, Keating, & Robinson, Forthcoming).

Developments in the 1990s

Ongoing changes in Australian industry, greater pressures to increase exports and become more competitive internationally, and changes in workplace culture led to renewed emphasis in the 1990s on the need for a more skilled workforce - for Australia to become a clever country. There was a further push to reform the basis of skill formation, and to expand and upgrade training, with government and industry giving high priority to vocational education and training (Gonczi, 1997; Keating, 1995a; Smith, 1997).

These trends in Australia paralleled shifts in emphases that also occurred elsewhere. In the United States, for instance, Barton (1996) observed that during the 1980s there had been efforts to promote programs such as cooperative education and experience-based career education, but little interest in system wide reform, with policy focussed more on issues of equity and 'at risk' groups. However this changed in the 1990s, prompted by claims by employers that young people lacked the necessary skills and attitudes for the workplace, and concern about the neglect of the 'forgotten half' - those who entered the workforce from high school - voiced in reports such as that prepared by the Commission on the Skills of the American Workforce, which recommended an increase in programs and funding for work-bound youth (Educational Testing Service, 1990). The United States federal government in 1994 enacted the School-to-Work Opportunities Act, which provided funding to states to develop programs that encouraged work-based learning, employer involvement, and paid work by students (Ruhm, 1997). In both the United States and Australia, the decade was marked by

federal legislation and state action that accompanied a resurgence of interest in vocational education.

In the early years of the 90s a series of Australian federal government commissioned reviews focused on the role that education could play in economic growth. All had a strong vocational perspective, considering how education and industry could be more closely linked, and what skills were required for employment. The underlying goal of all three reports was to better integrate work, education and training to produce a skilled and flexible workforce.

The Finn Committee (Australian Education Council Review Committee, 1991) examined the appropriate roles of schools, TAFE and higher education in providing post compulsory education and training. It drew attention to the lack of structured pathways for young people moving from education to work, and established national targets for educational participation and completion - most notably, that by 2001, 95 per cent of 19 year olds should have completed Year 12 or an initial post-school qualification, or be participating in a formally recognised program of education or training. The Finn Report also proposed that employment-related competencies be part of all post compulsory education, and that by the time they leave school young people should be competent in six key areas.

The Mayer Committee (Australian Education Council, 1992) was convened to further develop the concept of key competencies. To improve the relevance of education and training to the needs of clients - both industry and young people - its report identified seven generic employment-related key competencies which, it was argued, should be incorporated across the school curriculum. The competencies which were considered to be essential 'for effective participation in the emerging patterns of work and work organisation' were designated as collecting, analysing and organising information, communicating ideas, planning and organising activities, working with others and in teams, using mathematical ideas and techniques, solving problems, and using technology. (Similar undertakings also occurred in comparable countries at the same time - the SCANS Report was commissioned by the US Secretary for Labour to define the skills that young people needed in the world of work, while in England 'core skills' were identified to be included in all educational programs for 14-19 year-olds.)

Carmichael's proposed reforms to entry level training aimed to increase the numbers of young people participating in accredited education and training, and to facilitate their movement into and across post compulsory courses and systems (Employment and Skills Formation Council, 1992). This report was a precursor to the establishment of the Australian Vocational Training System (AVTS), a new national system of entry level training that involved closer links between schools, TAFE and industry (Lundberg, 1997; Malley et al., Forthcoming).

Implementing policy

As part of the mechanism for achieving the goal of a skilled workforce, and to facilitate a coordinated approach to vocational education and training, the Australian National Training Authority (ANTA) was established, and from 1993 managed Commonwealth funding of both school and post-school level vocational training. In 1994 the Australian Student Traineeship Foundation (ASTF) was created. The federal Labour government's White Paper on employment, Working Nation, had contained a combination of strategies to foster economic growth and reduce unemployment by providing more training programs for school leavers and attempting to promote tighter links between school and industry. This latter task was the responsibility of the ASTF, the new national agency charged with broadening the opportunities for senior students to acquire recognised workforce skills and qualifications before leaving school. Initially by-passing state authorities and offering funding and advice directly to schools, and in some cases supporting enterprises or industry associations to work with schools, the ASTF was the catalyst for promoting school-industry programs (Malley et al., 1999). Year 11-12 students participating in these programs were able to combine school studies with structured vocational learning in the workplace and formal off-the-job training. The programs were designed to involve employers in local partnerships to manage program delivery, ensuring them greater influence over training. From a government perspective, the benefits of such programs were that they improved students' work readiness and provided pre-employment and entry-level training which reflected the needs of industry.

School provision of vocational education and training in the 1990s

How were these policy goals and decisions translated into programs at the school level? A number of studies have provided overviews of the provision of vocational education

and training (VET) in Australian schools during the decade of the 90s. Initially these were essentially descriptive in nature, with attempts to address the quantitative dimensions of provision occurring only more recently.

Early diversity

A review undertaken in the first part of the decade (Curriculum Corporation, 1994) identified three phases in the development of vocational programs in schools to that time; the first referred to the inclusion in the curriculum of long-established vocational subjects such as accounting and secretarial studies; the second related to VET initiatives in the latter half of the 1980s that occurred as a result of increased school retention; and the third involved the surge of activity from 1993-94 as a response to the early implementation of the national training reform agenda - particularly the AVTS pilots.

Recognition at the federal level of the need for long-term, cooperative planning, rather than short-term, piecemeal programs had resulted in the establishment in 1988 of the National Board of Employment, Education and Training (NBEET), to coordinate policies in these areas. In the early 1990s a report to the Schools Council of NBEET into the role of schools in the vocational preparation of students examined the implications for schools of the massive increase in Year 12 retention rates that had occurred in the 1980s, as well as the demand for a more educated workforce. Among the advice it provided on how the Commonwealth could support schools were recommendations to promote the integration of general and vocational curriculum, and a number of agencies were asked to consider the feasibility of designing national curriculum frameworks, including national vocational modules and key competencies (National Board of Employment Education and Training, 1994). A companion volume to this Schools Council report documented many examples of the diverse efforts made by schools to strengthen the vocational preparation of students (Golding, 1994). A large number of these activities involved students spending time in structured learning in the workplace.

It was the reform of entry level training that was the strongest impetus for the development of VET in schools in the 1990s. Following on from the Carmichael Report (1992), schools were prominent in the AVTS pilot projects that were funded in 1993-1994. At the end of 1994 the expansion of AVTS activities in schools was endorsed by the Ministerial Council for Education, Employment and Youth Affairs (MCEETYA), the peak forum for state, territory and federal ministers. This marked an acceptance of the view

that the process of giving young people recognised workforce skills should begin in the upper secondary years at school - vocational preparation was acknowledged as a legitimate function of secondary schooling. While descriptions of the typical vocational programs operating in each of the state school systems at this time indicated that such programs were enormously varied - with great diversity in their accompanying accreditation and institutional arrangements - active involvement by students in workplace learning was a feature of a great number of them (Athanasou, 1996; Keating, 1995a; Lundberg, 1997).

The nature of VET provision in schools at the end of the 1990s

Many of the early predictions about the probable impact of the national training reform agenda on secondary schools (Keating, 1995a) have been realised: in the second half of the 1990s schools have been presented with both opportunities and challenges - opportunities to become providers of training, and to enable their students to gain VET qualifications while still at school, and challenges to provide programs that articulate to post-school VET, and to incorporate new ways of learning into the upper secondary curriculum. At the same time, the diversity of school-based program provision which characterised the early years of the decade gave way to a period in which VET in schools has been brought within a national framework. Hence, by the end of the 1990s, school provision of vocational programs can be classified into three broad categories, and secondary school students may spend time in a workplace as part of a school-sanctioned activity in any one of these three ways -- through VET in schools, in school-based New Apprenticeships, or through a third, 'miscellaneous' category of programs.

The term 'VET in schools' is now used to refer to programs which comply with the National Training Framework initiated by ANTA. Concerns about state variations in approaches that impinged on program quality (Dusseldorp Skills Forum, 1997) resulted in an agreement in 1998 within MCEETYA, and involving the Australian Curriculum Assessment and Certification Authority (ACACA), to adopt a national approach to the implementation of VET in schools. As a consequence of this policy decision, curriculum for VET in schools programs was to be based on National Training Packages, which incorporate outcome standards established by industry and competency based assessment. VET in schools programs are undertaken by students

in Years 11-12, and are included in the end of school certification process of the curriculum authority in each state. Many, but not all, programs have a mandated workplacement component which is organised and assessed by the school. (Malley et al., Forthcoming)

Another objective of successive Commonwealth governments since the mid 1980s has been to expand employment-based training through apprenticeships and traineeships, as an alternative to full-time institution-based vocational education (Sweet, 1998). Changes to the apprenticeship system were introduced from 1996 that were designed to encourage employers to take on apprentices by giving them more control over training (Kemp, 1996), and reduce costs. Under these new conditions, employers could choose the training provider, the content, the timing and the mode of delivery of training, while trainees would be only paid for 'productive' time on the job, not for training time (Burke, 1997). School-based New Apprenticeships are a variant of these arrangements. Young people who undertake a school-based New Apprenticeship combine study for their end of school certificate with an apprenticeship or traineeship. They can mix part-time school attendance to complete school certificate subjects and off-the-job skills training, and part-time work, the latter under a formal training contract with an employer for on-the-job learning. (Malley et al., 1999; Malley et al., Forthcoming).

In addition to VET in schools and school-based New Apprenticeships undertaken in the post compulsory years, there is a residual category of other programs offered by schools that involve students in exposure to the workplace. These include short-term work experience programs - still most commonly a feature of the Year 10 curriculum, but also sometimes done by students in Years 11 and 12 - as well as other activities such as enterprise education, the Australian Quality Council's E Teams and Transition Teams (Malley et al., Forthcoming).

The extent of program provision and student participation

Largely as a result of federal government policies and programs, the provision of vocational programs within schools, and the extent of student participation in such programs, increased significantly from 1994. Evidence from surveys conducted by ACER in 1995 (Ainley & Fleming, 1995) and 1996 (Ainley & Fleming, 1997), and repeated in 1999 show substantial growth in school-based programs which require

senior students to spend time in the workplace. Those surveys focused on programs that catered for students in the post compulsory years, and measured the extent of program provision by schools, and the extent of participation in those programs by students in Years 11-12. In 1996 there were programs in 62 per cent of schools, an increase of 16 per cent over 1995 (Ainley & Fleming, 1997), and by 1999 (according to as yet unpublished data) that figure had risen to 86 per cent. For 1999, when program provision was more narrowly defined so that only programs likely to include structured workplace learning were counted while others, such as externally initiated business partnerships like E-Teams, were not counted, the figure remained high - 80 per cent of all schools offered such programs (75 per cent of schools had VET in schools programs, and 28 per cent had school-based New Apprentices).

The ACER surveys also enabled estimates of the level of student participation in workplace learning programs, and revealed that in the space of one year, between 1995 and 1996, there was an increase from 7 per cent to 12 per cent in the proportion of the cohort of Year 11-12 students which was engaged in such programs (Ainley & Fleming, 1997). By 1999, this figure had reached 19 per cent. Information was also available about the amount of time that students spent in the workplace as part of the program. In 1996 well over half of those students who took part in a program (or 7.5 per cent of all Year 11-12 students) were in programs in which they spent a relatively short time - 10 days or fewer - in the workplace, and only 2 per cent of all Year 11-12 students were in programs that involved them in an extended workplacement of 20 days or more.

The development of workplace learning programs for students in the post compulsory years has been the focus of government policy in the 90s. However work experience programs have been a continuing aspect of the school curriculum in the middle years for two decades or more. Survey data showed that 62 per cent of Year 10 students took part in work experience in 1996, most commonly, for one week - 60 per cent of those who did work experience spent one week in the workplace, and 36 per cent spent 2 weeks there. In 1997, among Year 11 students, 44 per cent were involved in work experience - 67 per cent of those students were in the workplace for 5 days, and 12 per cent for 10 days (Fullarton, 1999). The limited exposure to the workplace that students acquire through either work experience or work placement programs is therefore very

likely to be in sharp contrast to the amount of time which many of those same students spend in their part-time jobs out of school hours.

CONTRAST BETWEEN POLICY AND REALITY

Despite the strong policy focus on the vocational aspects of young peoples' education, little attention has been given to their part-time jobs. Students' naturally occurring work experience has been largely overlooked in the policy formulation process. It is in this context, therefore, that a detailed analysis of the student-worker phenomenon is timely. There is a need for more accurate information about how many students are part-time workers, and about which students are more likely to be employed. It is important to find out why they work, what they experience while in their jobs, and what they think about having a job. And, most significantly, all stakeholders, policy makers among them, require empirical evidence about the impact on students of their part-time work, both while they are at school, and after they leave school - information which can better inform policies designed to smooth the transition from school to post-school employment. These are the key research questions that this study addresses.

THE EXTENT OF STUDENT PARTICIPATION IN PART-TIME WORK

The enormous growth in the labour force participation of school students over the last twenty five to thirty years is undisputed. What is not as certain is the precise extent of that participation. The proportion of students who are at school and who have part-time jobs is one dimension of participation. Various research studies have investigated the incidence of job-holding among Australian school students, with differing findings about the proportions involved depending on the way in which participation in the work force was measured, the time period that was referenced, the geographical area covered, and the age and year level of the students.

Apart from the numbers of school students who are employed, there is also the issue of the amount of time that students spend in their job. This is an important consideration, particularly if the effects of part-time employment are being investigated. It could be argued that, while some hours spent in a job may be beneficial to students, beyond a certain level that involvement may interfere with school performance. Certainly many studies of the effects of participation in part-time work on students, particularly in the United States, have pointed to the importance of the number of hours worked in accounting for differences in outcomes. Greenberger and Steinberg (1986), for instance, found that part-time work of 15 hours or more had a negative effect on school achievement. They argued that this occurred because students had less time available for homework, and, more generally, because those students were less engaged in school activities. Steinberg and Dornbusch (1991) reported deleterious effects of working long hours on a range of school attitudes and behaviours. D'Amico (1984) showed that, for some groups of American students - in particular, for white males - intensive involvement in work was related to a higher probability of dropping out of school. This association between working long hours and early school leaving was also reported by Steel (1991) and by Gilbert *et al* (1993) in reference to Canadian students.

An analysis of the extent of student participation in the part-time workforce in Australia should therefore include not only an investigation of the numbers of students who work part-time in a job, but also the amount of time they spend in those jobs.

THE NUMBERS OF STUDENT-WORKERS

The *Youth in Transition* data made it possible to investigate the extent to which school students have moved into the part-time work force, on a national scale, and also how this has changed over recent decades.

Variation in numbers employed over time

One approach to measuring the temporal change in participation is to look at the proportion of each cohort of students which, at a comparable age, was involved in part-time work. Table 3.1 shows, for the four *Youth in Transition* age-based cohorts, the per cent of school students who were working part-time as 17-year-olds, that is in 1978, 1982, 1987 and 1992.

Table 3.1 Per cent of 17-year-old school students employed part-time, by gender, October, 1978, 1982, 1987 and 1992.

Year	YIT ¹						ABS ²
	Per cent employed			<i>Total sample sizes</i>			Per cent employed
	Males	Females	Persons	<i>Males</i>	<i>Females</i>	<i>Persons</i>	
1978	26.5	26.5	26.5	<i>957</i>	<i>1009</i>	<i>1966</i>	20.1
1982	27.5	32.0	30.5	<i>677</i>	<i>817</i>	<i>1494</i>	20.5
1987	21.7	29.2	25.7	<i>658</i>	<i>773</i>	<i>1431</i>	24.5
1992	30.5	40.3	35.4	<i>1191</i>	<i>1706</i>	<i>2897</i>	30.3

Notes

- 1 *Numbers in part-time work as weighted percentage of total numbers in sample attending school as full-time students. For each year except 1978, working was referenced to month of October. For 1978, question on job holding was referenced to the time at which survey completed: for most, this was the end of 1978.*
- 2 *Numbers employed as per cent of estimated numbers of school students in age cohort. Distinction between part-time and full-time employment was available for 1992 only, and the percentage for that year is for those employed part-time. However the overwhelming proportion of school students who were employed were employed part-time. Source: ABS Labour Force, October, selected years (6203.0)*

These are not annual employment rates, but refer specifically to the month of October in each year, with the exception of 1978. The use of October as a reference month is important because it focuses on employment undertaken during term time, and excludes school holiday jobs. For 1978, however, data relate to the time that sample members were completing the questionnaire about their activities in that year; survey respondents were asked 'Do you have a job now?' For most, this was at the end of 1978,

but a small group of respondents completed the survey at the beginning of 1979, so that some caution is required in making comparisons for 1978 with the October figures for the other years.

The data in Table 3.1 confirm the long-term growth in student-worker numbers, indicating a rise in the percentage of 17-year-old school students who held part-time jobs, from 26.5 per cent in (October) 1978 to 35.4 per cent by (October) 1992. There was a deviation from this trend for the group aged 17 in 1987; the increase in participation that occurred between 1978 and 1982 was reversed somewhat between 1982 and 1987. However, very large growth took place between 1987 and 1992. In those five years, the proportion of 17-year-old students having a part-time job increased from one quarter to more than one third. It can be noted, too, that while over 35 per cent of students responded that they had a job in October 1992, a much higher proportion - 55 per cent - indicated that they had worked at some time during 1992.

The growth in participation in part-time employment by school students between 1978 and 1992 was far more pronounced among females than males, reflecting more general trends in the part-time labour market. In 1978, there was no difference in the percentage of 17-year-old male and female students who had part-time jobs, yet by 1992, while thirty per cent of males were employed, the figure for females was forty per cent.

In addition to *YIT* data, Table 3.1 includes estimates of the proportion of 17-year-olds who were attending school, and who were also employed, derived from the Australian Bureau of Statistics' (ABS) monthly survey of the labour force. To maintain consistency with the *YIT* data, these ABS data are presented for the month of October in the relevant years. The percentages in the table are not labour force participation rates, as defined by the ABS, as they do not include those students who said they were looking for work at the time of the survey. Rather, the percentages are the numbers who were actually employed as a proportion of the estimates of the numbers who were attending school in the relevant age group. For this category of workers, there was no distinction made between part-time and full-time employment in ABS data collections prior to 1992, so that only for that year is the percentage specifically for students employed part-time. However the overwhelming proportion of school students who were employed worked part-time rather than full-time, so that the

percentages for the other years are unlikely to be very different, even if the full-time workers could be separated out.

These ABS figures show somewhat lower levels of job holding by students than do the *Youth in Transition* data. The most likely explanation for this is that the ABS surveys are completed by the householder, who may overlook employment by more junior household members, whereas the *YIT* data were obtained directly from the students. O'Neil and Bosio (1982a) also reported differences between ABS estimates and their own research-based estimates. In the United States, similar discrepancies have been observed between official estimates of rates of student employment from the Bureau of Labour Statistics (based on information typically provided by parents, who systematically underestimate their children's labour force attachment, and those obtained from research studies such as the *High School and Beyond* Survey and the National Assessment of Educational Progress (Barton, 1989; Greenberger & Steinberg, 1986; Ruhm, 1997). Nevertheless, despite such differences, the ABS figures confirm the growing incidence of student-workers over the period 1978 to 1992, with the proportion of school students who were employed rising from twenty to thirty per cent according to these official estimates.

Variation in numbers employed with age and year level

More detailed examination of a single cohort of students who were born in 1975, covering the years 1989, when they were aged 14, to 1992, when they were aged 17, revealed changes in the proportion of students employed each year, as the cohort aged. Table 3.2 shows that from just over 24 per cent of fourteen year old students working part-time, this percentage rose to more than 35 per cent of 17-year-olds. At age 14, a higher percentage of males than females was employed. There was a marked gender difference in the rate of increase with age in the proportions of students who had jobs; the percentage of female students who worked part-time doubled, from 20 to 40 per cent between ages 14 and 17, compared with a fairly small increase among males.

Because this cohort is an age-based national sample of students, in any one calendar year the sample includes students from across more than one school year level, due to state differences in the age of school commencement. When analysed by year level at school, the data show that for the period 1989-91, while more than a quarter of

students who were in Year 10 in any one year were employed part-time (ranging between 26 and 30 per cent), by Year 11 that proportion jumped to around a third or more (ranging from 31 to 38 per cent between 1990 and 1992).

Data for the most recent calendar year, 1992, suggest that the proportion of students who have part-time jobs may peak when students are in Year 11, when 38 per cent were employed. The percentage of Year 12 students who had jobs was a little less than 35 per cent, supporting the notion that the greater pressure on students in their final year of secondary school may cause some to give up jobs they had held previously. Both Murphy (1986) and Latty (1989) had found that Year 11 students were slightly more likely to be employed than those in Year 12, although there was some contrary evidence from the 1987 SCOPE data for the ACT, which indicated a consistent increase in part-time employment from Year 10 through to Year 12 (Munro 1990).

Table 3.2 Per cent of students employed part-time, by age and gender, and by age and year level, 1989-1992, *Youth in Transition* 1975 cohort.

Year	Age	Males	Females	Persons	Year level				
					8	9	10	11	12
1989	14	27.5	20.7	24.2	20.4	25.5	26.2		
1990	15	25.5	30.1	27.8		20.8	30.3	30.9	
1991	16	29.8	35.2	32.5			28.4	34.2	34.9
1992	17	30.5	40.3	35.4				38.2	34.6
<i>Total sample sizes</i>									
<i>1989</i>		<i>2715</i>	<i>2938</i>	<i>5653</i>	<i>1257</i>	<i>3897</i>	<i>489</i>		
<i>1990</i>		<i>2124</i>	<i>2520</i>	<i>4644</i>		<i>1008</i>	<i>3211</i>	<i>399</i>	
<i>1991</i>		<i>1734</i>	<i>2177</i>	<i>3911</i>			<i>943</i>	<i>2625</i>	<i>310</i>
<i>1992</i>		<i>1191</i>	<i>1706</i>	<i>2897</i>				<i>719</i>	<i>2130</i>

Job holding among younger students

To complement the picture provided by these analyses of data from the 1975 *Youth in Transition* cohort, data from the survey of the 1995 Year 9 cohort of the *Longitudinal Surveys of Australian Youth* program was also examined (see Appendix 1, Table A3.1). This revealed that one quarter (25.7 per cent) of Year 9 students were employed during the school term; a slightly higher percentage of boys than girls (27.7 per cent compared with 23.8 per cent) reported that they had a job. The gender difference in participation, with boys more likely to be workers at a younger age, was consistent with findings for

the 1975 cohort when sample members were aged 14 (see Table 3.2, and Robinson and Long, 1992). Employment rates among the LSAY sample grew sharply, from 26 per cent to 41 per cent, between Years 9 and 10, by which time a slightly higher percentage of girls (47 per cent) than boys (44 per cent) was working (Fullarton, 1999).

It can be concluded from these national data that during the early and mid 1990s in Australia approximately one in four students in the middle years of secondary school, and about one in three students in their senior years were involved in regular part-time work, and, furthermore, that while boys were more likely than girls to be workers at a younger age, this pattern was reversed among older students. These findings from the *Youth in Transition* data about the effects of gender, age and year level on the incidence of student employment confirm some of the earlier studies that had been reported in the literature. Using another national dataset, the Australian Longitudinal Survey (ALS), McRae (1992) showed that, in 1985, 31 per cent of a sample of almost one thousand school students aged 16 or more had a part-time job, with slightly higher percentages of females than males working (33 per cent compared with 29 per cent) and rates of employment increasing with year level. Nolan and Hagen (1989), in a study of students in two Melbourne secondary schools, found that more boys than girls worked in the early years of high school, but that the reverse was the case from Year 10 onward. Similarly, Latty's (1989) survey of students in metropolitan Sydney revealed a much higher percentage of males than females working at age 15 (43 per cent compared to 24 per cent) whereas at age 17 the proportion of females working was higher than that for males. More recent national data, from the Australian Youth Survey (Wooden 1995) indicated that in 1991, among 16-year-old school students, employment rates were higher for females (39 per cent) than males (34 per cent).

International comparisons

At the end of the 1980s Australia was among a small group of five OECD countries with relatively high levels of student participation in the labour force. In 1988 labour force participation rates among teenage school students in these countries were over 35 per cent (36.7 per cent in Australia, 40.5 per cent in Canada, 43.8 per cent in the United States, 45.1 per cent in the United Kingdom, and 51.7 per cent in Denmark). This contrasted with low participation levels in other OECD member countries - in five nations labour force participation was less than 5 per cent, and in another five

countries the rates were between 5 and 10 per cent (OECD Employment Outlook, September 1988, cited in Ashenden, 1990). While different cultural expectations may be one explanation for such variation in rates of student labour market participation across OECD countries, another can be found in the differing character of the interface between education and training and the labour market; in countries where these systems are tightly connected, entry to work generally requires occupational qualifications, and so full-time students lack access to part-time work (McKenzie, 1998b). It can be noted that the measure used for these OECD comparisons was labour force participation, including both the employed and those who were seeking jobs, hence the (1988) OECD figure for Australia is not comparable with the (1987) employment rates derived from ABS and *Youth in Transition* data that are displayed in Table 3.1.

More recent data for 1997 show that among 16- to 19-year-olds, across 17 OECD countries, an average of 17 per cent of the age cohort was both attending school and participating in the labour force. Very few teenage students work in Belgium, France, Italy, Greece, Spain and Portugal, but this was much more common in the UK (about 30 per cent of the age group were students and workers), the Netherlands (40 per cent) and Denmark (about 45 per cent). More age-specific data (see Appendix 1, Table A3.2) further illustrate these national differences within the OECD -- while in the UK, almost 30 per cent of 18-year-olds combined education with employment, in Belgium this figure was 1 per cent (Bowers et al., 1999).

The significant definitional problems encountered in measuring the extent of student employment are highlighted when considering the results of research studies that attempt to do so, both within and between countries (Hakim, 1998; Hobbs, Lindsay, & McKechnie, 1996; Micklewright, Rajah, & Smith, 1994). Estimates vary according to the time frame over which participation is measured, as well as the definition of what constitutes employment. In the United Kingdom, for instance, analyses of Family Expenditure Survey data revealed high levels of part-time employment among full-time students aged 16-18. Between 1968 and 1991, annual part-time employment rates among this group increased from 40 per cent to 59 per cent, with greater growth among females (from 43 per cent to 63 per cent) than among males (from 37 per cent to 53 per cent) (Micklewright et al., 1994). These same analyses also illustrated the importance of deciding which particular types of student jobs should be included

when measuring employment - for instance, whether occasional and self-employment jobs like babysitting and lawnmowing should be counted. When defined broadly, as receipt of any kind of employment income, student labour force participation was estimated to be 59 per cent in 1991, yet when narrowly defined as receipt of an hourly wage, it was 45 per cent (Dustmann, Mickelwright, Rajah, & Smith, 1996; Micklewright et al., 1994).

Annual employment rates, or the percentage with paid work of any sort within the previous 12 months, are higher than conventional employment rates, which report the percentage with paid work in a specific reference period, generally the week preceding the survey interview. Hence, in contrast to the annual rates for the UK noted above, data from a sample of 560 senior school students in Manchester, England indicated 39 per cent were working at the time of being surveyed in 1995, with the most marked variation in employment rates between ages 16 (34 per cent) and 17 (52 per cent) (Lucas & Lammont, 1998). Another study of the incidence of paid work, based on a total sample of 1400 students who were approximately 15 years of age from 4 regions of Scotland and England, found that 43 per cent of students were currently employed, while 71 per cent had been employed at some time during their school years (Hobbs et al., 1996). Those authors reviewed the various research studies that had been conducted concerning the extent of student work in Britain, finding that the best estimate of the percentage who ever worked prior to the school leaving age ranged between 63 and 77 per cent. They concluded that *'there is overwhelming evidence that employment is a majority experience.....research indicates that most children will have had at least one job before they reach school leaving age'* (Hobbs et al., 1996:16).

A comparison of student employment rates derived from *Youth in Transition* with data available from United States and Canadian research supports the view that job-holding among Australian students, while high when contrasted with many other countries, is nevertheless lower than in North America. The 1980 *High School and Beyond* survey, based on a sample of 60000 students, showed 42 per cent of grade 10 students (sophomores) and 62 per cent of grade 12 students (seniors) had worked during the school year (Lewin-Epstein, 1981). Other data for this same period, but derived from the National Longitudinal Survey of Youth, found employment rates among grade 12 students to be 51 per cent at the time of the survey and 73 per cent when measured over the academic year (Ruhm, 1997). The National Assessment of

Educational Progress (NAEP), while focussed on measuring educational achievement, also collects information from students about their employment activities; 54 per cent of the 29,000 eleventh grade students in the 1986 assessment reported working (Barton, 1989). In the next year, 1987, the National Assessment of Economic Education Survey indicated that about one third of tenth grade students (36 per cent of males and 29 per cent of females) and two thirds of twelfth grade students (67 per cent of males, 68 per cent of females) were employed during the school year (Lillydahl, 1990). The National Educational Longitudinal Study (NELS) found that, in 1992, 50 per cent of a nationally representative sample of grade 12 students worked during the year (Owings, 1995).

High levels of part-time employment among students also occur in Canada. Labour force survey data showed employment rates among students aged 15-16 grew from an average across the months of 27 per cent for the 1980-81 school year, to 34 per cent in 1990-91 (Sunter, 1992). The increase in the proportion of high school students working was also documented in various local surveys - in some regions, it grew from about 50 per cent in the mid 1980s to about 60-70 per cent at the end of the decade (Ainsworth 1990, cited in Anisef). In 1991 the Canadian *School Leavers Survey* of more than 9000 18-20 year olds revealed that two thirds of males and over half of females worked in their last year of high school (de Broucker 1996:5). In summary, these Canadian and United States data show that the incidence of student employment in North America was somewhat higher than that found in Australia in the 1990s.

Patterns of participation

Apart from information about the proportion of Australian students employed at a point in time during the school year, further indicators of the extent of student involvement in the labour force were also available from the *Youth in Transition* data. From those students who were working part-time (in October of any given year), additional information was collected about the number of weeks they had worked in the month, and the length of time they had been in their job. Analyses of those data showed that a vast majority of those who were employed - more than 90 per cent of 17-year-olds in 1982 and 1987, and 85 per cent in 1992 - worked for the whole of the reference month. Furthermore, over 80 per cent of students who were employed in October 1992 worked for eight or more months during that year.

Length of time in a job

Other evidence that most students who get jobs do so for an extended period of time is presented in Table 3.3, which displays the length of time that students in the 1975 birth cohort had been in their current (October) jobs in each year 1990-92. Note that this excluded time spent in any other previous jobs, so it may understate the number of years for which students had actually been employed.

Table 3.3 Length of time that students who were part-time workers in 1990, 1991 and 1992 had been in their current jobs, 1975 Youth in Transition cohort

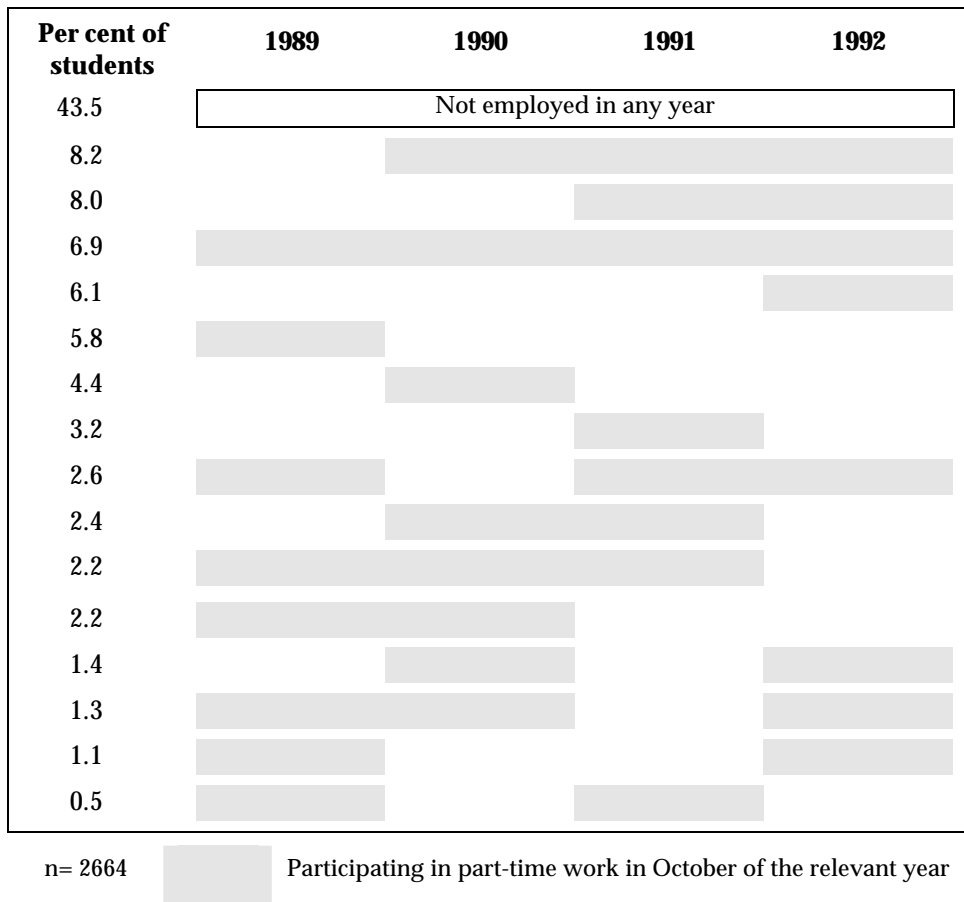
Year	1990			1991			1992		
	At age 15 years			16 years			17 years		
Time in job %	M	F	P	M	F	P	M	F	P
Less than 1 year	62.8	76.7	70.2	39.6	47.0	43.7	30.2	28.9	29.4
1 to 2 years	23.3	18.8	20.8	41.1	42.4	41.8	32.6	35.6	34.3
More than 2 years	14.0	4.6	8.9	19.3	10.6	14.5	37.3	35.6	36.3
Total per cent	100	100	100	100	100	100	100	100	100
Sample size	480	707	1187	450	734	1184	347	667	1014

In 1990, at age 15, 30 per cent of students who were working part-time had been in their jobs for one year or more; this increased to over 56 per cent in 1991, and over 70 per cent by 1992, when more than one third (36.3 per cent) of all student-workers had been employed in the same job for over 2 years. The figures for males and females were similar by age 17, although when students were younger there were higher percentages of males than females who had been working for more than one year. This is consistent with the results noted above that showed males entering the labour market at a younger age than females.

Number of years in employment

The patterns of part-time employment across the years 1989-1992 of a sub-group of this 1975 birth cohort of students are shown in Fig 3.1, where the shading indicates participation in part-time work in October of the relevant year. The sub-group consisted of 2664 students who were at school over the whole of the four years and for whom the relevant information on employment status was known. Fig 3.1 illustrates that, in the 4 year period 1989-1992, while almost 44 per cent of the students did not work at all, a total of over 56 per cent held a job in October in any one of the years.

Figure 3.1 The work history of a sample of school students, 1989-1992



(This figure would be considerably higher if holiday jobs, and other jobs not done in October, were included.) Just under 20 per cent of students worked for one year, and almost 37 per cent for more than one year. By age 17 in 1992, more than eight per cent of the subsample of students had been in employment for three years (from 1990-92), another eight per cent had worked for the previous two years (1991-92), and almost seven per cent had been working (in October) for all four years (1989-92) - these three groups accounted for twenty three per cent of all students in the sub sample. Employment in a single year was characteristic of a total of twenty per cent of students, with the largest percentage, just over 6 per cent, being employed in 1992. The remaining 14 per cent of students who were employed were engaged in part-time work in some years and not in others.

HOURS EMPLOYED PER WEEK

While the number of school students who have part-time jobs has grown substantially during the last two decades, and can be shown to differ according to students' age and year level at school, the time which students spend in their jobs is equally relevant when considering the question of the extent of student participation in the work force.

Variation in hours employed over time

The data in Table 3.4 provide information about the number of hours worked per week by school students who were aged 17 and employed part-time in the decade between 1982 and 1992. These figures suggest that, even though Table 3.1 showed that the percentage of students who had part-time jobs grew over the period, the amount of time students typically spent in their jobs did not change all that much. This can be seen by the fact that the median number of hours worked per week, for both males and for females, was consistently eight, with the single exception of males in 1987, when it was ten hours per week.

Table 3.4 Hours worked per week by 17-year-old school students with part-time jobs, 1982, 1987 and 1992

Hours per week	1982			1987			1992		
	M	F	P	M	F	P	M	F	P
Mean	8.3	7.1	7.6	10.2	8.4	9.1	9.3	9.0	9.1
Median	8	8	8	10	8	8	8	8	8
Number of hours	%	%	%	%	%	%	%	%	%
1 - 5	26.7	33.1	30.6	13.3	23.4	19.7	25.8	25.5	25.6
6 - 10	51.3	57.8	55.3	46.8	55.2	52.1	40.8	45.9	43.5
11 - 15	15.2	7.2	10.3	27.3	16.0	20.2	22.9	18.8	20.6
Over 15	6.8	1.9	3.8	12.6	5.4	8.1	10.4	10.2	10.3
Total per cent	100	100	100	100	100	100	100	100	100
<i>Sample size</i>	<i>183</i>	<i>258</i>	<i>441</i>	<i>121</i>	<i>213</i>	<i>334</i>	<i>347</i>	<i>668</i>	<i>1015</i>

However the average hours that students worked did increase over the decade 1982-92, rising from 7.6 to 9.1 hours per week for all persons. There was a steady growth for females - from 7.1 hours in 1982, to 8.4 in 1987, and to 9 hours per week by 1992. In earlier years, males worked a higher number of hours on average than females. Between 1982 and 1987 there was a relatively large increase, from 8.3 to 10.2, in the average number of hours worked by males, but this decreased to 9.3 hours in 1992. So

for the latter year there was almost no gender difference in mean hours worked per week.

The percentage distribution of the numbers of hours that students worked per week illustrates the trend towards a higher mean number of hours worked. Between 1982 and 1992, the percentage of 17-year-old students who were working for more than 15 hours rose (from 3.8 to 10.3 per cent) while the percentage working from one to five hours per week fell (from 30.6 to 25.6 per cent). The gender difference that existed in the earlier years - in 1982 the proportion of males who were working the highest number of hours was more than three times the proportion of females - had disappeared by 1992, when just over ten per cent of both males and females were working for more than 15 hours per week.

Variation in hours employed with age and year level

The group of students who were at school between 1989 and 1992 and who held part-time jobs in October of each of those years provided information about the number of hours that they worked in their jobs each week. Those data revealed that the average time which students spent in their jobs increased slightly with age and with year level at school. Table 3.5 shows that the mean hours worked per week rose from 8.0 hours at age 14 to 9.1 hours at age 17. Among younger students, males tended to work longer hours than females; however this gender difference dissipated by age 17, when both males and females averaged almost the same number of working hours per week. As a corollary of the increase that occurred with age, year level at school also influenced the number of hours worked. Students who were members of the 1975 *Youth in Transition* birth cohort who were in Year 9 in either 1989 or 1990 were employed an average of eight hours per week. (This same average was found for the Year 9 cohort of the LSAY project in 1995; see Appendix 1, Table A3.1). Year 12 students in either 1991 or 1992 averaged 9.4 hours per week.

Table 3.5 Mean hours worked per week by students with part-time jobs, by age and gender, and by age and year level, 1989-1992, *Youth in Transition* 1975 cohort

Year	Age	Males	Females	Persons	Year level				
					8	9	10	11	12
1989	14	8.4	7.4	8.0	7.7	8.0	8.7		
1990	15	8.7	8.5	8.6		8.1	8.6	9.1	
1991	16	9.0	8.2	8.5			8.1	8.6	9.4
1992	17	9.3	9.0	9.1				8.7	9.4
<i>Sample sizes</i>									
1989		628	531	1159	212	824	120		
1990		482	712	1194		187	879	126	
1991		453	721	1174			237	829	101
1992		347	668	1015				267	739

These data showing that student-workers spent an average of around 8-9 hours per week in their part-time job is consistent with other Australian studies - ranging from a sample of 45 girls in one Melbourne eastern suburban school (Yap, 1991) to a larger sample of over 250 Year 11-12 students in three regions of Victorian (Victorian Industry Education Partnerships, 1999), although a higher figure of 15-20 hours was reported for the small sample of 18 Year 11-12 students interviewed in Western Australia (Hull, 1999)

International comparisons

The most striking aspect of these figures concerning the amount of time which students typically spend in their jobs is that, when compared with their North American counterparts, Australian students work far fewer hours. In 1992 about 10 per cent of Australian 17-year-old students who were employed worked for more than fifteen hours per week (see Table 3.4). More than a decade before, in 1980, the comparable percentages in the United States were 36 per cent for tenth grade students, and 71 per cent among twelfth graders. Average weekly working hours were consequently much higher also; among twelfth grade students, they were reported to be 19 hours - about 21 hours for males, and 18 hours for females (Lewin-Epstein, 1981). In 1987 the National Assessment of Economic Education survey showed twelfth grade male students working an average of 21.5 hours, and females 19.6 hours (Lillydahl, 1990). Hours worked by the students in Mortimer's longitudinal study differed by gender, and for males increased from an average of over 19 hours per week in grade

10, to 22 hours in grades 11-12, while females averaged 20 hours in grade 12 (Mortimer, Finch, Dennehy, Lee, & Beebe, 1994). The NELS data indicated that in 1992 16 per cent of all high school seniors (19 per cent of males, and 14 per cent of females) were employed for more than 20 hours per week (Owings, 1995).

Canadian students also work longer hours than those in Australia. King *et al* (1988), in a sample of 13 Ontario high schools, found two thirds of boys who worked did so for more than 15 hours per week, while the proportion of girls in this category was a little less, but still over 60 per cent. Among employed secondary school students aged 17-19, 26 per cent worked for more than 20 hours per week (Sunter, 1992). Bernier (1995), using Canadian Labour Force Survey data for the 1993-4 school year, noted that 40 per cent of full time 17-year-old students were working more than 15 hours.

In the context of such data, most Australian school students can be viewed as moderately rather than highly involved part-time workers. The same can be said of student-workers in Britain, where typically they work between 6-10 hours per week (Hakim, 1998). Dustmann, Mickelwright, Rajah, & Smith (1996) noted that average hours worked by 16 year olds employed in 1974 were between 6-9 per week. Micklewright *et al.*, (1994) reported average hours of work among 16-18 year old students for the period 1988-91 to be 10.5 per week - a figure that was boosted by the inclusion of vacation of employment - while Lucas and Lammont (1998) found school students in their sample worked an average of 9 hours per week in 1995.

CONCLUSION

There are two major elements to the picture which emerged from these data of the extent of student participation in the part-time labour force. From 1978, when about one quarter of 17-year-old secondary school students was working part-time, the proportion of student-workers grew, with a very considerable jump between 1987 and 1992; by that year, more than one third of 17-year-old school students had a part-time job. There was particularly strong growth in part-time employment among females, mirroring a trend that occurred in the youth labour market beyond the school gate. The percentage of students who worked part-time increased with both age and year level at school, possibly reaching a peak in Year 11, with a slight decline in the proportion of Year 12 students who had jobs. Based on these figures, it is likely that

currently in Australia approximately one quarter of the students in Years 9 and 10 and one third of those in Years 11 and 12 are involved in regular part-time work throughout the school year. Furthermore, there was evidence that students who took up part-time jobs did so for sustained periods; it was not uncommon for students to work for two, three or four years during their secondary schooling. These rates of student employment are similar to those found in Britain, relatively high by comparison with many other European countries, yet not as high as those that occur in North America.

Furthermore the intensity of participation in part-time jobs by the majority of Australian school students, when measured in terms of numbers of hours worked per week - eight or nine hours being a typical figure - was low by U.S. standards, where fifteen or twenty hours is more the norm. Gender differences in mean hours worked by 17-year-olds that existed in 1982, when males worked over one hour per week more than females on average, had disappeared by 1992. The mean number of hours worked increased with increasing age and year level of students, ranging from eight hours in Year 9 to nine and a half hours in Year 12. Although data for 1992 indicated that Year 12 students were a little less inclined to work compared with Year 11 students, those in Year 12 who did have jobs tended to work slightly longer hours than those in Year 11.

These data provide empirical evidence that during the 1990s a proportion ranging between one quarter and one third of students in Australian secondary schools was involved in part-time employment during the school year, generally for about the equivalent of one full working day per week. That is, student-work is becoming a normative experience. The question which then arises concerns the types of young people who were most likely to be these student-workers, and whether there were any differences, either in employment rates or in employment intensity, according to students' social and educational background. While the decision to engage in part-time work might be taken by individual students on the basis of a range of personal factors, any systematic variation in the likelihood of employment might be regarded as evidence about constraints on that decision, and therefore of relevance in attempts to understand and account for that behaviour.

THE CHARACTERISTICS OF STUDENT-WORKERS

The issue of which students are most likely to have jobs while at school is of interest in itself, but it is also integral to any assessment of the effects on students of their participation in part-time work. While it is highly probable that students with personal attributes such as initiative and enterprise have a greater likelihood of being employed, there is a range of other characteristics which could potentially influence whether students take on part-time jobs while they are still at school. Personal and family background factors, such as gender, ethnic origin, and socioeconomic status, constitute one group of characteristics which can be examined when describing the sort of students who participate in the work force. A second group of influences are those which relate to the educational attributes of students, encompassing factors such as the type of school they attend (although it could be argued that this is just as much connected to their family circumstances as it is an attribute of their educational background), and their level of achievement, as well as their more subjective experience of school

The relationships between these various aspects of students' family and educational background and their participation in part-time employment were investigated using a number of LSAY datasets. Two dimensions of participation were investigated - the extent of participation, as indicated by rates of employment, and the intensity of involvement, measured by the number of hours per week which students spent in their jobs. The focus was on describing the characteristics of students who worked at age 17, drawing on data from all four *Youth in Transition* birth cohorts. The measurement of each of these background variables is detailed in the next section of this chapter, before a discussion of the patterns which emerged from both bivariate and multivariate analyses of these data. To supplement this picture of 17-year-old student-workers, data from the 1995 Year 9 cohort of *Longitudinal Surveys of Australian Youth* were used, providing a valuable additional perspective on the association between part-time work and attitudes to school.

THE YOUTH IN TRANSITION STUDENT BACKGROUND VARIABLES

The family background variables that were available from the data were students' ethnic origin, measures of a number of aspects of parental socioeconomic status, and students' home location, while educational characteristics included year level, type of school attended, earlier school achievement, self-concept of ability, post-school intentions and vocational aspirations. The following is an outline of how these variables were derived.

Ethnic background This referred to father's country of birth, reported in three broad categories - Australian born, born overseas in an English speaking country, and born overseas in a non-English speaking country.

Location The home location of the two oldest cohorts at age 17 (the 1961 cohort in 1978, and the 1965 cohort in 1982) was measured retrospectively in 1986. Some imprecision might be expected in responses requiring recall over such a lengthy period of time, particularly for the 1961 cohort, although the information on home location, when asked in 1986, was sought for a succession of years, providing a context for that recall. For the 1970 cohort, there was no exactly comparable measure of home location available for 1987, the year in which participation in part-time work was examined. However the question about where students lived was asked prior to that, in 1985 - when students were aged 15, and most likely to be still at home. The 7 possible responses to the question were collapsed into 3 categories - capital city, provincial city or town, and country town or country area.

There were no specific data available concerning students' home location for the 1975 cohort. Instead, the location of the school attended by the student at age 14 was taken as a proxy. The population density of the local government area in which the school was located was used to divide schools into quartiles, with the quartile having the lowest density of population classified as rural.

Parent's occupation The measure was based on father's occupation, but if information on father's occupation was missing, then mother's occupation was used. The six categories, ranging from professional to unskilled, are a condensation of the ANU-2 occupational prestige scale.

Parent's education This was based on mother's highest level of education, although if information for mother's education was missing, father's education was used.

Family wealth This was based on a factor scale derived from respondents' reports on the nature of their accommodation and on the possession of certain consumer durables (referenced to the time that sample members were at school); the scale was divided into quartiles and the middle two quartiles combined.

Year level For the 1961, 1965 and 1975 cohorts, this information was as reported in the relevant year (that is, when sample members were aged 17 in 1978, 1982 and 1992 respectively); for the 1970 cohort, it was estimated for 1987 from the student's year level in 1986.

School type in post compulsory years For the 1961 and 1975 cohorts, this was based on responses referring to the last year of secondary school, and for the 1965 and 1970 cohorts, it was based on school attended at age 16.

Achievement This represents early school achievement, measured by standardised tests in literacy and numeracy administered either at age 14 (for the 1961 and 1975 cohorts) or at age 10 (for the 1965 and 1970 cohorts). At the time of testing, all students in the samples were divided into quartiles according to their level of achievement on the tests. School retention rates into the post compulsory years are not the same for all ability groups however, so that by age seventeen, the student population in each sample contained a larger proportion of higher early school achievers, and a smaller proportion of lower achievers. Hence the numbers of students in each ability group were no longer approximately equal, as the figures in Table 4.3 show.

Self-concept of ability This was based on a question about how good students perceived themselves to be at their school work in relation to the other students in their class. For most cohorts, the question referred to the year in which it was asked, which was at age 16 for the 1965 cohort, and at age 15 for the 1970 and 1975 cohorts - that is, prior to the year in which employment rates were examined. The exception was the 1961 cohort, of whom the question was asked in 1980, with reference to the respondent's final year of secondary school (for which the modal year was 1978, when students were aged 17).

Post-school intentions Student's post-school plans were measured at age 15 for the 1970 cohort, and age 16 for the 1975 cohort; multiple responses involving various combinations of full-time and part-time work and study were allowed. For purposes of analysis, however, four mutually exclusive categories were used: study only, work only, a combination of work and study, and undecided. Another dimension of study intentions was examined for the 1975 cohort in 1992: that was their type of intended study in the following year, focussing on the distinction between higher education and other tertiary study (mainly TAFE).

THE RELATIONSHIP BETWEEN PART-TIME WORK AND FAMILY BACKGROUND

Table 4.1 records the percentages of 17-year-old students employed in 1978, 1982, 1987 and 1992, disaggregated according to the personal and family background characteristics that were described above.

Gender

Gender is one factor that has been shown to be a strong influence on labour force participation. As was noted in Chapter 3, by the 1990s, among students in the post compulsory years of secondary school, females had considerably higher rates of part-time employment than males. This reflected the situation in the broader labour market, where teenage participation in part-time employment was greater among females than among males. Although in the 1980s male student-workers had a higher intensity of involvement in work, when measured by average hours worked per week, by 1992 there was no such gender difference. This was not the case among younger school students, for whom gender differences in hours worked persisted; among 14-year-olds in 1989, males tended to be more likely to have a part-time job, and to work for slightly longer hours per week (Robinson & Long, 1992), and the same pattern was also found among Year 9 students in 1995.

Ethnic origin

The data in Table 4.1 show that students from non-English speaking backgrounds had consistently lower levels of participation in part-time jobs than students from Australian backgrounds in each of the years examined, while students whose fathers were born overseas in English-speaking countries had the highest levels of job holding

- the employment rates in 1992 for these three groups were 28 per cent, 37 per cent and 41 per cent respectively. This pattern was true for both males and females (with the exception of females in 1978, when Australian born students had a slightly higher participation rate). These differences in employment rates among students according to their ethnic origin generally remained constant over the years, despite the overall increase in participation in part-time employment. In both 1982 and 1992 the percentage of students from non-English speaking backgrounds who were working part-time was between seven and eight points lower than that for Australian students, and about twelve or thirteen points below students from English-born backgrounds.

This pattern is consistent with that reported from research studies in both Britain (Dustmann et al., 1996; Hakim, 1998) and the United States States (Berryman & Schneider, 1982; Carr, Wright, & Brody, 1996; Kablaoui & Pautler, 1991; Owings, 1995; Stern, Finkelstein, Urquiola & Cagampang, 1997), where higher rates of part-time employment occur among whites than among other racial or ethnic groups. Hakim (1998:163) observed that *'students in ethnic minority groups are significantly more likely to devote themselves exclusively to their studies.....as in the USA, white students in Britain are almost twice as likely as ethnic minority students to gain some experience of paid work while in full-time education.'*

Previous Australian studies had also indicated that students from non-English speaking backgrounds were less likely to have part-time jobs than other students (Coventry, Cornish, Stricker, Cooke, & O'Brien, 1984; Latty, 1989; Nolan & Hagen, 1989; Prior & Beggs, 1989). Prior and Beggs (1989) analysed national data from the Australian Longitudinal Survey and found that, among students who completed Year 12 in 1985, a much smaller percentage (35 per cent) of students with non-English speaking mothers had been employed over the preceding four years than students with English-speaking mothers (61 per cent). Nolan and Hagen (1989) examined the incidence of part-time work among students in two secondary schools in Melbourne during 1988 and early 1989, and noted differences of a similar magnitude - employment rates of 35-40 per cent among students of Southern European and South East Asian background compared with 60 per cent among Australian born students.

Table 4.1 Percentages of 17-year-old school students who worked part-time, by family background characteristics, 1978, 1982, 1987 and 1992

	1978			1982			1987			1992		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
All students	26.5	26.6	26.5	27.5	32.0	30.0	21.7	29.2	25.7	30.5	40.3	35.4
Ethnic background												
Australian-born	26.2	29.8	28.0	28.7	32.5	30.9	21.1	29.3	25.4	32.9	40.7	36.7
English-born	38.8	24.1	31.6	29.6	40.6	35.7	24.0	42.7	34.1	37.3	44.4	40.9
Non-English-born	21.5	15.3	18.8	23.0	25.0	24.1	24.0	23.6	23.8	18.0	36.6	28.0
Location												
Capital city	30.1	25.2	27.7	30.8	32.8	31.9	26.8	30.7	29.0	29.7	36.2	33.4
Provincial city or town	24.4	32.0	28.5	24.6	36.0	31.5	27.2	39.4	33.1	35.2	47.4	41.3
.....												
Country town or area	15.9	21.2	18.3	30.4	32.3	31.7	4.0	12.4	8.5	23.8	33.5	28.5
Parental occupation												
Professional	32.9	25.5	29.2	15.9	27.7	26.8	8.1	25.1	16.0	35.5	36.6	36.0
Managerial	30.9	28.5	29.7	30.3	28.5	27.7	18.0	28.8	24.7	31.8	42.1	37.2
White collar	26.7	34.3	30.6	35.3	38.3	37.3	43.7	42.0	43.0	30.8	44.9	37.7
Skilled	17.5	23.5	20.4	36.0	33.4	28.1	22.2	31.3	26.7	26.9	42.9	35.5
Semi-skilled	30.8	27.6	29.0	21.4	33.2	25.6	27.9	24.0	25.7	28.3	41.7	35.1
Unskilled	18.7	22.8	20.8	30.4	39.8	34.3	28.0	29.7	29.0	30.9	36.2	33.6
Parental education												
Post secondary	33.4	36.1	34.9	23.4	32.4	28.8	9.5	31.1	21.8	28.2	34.9	31.2
Completed secondary	30.4	24.4	27.5	28.4	30.2	29.4	24.5	30.0	27.2	31.3	40.6	35.4
Some secondary	24.2	27.9	26.2	30.4	32.3	31.5	21.4	30.1	26.2	35.0	43.6	39.8
Primary	23.6	20.5	22.1	25.2	38.6	32.9	26.3	16.0	20.3	10.9	29.2	21.5
Family wealth												
Wealthiest quartile	30.7	29.8	30.3	28.7	32.4	30.8	20.2	35.7	28.4	38.5	42.3	40.3
Middle 50%	31.1	26.0	28.5	30.9	31.3	31.1	24.4	28.5	26.7	30.1	41.6	36.0
Poorest quartile	13.1	23.5	18.7	12.7	35.5	26.8	20.2	21.3	20.8	22.8	34.7	28.7

Notes:

Percentages are weighted to take account of state of residence and school system. (Note that results presented in all tables are weighted in this way)

Ethnic background is based on father's country of birth.

Parent's occupation is based on father's occupation. If information on father's occupation was missing, then mother's occupation was used. The six categories are a condensation of the ANU-2 occupational prestige scale.

Parent's education is based on mother's highest level of education. If information for mother's education was missing, father's education was used. (cont'd next page)

Table 4.1 contd. Total sample sizes

	1978			1982			1987			1992		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
All students	957	1009	1966	677	817	1494	658	773	1431	1191	1706	2897
Ethnic background												
Australian-born	646	715	1361	439	523	962	438	490	928	799	1088	1887
English-born	120	119	239	79	95	174	81	93	174	145	209	354
Non-English-born	188	174	362	149	174	323	132	181	313	189	319	508
Location												
Capital city	300	321	621	298	320	618	373	442	815	235	393	628
Provincial city or town	94	95	189	67	95	162	128	128	256	398	557	955
.....												
Country town or area	60	68	128	40	82	122	105	133	238	281	370	651
Parental occupation												
Professional	217	226	443	153	191	344	166	149	315	300	349	649
Managerial	232	235	467	175	182	357	112	159	271	254	398	652
White collar	133	139	272	77	87	164	78	71	149	134	196	330
Skilled	171	176	347	102	134	236	111	119	230	170	259	429
Semi-skilled	92	107	199	69	92	161	73	94	167	117	185	302
Unskilled	93	105	198	63	80	143	57	90	147	125	202	327
Parental education												
Post secondary	106	147	253	95	124	219	63	85	148	230	299	529
Completed secondary	240	251	491	269	285	554	244	258	502	405	469	874
Some secondary	388	428	816	215	279	494	245	293	538	439	744	1183
Primary	129	129	258	81	111	192	58	80	138	56	113	169
Family wealth												
Wealthiest quartile	246	269	515	206	248	454	190	237	427	335	444	779
Middle 50%	350	389	739	300	356	656	303	356	659	549	801	1350
Poorest quartile	136	142	278	74	103	177	137	150	287	261	382	643

Notes cont:

Family wealth is based on a factor scale derived from respondents' reports on the nature of their accommodation and on the possession of certain consumer durables. The scale was then divided into quartiles and the middle two quartiles combined.

Location. For the 3 older cohorts based on responses to question about where respondent was living. For the 1975 cohort, based on population density of the area of school attended in 1989; results presented for this cohort are for population density quartiles, ranging from highest to lowest density.

(The figures cited here from both of these studies were based on labour force participation measured over a lengthy period, not at a single point in time, and hence are not directly comparable with the present study.)

What these earlier studies had not revealed, however, is the considerable variation within the non-English speaking group, nor had they made reference to the gender dimension of that variation. From Table 4.1 it can be seen that, in 1992, among seventeen year old students from non-English speaking backgrounds, twice as many females had jobs as did males from the same background, whereas the data for previous years - 1982 and 1987 - showed no such gender difference. To examine differences in rates of part-time employment within the non-English speaking background group, *Youth in Transition* data for parents' country of birth were further disaggregated; this information for the 1975 birth cohort is presented in Table 4.2.

Table 4.2 Participation in part-time employment among seventeen year old students whose parents were born in non-English speaking countries, 1992 (percentages)

Country of birth	Father's country of birth			Mother's country of birth		
	Males	Females	Persons	Males	Females	Persons
European	26.5	41.1	34.8	24.7	37.2	32.1
Asian	6.3	29.0	15.6	7.8	31.9	18.0
Other	3.2	24.4	15.8	11.4	25.1	18.4
Total Non-Eng speaking	18.0	36.6	28.0	16.9	34.1	26.2
<i>Sample sizes</i>						
<i>European</i>	<i>118</i>	<i>214</i>	<i>332</i>	<i>97</i>	<i>186</i>	<i>283</i>
<i>Asian</i>	<i>51</i>	<i>66</i>	<i>117</i>	<i>51</i>	<i>70</i>	<i>121</i>
<i>Other</i>	<i>20</i>	<i>39</i>	<i>59</i>	<i>29</i>	<i>36</i>	<i>65</i>

Two features emerge from these data. Compared with students whose fathers had been born in Europe, students from Asian and other backgrounds had very low rates of employment; while about 35 per cent of students with European-born fathers were employed, the figure for the other two groups was less than half that - around 16 per cent in each case. Furthermore, employment rates among these two latter groups were also much more sharply differentiated by gender than among European born. Females from Asian backgrounds were about five times more likely to have a part-time job than were males from the same background - 29 per cent compared with 6 per cent - and among students from other, non-European backgrounds the difference was even

greater. This pattern was repeated, although less marked, when mother's country of birth was taken as the measure of ethnicity.

The lower incidence of part-time work among students from non-English speaking backgrounds in general, and among particular groups of such students, may be explained, on the one hand, by disadvantages which they may suffer in the job market, or, on the other hand, by cultural differences in attitudes resulting in a deliberate decision not to participate in employment while at school. If the former explanation is advanced - for instance, language difficulties could deter or prevent some students from seeking part-time work, or they may lack access to employment opportunities - then it would seem that these barriers to employment are not as great for students whose parents were born in Europe, or for females whose parents were Asian born. A greater commitment to the long-term benefits of education, which therefore accords higher priority to schooling than to a part-time job in the short-term, would seem to be a more probable explanation. Latty (1989:46) had noted from his study of labour force participation among several hundred students in Sydney in 1987 that students from non-English speaking backgrounds were not only less likely to be working, but also less likely to be seeking work, a high proportion citing their studies as a reason for not doing so. If low rates of participation in part-time work reflect a cultural preference for education, this attitude seems to be stronger among students from Asian rather than European backgrounds. It is also conceivable that the difference found between these two groups of students may be partly linked to their parents' length of residence in Australia. Although information on year of arrival was not available from the *Youth in Transition* data, patterns of immigration mean that European-born parents have generally been in Australia for a longer period of time than Asian parents. If it is assumed that more recently arrived migrants place an even greater emphasis on the value of education, this may be translated into lower rates of part-time employment among students from those backgrounds. However, if this should be the case, it is perceived to be far more important for males than for females, as evidenced by the discrepancy by gender in rates of part-time employment among students from Asian backgrounds.

Location

Information on home location was available directly from the three oldest cohorts of students, enabling a comparison of employment rates among those living in capital cities, in provincial cities and towns, and in country towns or country areas. As indicated in Table 4.1 there was not a clear and consistent association for all three years between levels of participation in part-time work and where students were living. In 1982, in fact, employment rates were the same – 32 per cent - across each of the three categories of home location. However in both 1978 and 1987 the lowest participation rates were among students living in the most rural areas – that is, in country towns or country areas - while there was little difference between the rates for students from capital cities and those living in provincial cities or towns. For the 1975 birth cohort, the location variable referred not to the student's home but to the area of the school attended in 1989; nevertheless, the same result was found for this cohort in 1992 - lower rates of employment among students from the least densely populated areas.

A similar pattern was reported by Coventry et al (1984:46). The lower levels of part-time employment recorded by students in rural areas could be assumed to reflect both a dearth of part-time and casual jobs in such locations, and difficulties of access associated with greater distances. Low participation rates occurred among both male and female students, but were lower for males than females (four per cent for males compared to 12 per cent for females in 1987, 24 per cent compared with 34 per cent in 1992) suggesting that the fewer jobs that were available, probably in the service sector, were more likely to have been filled by young females.

Parental occupation

An analysis of the variation in level of job-holding among students according to the occupational background of their parents across each of the four cohorts of seventeen year olds does not provide unequivocal evidence of an association between the two. In 1978, as Table 4.1 shows, the lowest incidence of part-time work was among students whose fathers were in skilled and unskilled occupations (around 20 per cent), while the incidence among students whose fathers were in the other four occupational groups was considerably higher (29-30 per cent). By contrast, in 1982, the groups with the lowest incidence of part-time work were students from semi-skilled backgrounds

(26 per cent), and the highest incidence was among students whose parents were in unskilled and white collar occupations (34 and 37 per cent respectively). This latter group also had the highest percentage of part-time workers in 1987 (43 per cent), but in that year, unlike in 1982, the lowest percentage (16 per cent) was found among students from professional backgrounds - this was true for both males and females, but particularly males. The pattern, then, for the three years 1978, 1982 and 1987 was inconsistent, and in some ways contradictory.

In 1992, there was little variation between students whose parents were from different occupational groups, with percentages employed in each group ranging between 34 and 38 per cent, but with slightly lower rates found among students whose parents were from the lowest occupational category. However, this relative uniformity in 1992 masked a contrasting gender pattern. Among males, students from professional backgrounds had the highest incidence of part-time work (36 per cent) , and those from skilled and semi-skilled the lowest (28 and 27 per cent). For females, the two groups which had the lowest levels of employment were students whose parents were from professional (37 per cent) and from unskilled occupations (36 per cent) - that is, the two extremes of the occupational categories - providing some suggestion of a curvilinear relationship.

Overall, these data do not show any clear association between parental occupation and student part-time employment, although a focus on the most recent data, for 1992, suggests that there may be an effect of this background factor, which operates somewhat differently for males and females.

Parental education

Nor is there a consistent relationship over time between educational background of parents and student participation in part-time work in the data shown in Table 4.1. The pattern for 1978 suggested that the likelihood of students - both males and females - having a job increased with level of parental education; 22 per cent of students from the lowest category were in part-time work, while the figure for students whose parents were from the highest category was 35 per cent. The reverse was true for 1982, although the discrepancy between the two extremes was very small - only 3 percentage points. In 1987, the lowest proportions of students who were employed

came from these two extreme categories - that is, students whose parents were the most and the least educated - whereas somewhat higher proportions of students from the two middle categories of parental education were employed.

This curvilinear relationship was also found in 1992; higher rates of employment among the middle groups, with slightly lower rates among the most highly educated and much lower rates among the least educated; this was true for both males and females, but markedly so for males. In general, across most years, this lowest level of parental education was associated with a lower likelihood of students being employed.

Family wealth

The strength of the relationship between family wealth and job-holding by students varied over the years shown in Table 4.1, but it was a consistent and positive one. Students from the wealthiest family backgrounds had a higher rate of participation in part-time work than did those from the poorest. In 1978 thirty per cent of students in the wealthiest quartile had jobs, compared with almost 19 per cent of students from the poorest group, and the figures for 1992 were forty per cent compared with just over 29 per cent. However this contrast in employment rates between students from the most and least wealthy quartiles was not as great in the intervening years, 1982 and 1987. In 1987, for instance, the difference in employment rates between students in the wealthiest and poorest quartiles was less than eight percentage points (28.4 per cent compared with 20.4 per cent).

Socioeconomic status and part-time work: an overview

These data concerning parental occupation, parental educational background and family wealth, when combined, can be used to make some generalisations about the effect of socioeconomic status on a student's likelihood of participating in part-time work. Before doing so, it is useful to review what is known on this issue from other Australian studies, although the evidence is somewhat sparse.

Connell (1975), in a sample of Sydney secondary school students, found a higher incidence of part-time work among students from blue collar backgrounds, especially boys. Two analyses conducted in the 1980s drew attention to the possible relationship between socioeconomic status and students who work, without actually attempting to

measure the socioeconomic status of student-workers. Bentley and O'Neil (1984) suggested that differences in labour market behaviour of students from independent schools compared with government schools may have been related to socioeconomic variables, while Dalziel (1989) attributed differences in student employment rates between various government schools to socioeconomic factors in the areas in which the schools were located. Both these studies implied that high socioeconomic status was positively associated with part-time work.

Coventry et al (1984) provided some more direct evidence for this view. Their study focused on young people who were part-time workers, and was based on longitudinal data collected from a sample of 2378 Victorian students who were in Year 9 in 1980, and who were re-surveyed in 1981 and again in 1983. At that time, 1833 respondents remained in the sample, of whom 1050 were still at school; 25 per cent of these Year 12 students were also working part-time. To examine the relationship between participation in part-time work and socioeconomic status, a composite measure of the latter, consisting of father's occupational status and both parents' level of education, was used. It was found that 'a greater percentage of young people from a high SES background (23 per cent) were engaged in part-time work compared with people from low (15 per cent) and medium (17 per cent) SES backgrounds' (Coventry *et al*, 1984:53). These data were for all people who were working part-time when aged 17-18 in 1983, regardless of their educational status - both students and non-students were included. However, for the purposes of the present study, it was desirable to know if there were any differences between non-students and students in this respect. It was possible to use the information provided about the employment and educational status of those in the sample in 1983, to separate out those who were full-time students and part-time workers (n=276) from those part-time workers who were not in education (n=62) and to calculate, for the student group, the relative representation of each socioeconomic group. These derived figures indicate that, among the 276 full-time students who were in part-time work (of whom 259 were at school and 17 in other education), 21 per cent came from the lowest socioeconomic group, 31 per cent were from the medium group, and 47 per cent were from the highest group. The same figures, calculated for the whole sample of part-time workers (students and non-students), were about 25 per cent, 32 per cent and 43 per cent respectively, indicating little difference between student and non-student part-time workers in terms of socioeconomic background,

and confirming the positive relationship between socioeconomic status and part-time work.

McRae (1992) used family income as an indicator of socioeconomic status when examining 1985 data from the Australian Longitudinal Survey, and, although the analysis was based on only a small sample (just over 400 students), he showed that, apart from a very high income group (who were much less likely to work), increasing family income was associated with a higher probability of working. McRae (1992:207) concluded that this was evidence for the view that those who have part-time jobs tend to be 'middle class students working for pocket money'.

Viewed against these earlier findings, what do the *Youth in Transition* data presented in Table 4.1 tell us? While it is recognised that parental occupation, parental education and family wealth are not independent variables, from the bivariate analyses discussed above, a number of conclusions can be drawn. First, there is consistent evidence that family wealth is positively associated with part-time employment, although students from the very wealthiest backgrounds were less likely to be employed. Secondly, while the effect of parental occupation was mixed, for the most recent data, when both male and female students were considered together, lower rates of employment were found among students whose parents were from the lowest occupational category, although this must be qualified by reference to differences by gender. Thirdly, over most years, low rates of employment occurred among students whose parents had the lowest level of education. Hence these results, in combination, can be seen to support the hypothesis that part-time workers are more likely to come from middle and higher rather than from lower socioeconomic backgrounds.

There are a number of advantages which students from such backgrounds might enjoy in the part-time job market. In particular, when cognisance is taken of the way in which students obtain jobs - using largely informal methods, frequently through parents and other family members, as well as friends (Victorian Industry Education Partnerships, 1999), then students whose parents are employed and have professional contacts have more opportunities to obtain part-time work. There is empirical evidence from two separate British datasets that students with an unemployed parent have a lower likelihood of being part-time workers (Dustmann et al., 1996; Micklewright et al., 1994). In a context where informal recruitment processes are

common, “*the absence of a parent.....to ‘ask around’, ‘put in a good word’ or ‘keep an eye out’ for a vacancy is likely to constitute a real barrier to work*” (Mizen, Bolton, & Pole, 1999:430). Students from more affluent backgrounds may also have greater access to other forms of parental support - for instance in providing transport to and from the workplace, a significant factor given the relatively restricted mobility of many young people.

By implication, therefore, the majority of Australian school students who work are not driven to do so by financial need within the family. The evidence available from American research indicates a similar situation. Some of those studies have reported a curvilinear relationship between employment rates and family income. Young (1979) noted that labour market participation of adolescents was highest among middle income rather than lower and higher income families, and Greenberger and Steinberg (1986) cited *High School and Beyond* data for 1980 that showed that employment rates among grade 10 and grade 12 students increased as family income levels rose, but then declined again for the highest income groups (although not to the levels of the poorest). Using parental occupation as an indicator, Schill et al (1985) found, for a sample of almost 4600 high school students in Washington, that employed students came from families with higher socioeconomic status than did unemployed students. Among a national sample of grade 12 students in 1992, employment rates were related to socioeconomic status in a curvilinear pattern, ranging from 44 per cent in the low category, to 53 per cent of the middle category, and 49 per cent in the high category (Owings, 1995).

British researchers have also found that student-workers are less likely to be from poorer backgrounds. Dustmann et al (1996) showed that household income did not have a significant effect on the probability of employment among a sample of 16-year-olds in 1974. Hakim (1998) reviewed a number of quantitative and qualitative studies, and concluded that student employment rates were equally high, or even higher, in the most affluent homes, reinforcing the view that it is not financial necessity that has acted as a catalyst for such employment. However Mizen et al (1999) have cautioned against assuming an absence of any financial imperative for student employment in that country, arguing that changing economic circumstances during the 1980s and 90s - particularly the increasing proportion of families living on low incomes - have created a greater pressure for young people to seek part-time work in order to finance their leisure activities.

On balance, the Australian data, consistent with that from Britain and the United States, tend to indicate that during the 1990s school students who had part-time jobs were more likely to be from middle class families, and by inference to be working as a matter of choice, rather than young people from less affluent backgrounds who were impelled to work by economic necessity. Structural factors do not appear to be a major influence; the majority of student-workers want to be active participants in the labour market.

THE RELATIONSHIP BETWEEN PART-TIME WORK AND EDUCATIONAL CHARACTERISTICS

The percentages of students who were in part-time employment as 17-year-olds are recorded in Table 4.3, disaggregated by various facets of their educational experience.

Year level

The difference in employment rates between Year 11 and Year 12 students in the *Youth in Transition* samples at any one time was not large. In 1992, 35 per cent of Year 12 students had jobs compared with 38 per cent of those in Year 11. A similar discrepancy occurred in 1982, although the pattern was the reverse in 1978 and 1987. If the most recent data, for 1992, is taken as evidence that students may now be a little less inclined to work in a part-time job in their final year of school, then the tendency was stronger among males than females; the difference in employment rates between Years 11 and 12 was greater (six percentage points) for males than for females (one point). It should be noted, however, that these figures are for age based samples, and hence cannot be seen as accurately reflecting the situation in nationally representative groups of students of either Year 11 or Year 12.

Table 4.3 Percentages of 17-year-old school students who worked part-time, by educational characteristics, 1978, 1982, 1987 and 1992

	1978			1982			1987			1992		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Year level												
Year 11	26.2	23.5	25.0	31.2	32.4	31.8	20.5	27.5	24.1	35.4	41.1	38.2
Year 12	27.6	28.7	28.2	24.3	32.5	29.2	22.2	29.0	25.9	28.9	40.1	34.6
School type in post comp years												
Government	25.1	26.5	25.8	33.4	35.7	34.7	23.5	27.6	25.8	32.1	42.2	37.2
Catholic	34.1	30.4	32.4	28.8	32.0	30.8	22.8	32.3	27.6	27.9	39.9	33.6
Independent	21.6	21.4	21.5	10.1	17.4	13.5	14.1	27.4	21.1	26.4	31.8	29.2
Achievement												
Highest quartile	29.4	32.7	30.9	23.8	32.0	27.9	25.0	39.0	32.8	31.1	44.1	36.5
Third quartile	29.2	29.5	29.4	36.4	33.9	34.8	18.6	27.3	23.0	35.4	41.0	38.4
Second quartile	20.9	19.7	20.2	22.4	31.8	28.2	23.2	24.1	23.8	31.9	40.8	36.9
Lowest quartile	18.4	8.5	14.3	30.3	25.6	27.7	17.8	10.2	14.3	19.5	32.6	26.6
Self-concept of ability												
A lot above average	25.9	31.3	28.7	31.4	30.1	30.7	23.2	26.5	25.0	35.7	43.2	39.3
A little above average	26.0	29.8	27.9	30.5	34.9	33.2	20.9	32.0	26.9	31.9	43.2	37.7
About average	24.7	22.6	23.5	22.8	29.9	26.9	24.3	24.9	24.6	28.6	36.9	33.1
Below average	41.6	12.9	32.4	27.7	26.8	27.4	9.1	40.0	20.2	20.1	23.9	21.7

Notes:

Year level: For the 1961, 1965 and 1970 cohorts, as reported in relevant year, while for the 1970 cohort, was an estimate for 1987, based on year level in 1986. School type in post compulsory years: For the 1961 cohort, based on responses for 1979 and for last year of secondary school. For the 1965 and 1970 cohorts, refers to school attended at age 16. For the 1975 cohort, based on 1993 responses for last year of secondary school. Achievement: Based on achievement tests at age 14 (the 1961 and 1975 cohorts) or at age 10 (the 1965 and 1970 cohorts). Self-concept of ability: For the 1961 cohort this was asked in 1980, with reference to respondent's last year of secondary school. For other cohorts, refers to the year in which the question was asked, this being at age 16 for the 1965 cohort, and age 15 for the 1970 and 1975 cohorts.

School type

Students who attended government schools were more likely to be part-time workers than those who were at Catholic or non-government, non-Catholic Independent schools. This was true for each year except 1978, when the percentage of students who were employed was higher in Catholic schools than government schools (for that year, some respondents may have been reporting vacation jobs: see Chapter 3, page 48). In 1992, while 37 per cent of government school students had part-time jobs, the figure for independent school students was 29 per cent, a discrepancy that was a little less for males and a little more for females.

This finding is consistent with earlier research. Bentley and O'Neil (1984) reported the results of a 1980 survey of 2815 South Australian students in Years 10-12, and from that concluded that '*labour force participation rates of students attending government schools are higher than those of students attending independent schools*'. The study pointed to differences in patterns of labour market participation by students from independent schools compared with students in government schools, noting that the former tended to confine themselves to holiday jobs, rather than working during school term. This greater reluctance of students at independent schools to combine school with part-time work was also reflected in the reasons that those who were not involved in the labour market gave for not looking for work; almost 67 per cent of students in independent schools cited interference with their studies or exams as the main reason they were not looking, while the comparable figure for students in government schools was 59 per cent.

School achievement

A unique feature of the *Youth in Transition* data is that they contain a measure of early school achievement of sample members, based on standardised tests in literacy and numeracy. Hence it was possible to examine the patterns of students' part-time employment according to their earlier school performance, at either age 14 or at age 10. For the 1961 birth cohort there was a positive relationship between school achievement when aged 14 and part-time employment at age 17. While 14 per cent of students who had been in the lowest achievement quartile in 1975 were employed in 1978, the figure for those from the highest achievement quartile was 31 per cent, a contrast that was

found for both males and females. The same relationship occurred among students in the 1970 cohort, with higher rates of employment at age 17 in 1987 among those who had been in the top achievement quartile when they had been tested at age 10, and lower employment among the lowest achieving quartile. However for this 1970 birth cohort there was a difference between males and females, with the highest employment rates for males in the highest and second quartiles, and lower rates in the lowest and third quartiles.

By contrast, it was not students in the highest but in the second highest achievement quartiles who were most likely to be employed at age 17 for both the 1965 birth cohort tested at age 10 in 1975 and the 1975 cohort tested at age 14 in 1989. In the case of the former cohort, the employment rates in 1982 for females were similar for the three highest quartiles, and markedly lower among the lowest achieving group, but for males the second and highest quartiles had lower rates. For 1992, the clearest difference was the lower employment rates among the lowest achieving students, both males and females. Overall, while the percentage of students from the top three achievement groups ranged between 36 and 38 per cent, just 27 per cent of the lowest achieving quartile was employed.

These *Youth in Transition* data indicate that students who were lower achievers in their early years at school were consistently less likely than average and higher achieving students to have part-time jobs when they were aged 17. American studies which have addressed this issue, such as those by Barton (1989), Lillydahl (1990) and Schill et al (1985), noted a similar positive association between rates of part-time employment and student achievement. Recent data from the NELS also showed lower achievers were less likely to be employed: among a sample of grade 12 students in 1992; the lowest employment rate of 46 per cent was reported by students from the lowest achievement quartile (based on class rank), whereas employment rates were 53 per cent, 55 per cent and 52 per cent in the second, third and highest quartiles respectively (Owings, 1995). There is evidence of the same tendency in Britain. Analyses based on data from the National Child Development Study in the UK found that measured ability at age 11 had a significant positive effect on the likelihood of 16-year-old students having a part-time job, but that it was only those in the bottom quartile of ability who were less likely to be student-workers as teenagers, while there were no significant ability effects for the second, third or fourth quartiles (Dustmann et al.,

1996). Howieson (1990), using Scottish data, showed that lower percentages of less academic students had part-time jobs compared with the most academic students, with the highest incidence of part-time work among mid-attaining students

The Australian evidence from the *Youth in Transition* data is that less able students are less likely to be part-time workers. This is an important consideration in any attempt to assess the effects of that part-time employment on students, particularly on their academic performance.

Self-concept of ability

It is known from other studies that when students are asked to rate their level of school performance, the distribution of their responses is highly skewed, with relatively small numbers indicating that they believe themselves to be achieving below average in their school work, and large numbers who indicate that they are achieving above average. This is evident in the figures shown in Table 4.3. So some care is required when interpreting the data on students' views of their own ability. In addition, for three of the *Youth in Transition* cohorts, there was a gap of one or two years between the time when sample members were asked about their perceptions of their school performance - at age 15 or 16 - and the reference year for participation in employment, when students were aged 17. Lower school retention rates might be expected among students who believed that they were not performing as well as their peers, further exacerbating the initially skewed distribution of the responses. A different factor related to timing may have influenced responses for the cohort born in 1961; those sample members were asked about their level of school performance later, at age 19, referring back to their last year of secondary school. Despite these caveats, however, there was evidence of a pattern in the data, particularly for 1992, which was also consistent with the pattern found for early school achievement.

The rate of part-time employment for 1992 showed a positive relationship with students' perceptions of their ability. Students who believed (when they were aged 15) that the standard of their school work was a little or a lot above average had higher rates of employment when they were aged 17 than students who believed themselves to be performing below average (38-39 per cent compared with 22 per cent), while the rate of job-holding among those who thought they were about average was between

these extremes (33 per cent). This association between self-concept of ability and employment was found for both males and females.

For the earlier years, there was some evidence of the same pattern, but there were also gender differences that were contradictory. Lower self-concept was associated with low employment rates, but only for females in 1978, and less so in 1982, and only for males in 1987. There were some instances of the reverse - high employment among those who considered themselves below average at school - among males in 1978, and among females in 1987, although in the latter case very small cell sizes could account for such a divergent finding.

Table 4.4 Percentages of 17-year-old school students who worked part-time, by post-school intentions, 1987 and 1992

Post-school intentions	1987			1992		
	Males	Females	Persons	Males	Females	Persons
Study only	19.0	25.9	23.2	28.3	35.7	32.1
Study and work	28.7	38.3	33.4	34.0	49.4	43.1
Job only	25.4	29.9	27.3	32.9	40.0	35.2
Undecided	12.6	25.5	20.1	31.6	38.2	35.0
<i>Total sample sizes</i>						
<i>Study only</i>	<i>241</i>	<i>346</i>	<i>587</i>	<i>475</i>	<i>719</i>	<i>1194</i>
<i>Study and work</i>	<i>121</i>	<i>126</i>	<i>247</i>	<i>191</i>	<i>437</i>	<i>628</i>
<i>Job only</i>	<i>172</i>	<i>133</i>	<i>305</i>	<i>255</i>	<i>173</i>	<i>428</i>
<i>Undecided</i>	<i>78</i>	<i>106</i>	<i>184</i>	<i>177</i>	<i>258</i>	<i>435</i>

Note: Student's post-school plans were measured prior to employment at age 17 -- for the 1970 cohort, at age 15, and at age 16 for the 1975 cohort; multiple responses involving combinations of full-time and part-time work and study were allowed, although categories in the table are mutually exclusive.

Post-school intentions

While factors such as school achievement and self-concept of ability could be expected to have a strong influence on students' post-school study and work intentions, part-time employment while at school may be indirectly associated with students' intentions. The nature of that association is not clear, however. It could be argued that students with high educational aspirations may be more highly motivated, and therefore also more likely to have part-time jobs as a means of improving their future employment prospects. An alternative argument is that those who have high educational aspirations may be more likely to shun part-time work, regarding it as an unwelcome diversion from study.

Table 4.4 presents data for two cohorts on the intentions of students to study, work, or do both, after leaving school. These intentions were measured at age 15 for the 1970 cohort, and at age 16 for the 1975 cohort, and hence can be seen more as predictors of part-time employment at age 17 rather than as outcomes of that employment - although experience of part-time employment in those earlier years may also have had an influence on post-school intentions. For each cohort, employment rates at age 17 were highest among those students who had previously indicated that, after leaving school, they intended to combine work and study, and lowest among those who had said that they intended to study but made no reference to working while doing so. In 1992 the rates of employment for these groups of students were 43 per cent and 32 per cent respectively. Among those who had responded, when asked at age 16, that they would get a job, but not study, when they left school, the employment rate was between these two extremes - 35 per cent. For both males and females, these data show that school students whose post-school plans focused on study alone were slightly less inclined to be part-time workers while at school than those who planned to be in employment when they left school, while the students who planned to combine work and study after leaving school were also the ones most likely to be doing so while attending school.

An additional perspective on this issue of the relationship between students' post-school plans and their involvement in part-time work was provided by examining the differences in rates of employment according to students' study intentions for the following year. These data, for the 1975 cohort at age 17 in 1992, are displayed in Table 4.5. It shows that those who were intending students in the following year, 1993, were slightly more likely to be working part-time while at school than those who did not intend to be students, providing some evidence for the view that it is students with higher educational aspirations who are more inclined to be employed when at school. Of those who indicated that they planned to study (either at school or post-school) in the next year, 36 per cent were part-time workers, compared with 33 per cent of those who stated that they were not intending to study. Among the intending students, employment rates were highest for those who were planning to be at school in 1993, (by implication, among Year 11 students in 1992), with little difference between males and females - 39 per cent of the former were employed, and 42 per cent of the latter.

Table 4.5 Percentages of 17-year-old school students who worked part-time, by educational intentions and vocational aspirations, 1992

Intentions and aspirations	Per cent employed		
	Males	Females	Persons
Intentions next year			
Study			
Continue at school	39.3	41.8	40.5
Post-school study			
Higher education	25.9	41.4	34.3
Other study	30.8	35.6	33.4
Total post-school study	27.3	39.8	34.0
Total study	31.4	40.5	36.2
No study	27.2	40.0	32.6
Job aspirations at age 30			
Professional	31.6	41.3	36.6
Managerial and clerical	30.4	43.0	35.6
Blue collar	23.9	36.8	30.1
<i>Total sample sizes</i>			
Study			
<i>Continue at school</i>	<i>335</i>	<i>445</i>	<i>780</i>
<i>Post-school study</i>			
<i>Higher education</i>	<i>383</i>	<i>727</i>	<i>1110</i>
<i>Other study</i>	<i>163</i>	<i>231</i>	<i>394</i>
<i>Total post-school study</i>	<i>546</i>	<i>958</i>	<i>1504</i>
<i>Total study</i>	<i>921</i>	<i>1444</i>	<i>2365</i>
No study	<i>253</i>	<i>253</i>	<i>506</i>
Job aspirations at age 30			
<i>Professional</i>	<i>641</i>	<i>995</i>	<i>1636</i>
<i>Managerial and clerical</i>	<i>188</i>	<i>191</i>	<i>379</i>
<i>Blue collar</i>	<i>143</i>	<i>162</i>	<i>305</i>

*Notes: Some respondents did not indicate type of intended study, so totals for all study are higher than the sum of school and post-school study.
Job aspirations were asked in 1989, and referenced to age 30; responses were initially recorded in 18 categories.*

For those who were intending to undertake post-school study in 1993, however, there was a considerable gender difference in employment rates, and a further difference according to whether or not the intended study was in higher education. While 26 per cent of males who planned to study at university had part-time jobs, the figure for females was much greater - 42 per cent. The contrast was not nearly as great for those who planned to do other study, primarily TAFE - among males, 33 per cent were employed, among females, 36 per cent. These data indicate that males with high academic aspirations were somewhat less likely to be part-time workers than females with similar goals.

A second aspect of Table 4.5, which partly addresses the question of whether the aspirations of student-workers differ from non-workers, is the data concerning the kind of job which students thought they would have when older. Students had been asked, at age 14, about their intended job at age 30. Responses were initially recorded in 18 categories, but recoded to three major categories - professional, white collar (managerial and clerical) and blue collar (including skilled, semi-skilled and unskilled). It has long been recognised that student's occupational aspirations are highly skewed, in that a far greater proportion of students hope to occupy higher status occupations than can actually do so (Anderson, Saltet, & Vervoorn, 1980). This can be seen in Table 4.5 in the numbers of students in each of the three categories of jobs, with seventy per cent of all students aspiring to professional jobs. These data also suggest that students with lower aspirations may be less likely to be in part-time work. The employment rate among students who intended to work in professional and managerial and clerical jobs was a little higher (36 per cent) than among those who had said they planned to be in blue collar jobs (30 per cent) at age 30.

THE RELATIONSHIP BETWEEN PART-TIME WORK AND CHARACTERISTICS OF STUDENTS : A MULTIVARIATE ANALYSIS

Rates of part-time employment among school students vary considerably according to different aspects of social and educational background, as has been described above. That discussion drew on data from four different groups of 17-year-olds at different points in time. For one group, the 1975 birth cohort, further analyses were conducted in order to examine the influence of individual variables on the incidence of part-time work among students, while controlling for the effects of the other variables

The likelihood of a student being in part-time employment at age 17 in 1992 was modelled using logistic regression. The first section of this chapter described the student background variables from which dummy variables were constructed for inclusion in the regression analyses. For this purpose some variables - namely, ethnic background, parental occupation, parental education, school achievement and self-concept of ability - were collapsed into fewer categories than shown in Tables 4.1 and 4.3 (see Appendix 2). An additional aspect of social background that was included in the model was a measure of rurality. Although there were no specific data available concerning students' home location, a dummy variable for rurality was derived from

Table 4.6 Logistic regression analyses of effects of students' background characteristics on participation in part-time work, 17-year-olds in 1992

	Regression coefficient
Gender (compared with Females)	
Males	- 0.44 ****
Ethnic background (cf English-speaking)	
Non-English speaking	- 0.29 *
Location (cf Non-rural)	
Rural	- 0.44 ****
Parental occupation (cf Semi-skilled and unskilled)	
White collar and skilled	0.09
Professional and managerial	0.10
Parental education (cf Primary or some secondary)	
Completed secondary	- 0.14
Post secondary	- 0.49 ***
Family wealth (cf Poorest quartile)	
Middle 50%	0.35 **
Wealthiest quartile	0.58 ****
Year level (cf Year 12)	
Year 11	0.38 ***
School type (cf Government)	
Catholic	- 0.27 *
Independent	- 0.58 ****
Early school achievement (cf Lowest quartile)	
Middle 50%	0.48 ***
Highest quartile	0.51 **
Self-concept of ability (cf Below average)	
About average	0.48 +
Above average	0.74 *
Post-school intentions (cf Study only)	
Study and work	0.41 ***
Work only	0.33 *
Don't know	0.13
<i>N</i>	2409

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Goodness of fit statistics:

Somers' D = 0.280, Gamma = 0.282, Tau-c = 0.640, Log likelihood chi-square = 147.536 with 19DF

the location of the school attended by the student at age 14. Population density based on census data was used to establish a quartiled distribution of schools, from those located in the most densely to least densely populated areas, and the least dense quartile designated as rural. In addition to social background, the bivariate analyses had also indicated the importance of students' post-school intentions, which were therefore included in the model. However the two variables considered in Table 4.5 - students' intentions regarding type of study in the following year, which was highly

dependent on current year level in school, and vocational aspirations at age 30 - were excluded.

As the results recorded in Table 4.6 show, there were several background characteristics of students that were significant predictors of part-time employment among 17-year-olds. Among the strongest of these predictors were gender, location, family wealth, and school type, while parental education, early school achievement and post-school intentions were also important.

Males were significantly less likely than females to be part-time workers at age 17. This was in contrast to the situation among younger students. As was demonstrated in Chapter 3, the change in rates of participation in part-time work with age and year level varied by gender; these multivariate analyses reinforce the observation that while male students may enter the part-time labour force at an earlier age, by age 17 it is females who are more likely to be student-workers. Table 4.7 shows that year level as well as gender had an impact on the likelihood of employment in 1992 - when other factors were held constant, students who were in Year 11 were more likely to be workers than those in Year 12.

Where students lived was associated with the likelihood of their being employed. Students from the least densely populated areas - that is, from the most rural locations - were less likely to have a part-time job than those living elsewhere. Aspects of family background were also significant. After controlling for the effects of other factors, compared with the poorest group of students, those from wealthier families were more likely to be employed and students whose parents were the most educated were less likely than other students to be part-time workers. However, when other factors were held constant, parental occupation was not a predictor of student employment, while a non-English speaking background had a small negative effect.

There was a significant association between the type of school students attended and their employment status, with students who went to independent schools much less likely to be part-time workers than those who were at government schools. Students in Catholic schools were also less likely to be workers, but the difference was not as marked as that between independent and government school students. Other attributes of students' educational background were shown to be significant. Students

who believed that they were above average in ability were more likely to be workers than those who indicated they were below average. Another variable found to be significant in Table 4.6 was that which summarised students' post-school plans. Not surprisingly, those students who had previously indicated that they intended to combine study with a job after leaving school were more likely to be part-time workers while still at school than those who intended to proceed solely to further study.

Perhaps the most important finding, especially in the context of investigating effects on educational performance, was that concerning the association between employment and earlier school achievement. When other factors were held constant, compared with those who had been lower achievers in their earlier school years, middle and higher achieving students were significantly more likely to be employed in their senior years at school. This mirrors the results of similar analyses of U.K. data, in which students in the bottom quartile of ability at age 11 had a significantly lower probability of working part-time at 16 than students in the second, third and fourth quartiles of ability (Dustmann et al., 1996).

THE RELATIONSHIP BETWEEN HOURS WORKED PER WEEK AND STUDENTS' BACKGROUND CHARACTERISTICS

Apart from examining the percentage of students who were employed and how that percentage varied for different categories of students, a second dimension of participation in part-time work was investigated. This was the amount of time that students who were employed spent in their jobs, with the analyses focusing again on the 1975 birth cohort. In 1992, 17-year-old school students worked an average of just over nine hours per week. However this average figure varied according to personal and family background characteristics, as can be seen in the figures presented in Table 4.7, which are in each instance recorded separately for males and females. Another indicator of the extent of students' involvement in their jobs is the distribution of hours worked, so Table 4.7 also records the percentage of students from each group who worked for more than ten hours per week (noting that the mean for all students was 9 hours weekly). These bivariate data reveal that certain groups of students had a tendency to be more intensely involved workers.

Among students overall, gender had a negligible effect on the average hours worked per week, but for students from a non-English speaking background there was a difference by gender. Reference to Table 4.6 indicates that a non-English speaking background was negatively associated with part-time employment, and the percentages recorded in Table 4.1 show this was especially so for males, but Table 4.7 reveals that males from such a background who were employed tended to work longer hours - over two hours more on average than others. Further analyses, not reported in the table, showed that it was males from European backgrounds, and Asian students, both males and females, who contributed most to the higher than average working hours of this non-English speaking background group.

Social background, measured by parental education and family wealth, also appeared to have some influence on hours worked. Family wealth was positively associated with an increased likelihood of employment, as seen in Table 4.6, but Table 4.7 shows that students from the wealthiest families tended to work fewer hours per week on average. While 29 per cent of the wealthiest students worked for more than ten hours per week, among students from the poorest quartile the figure was 37 per cent. The latter students worked around ten hours per week, over an hour more on average than students from wealthier families (the contrast was one and a half hours for females). The highest level of parental education was linked with a lower rate of employment, yet students whose parents had post secondary education worked about 2 hours less on average than other students.

Students who lived in the least densely populated areas were less likely to have a part-time job, as was seen in Table 4.6, and Table 4.7 indicates that those who were employed tended to work slightly fewer hours per week – although the average figure for this group was just a little less than that for students from the most densely populated areas. There was a curvilinear relationship between hours worked and location, with the highest average hours worked by those who were from locations with moderate population densities.

Table 4.7 Mean hours worked, and percentages of students who worked more than 10 hours per week, by background characteristics, 17-year-olds in 1992

	Mean no. of hours worked per week			Per cent working >10 hours per week			Sample sizes	
	Males	Females	Persons	Males	Females	Persons	Males	Females
All students	9.3	9.1	9.2	33	29	31	347	668
Ethnic background								
Australian-born	9.1	9.0	9.0	32	29	31	239	445
English-born	8.6	9.5	9.1	29	35	32	49	89
Non-English-born	11.2	8.5	9.3	44	21	28	43	104
Location (pop density)								
Highest quartile (urban)	9.0	8.3	8.5	31	26	28	62	142
Third quartile	9.7	8.7	9.2	37	24	30	145	260
Second quartile	9.6	10.7	10.2	35	40	38	80	155
Lowest quartile (rural)	8.7	8.1	8.3	27	25	26	60	111
Parental education								
Post secondary	8.1	7.4	7.8	22	12	18	66	115
Completed secondary	10.0	9.4	9.7	42	35	39	111	184
Some secondary	9.2	9.2	9.2	31	29	30	144	309
Primary	12.3	8.7	9.5	46	28	32	9	33
Family wealth								
Wealthiest quartile	8.9	8.9	8.9	32	26	29	132	193
Middle 50%	9.5	8.7	8.9	34	27	29	146	326
Poorest quartile	9.7	10.6	10.1	36	37	37	56	122
School type								
Government	9.8	9.3	9.5	38	31	34	240	436
Catholic	9.0	8.8	8.9	29	26	27	69	156
Independent	7.1	7.3	7.2	10	20	15	38	76
Achievement								
Highest quartile	8.4	8.8	8.6	25	26	26	151	227
Third quartile	9.6	9.1	9.3	28	30	29	100	200
Second quartile	10.5	8.7	9.3	54	26	37	66	161
Lowest quartile	10.2	9.8	9.9	44	37	39	30	80
Self-concept of ability								
A lot above average	8.8	8.7	8.7	21	25	23	70	108
A little above average	9.3	8.6	8.8	34	27	30	152	338
About average	9.7	9.8	9.8	36	36	36	96	185
Below average	9.2	9.0	9.1	45	30	40	15	14
Post-school intentions								
Study only	8.3	8.6	8.5	25	25	25	125	252
Study and work	9.6	9.1	9.2	39	30	33	68	220
Work only	10.3	10.2	10.2	44	41	43	74	62
Undecided	9.8	8.8	9.2	32	25	28	59	97
Study intentions next year								
Continue at school	9.2	8.6	8.9	33	28	30	106	185
Higher education	8.6	8.3	8.4	28	22	24	114	285
Other post sec study	11.2	9.8	10.4	39	40	40	45	84
No study	9.9	11.0	10.5	43	40	41	69	99
Job aspirations at age 30								
Professional	9.1	8.6	8.8	31	28	29	205	402
Managerial & w collar	10.5	11.0	10.7	38	43	40	55	76
Blue collar	9.4	9.9	9.7	38	32	34	29	59

Note: See Tables 4.1, 4.3, 4.4 and 4.5 for definitions of variables

Employment rates were highest among students from government schools, and those students also spent on average over two hours more per week in their jobs than students from independent schools - nine and a half hours per week compared with just over seven hours. The percentage of students in government schools who worked for more than ten hours per week was more than double that figure in independent schools - 34 per cent compared with 15 per cent, and among males the contrast was much starker - 38 per cent compared with 10 per cent.

Student achievement was positively associated with part-time employment, but from Table 4.7 it appears that higher achievers worked fewer hours. Thirty nine per cent of the lowest achieving students worked for more than ten hours per week, while 26 per cent of the highest achievers did so. The highest achieving quartile of students worked an average of 8.6 hours per week, and the lowest achieving quartile 9.9 hours. This pattern was similar for males and females, although the difference between the top and bottom quartiles was one hour for females, but closer to two hours for males. The effects of students' perceptions of their own achievement on average hours worked were somewhat similar to the effects of their measured achievement. Students who believed that they were performing below average had markedly lower employment rates than others who thought that their standard of school work was about average or above average. The mean number of hours worked per week, however, was approximately one hour less for both those who considered themselves performing below average and those who thought they were above average, compared with students who thought of themselves as average.

There was a difference in hours worked according to students' post-school intentions. Those who had indicated some years previously that, after leaving school, they intended to go on to further study only worked almost 2 hours less per week than those who were intending to be in a job only (8.5 compared to 10.2 hours). Those who hoped to be in professional jobs when aged 30 tended to work for at least an hour less per week than other students. Employment rates were fairly weakly related to students intentions in the following year, but there was a stronger association between their intentions for 1993 and the average hours that they spent in their part-time jobs in 1992. Students who planned to go on to higher education worked an average of 8.4 hours per week, two hours less than those who were intending to do other post secondary study. Twenty eight per cent of the former group worked for over ten

hours per week, while the figure was 39 per cent for the latter. Compared with intending students, those who were not intending to be students were less likely to be employed, yet they worked for longer hours on average - 10.5 hours per week.

Table 4.8 Multiple regression analyses of effects of students' background characteristics on hours worked per week, 17-year-olds in 1992

	Regression coefficient
Gender (compared with Females)	
Males	0.30
Ethnic background (<i>cf</i> English-speaking)	
Non-English speaking	0.17
Location (<i>cf</i> Non-rural)	
Rural	- 1.05 *
Parental occupation (<i>cf</i> Semi-skilled and unskilled)	
White collar and skilled	- 1.13 *
Professional and managerial	- 0.52
Parental education (<i>cf</i> Primary or some secondary)	
Completed secondary	0.83 *
Post secondary	- 0.88 +
Family wealth (<i>cf</i> Poorest quartile)	
Middle 50%	- 0.74
Wealthiest quartile	- 0.42
Year level (<i>cf</i> Year 12)	
Year 11	- 0.62 +
School type (<i>cf</i> Government)	
Catholic	- 0.38
Independent	- 2.09 ***
Early school achievement (<i>cf</i> Lowest quartile)	
Middle 50%	- 0.10
Highest quartile	- 0.30
Self-concept of ability (<i>cf</i> Below average)	
About average	1.21
Above average	0.68
Post-school intentions (<i>cf</i> Study only)	
Study and work	0.72 +
Work only	0.83
Don't know	0.47
<i>N</i>	866
<i>R</i> ²	0.06

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

A multivariate analysis of student background influences on hours worked per week

For those students who had a part-time job, multiple regression analysis was utilised to estimate the relative influence of particular variables on the number of hours students worked each week, while holding constant the effects of the other variables.

Table 4.8 displays the results of this analysis. Some of the characteristics noted in the bivariate statistics – such as family wealth – were not confirmed as statistically significant influences on the amount of time which students spent in their job. One exception was the strong and significant association between school type and hours worked. All other factors aside, students from independent schools were found to work on average around two hours per week less than students in government schools.

Smaller negative effects on hours worked were found for location, and parental occupation and education. Shorter weekly hours were worked by students from rural areas, by those whose parents were in white collar and skilled occupations rather than in semi-skilled and unskilled occupations, and students whose parents were more highly educated (that is, holding post secondary qualifications). In addition, Table 4.8 shows that slightly longer hours were worked by students in Year 12 compared with Year 11, and students who intended to both study and work after leaving school compared with those who planned to study only.

Perhaps of greatest interest, in the broader context of an investigation of the effects of part-time work on schooling, was the relationship between hours worked at age 17 and earlier school achievement. The coefficients indicated a tendency for higher achieving students to work very slightly shorter hours than the lowest achievers, but achievement did not have a statistically significant effect on the number of hours that students spent in their jobs. This must be considered when later outcomes, especially outcomes related to school performance, are examined.

THE BACKGROUND CHARACTERISTICS OF SENIOR SECONDARY SCHOOL STUDENT-WORKERS: A SUMMARY

These analyses have shown that, while a high proportion of senior secondary school students (more than a third of 17-year-olds in 1992) were involved in part-time work, both the likelihood of such involvement and its intensity varied somewhat according to certain demographic and educational characteristics of the students. Table 4.9 provides a summary of the main ways in which students' background characteristics effected both the extent and the intensity of participation in employment while in their senior years at school.

Table 4.9 The effects of students' background characteristics on extent and intensity of participation in part-time work, 17-year-olds in 1992

Extent of participation in employment	Intensity of participation: Average weekly hours in employment		
	Higher hours	No significant effect on hours	Lower hours
Higher participation	<ul style="list-style-type: none"> • Government school • Post-school intention to combine study and work 	<ul style="list-style-type: none"> • Female • High and moderate family wealth • High and moderate school achievement • High self-concept 	
Lower participation		<ul style="list-style-type: none"> • Male • Non-English speaking background • Low school achievement 	<ul style="list-style-type: none"> • Independent school • High parental education • Rural location

Attendance at a government school was the major factor that was associated with both a markedly higher likelihood of having a job, as well as a tendency to work longer hours. The intention to combine work and study after leaving school was also a significant predictor of part-time employment while at school, and was associated with slightly longer working hours. Another group of characteristics consisted of those which had a positive association with participation in part-time work, but did not have a significant effect on the amount of time that students devoted to their jobs each week. Being female, coming from a wealthier rather than a poorer family background, being among the upper three quartiles in early school achievement at school and having a high self-concept of academic ability were in this category.

Conversely, lower employment rates were related to a number of other aspects of students' background, some of which were also associated with less time spent in the job. Students who attended independent schools, those who had highly educated parents, and those from rural locations were both less likely to be in part-time work, and if they did have a job, worked fewer hours each week. Some other characteristics – being male, being from a non-English speaking background, and having a low level of school achievement - were related to lower employment rates, but these had no significant influence on average hours worked.

THE RELATIONSHIP BETWEEN PART-TIME WORK AND ATTITUDES TO SCHOOL AMONG YEAR 9 STUDENTS

The foregoing analyses explored the association between a variety of social and educational background characteristics and the incidence of part-time employment among students in their senior years of secondary school. But it could be presumed that other aspects of students' school experience might also have an influence on their decision to take on part-time work in addition to study. It could be expected that their willingness and capacity to juggle the possibly competing demands of work and study would be related in part to their attitudes toward school.

Variables that measured how students felt about their schooling in general were not available for the 1975 *Youth in Transition* birth cohort, and hence were absent from the previous analyses. However it was possible to investigate the associations between students' attitudes to school and both their employment status and the hours that they worked each week using data for the 1995 Year 9 cohort from the *Longitudinal Surveys of Australian Youth*. In that year, information was obtained from students about their perceptions of their life at school - they were asked to respond to a range of items about school in general, how they got on with their teachers, how they felt about the work that they did at school and the success that they had achieved there. These items were mainly drawn from the quality of school life questionnaire, a research instrument that has been developed and refined in a number of studies over a lengthy period (Ainley & Sheret, 1992; Batten, 1989; Williams & Batten, 1981). The 30 items used in 1995 to ascertain students' opinions about school are shown in Table 4.10; items were prefaced by the words *My school is a place where....*, and students were asked to indicate whether they strongly agreed, agreed, disagreed or strongly disagreed with each statement. The items have been grouped in the table according to four underlying scales, which were identified by means of a factor analysis of students' responses. A feeling of general satisfaction with school was measured by 11 items, 7 items concerned students' relations with teachers, 5 items were about the relevance that students felt their schooling to have to their future lives, and 7 items tapped the degree to which they felt successful as students.

Table 4.10 Percentages of Year 9 students who agreed or strongly agreed with attitudes to school items, by employment status and hours worked per week, by gender, 1995

Quality of School Life Item	Non-workers			Worked 1- 8 hrs			Worked >8 hrs		
	M	F	P	M	F	P	M	F	P
General satisfaction items									
The work we do is interesting.....	62	67	64	57	60	59	54	52	53
I feel happy.....	69	76	73	68	78	72	65	69	67
I like learning.....	72	76	74	69	75	72	66	72	69
I get enjoyment from being there.....	51	59	55	48	57	52	44	53	48
I like to ask questions in class.....	60	59	60	60	59	60	62	58	60
I like to do extra work.....	24	31	28	24	30	27	23	25	24
I really like to go each day.....	33	39	36	29	37	33	31	28	30
I enjoy what I do in class.....	59	64	61	55	58	56	56	54	55
I get excited about the work that we do..	24	24	24	19	20	20	20	15	18
I find that learning is a lot of fun.....	40	46	43	39	43	41	38	39	39
I am given the chance to do work that really interests me.....	59	64	61	57	62	59	55	56	55
<i>General satisfaction:: Average percentage agreement</i>	50	55	53	48	53	50	47	47	47
Teacher items									
Teachers are fair and just.....	60	70	66	55	66	60	53	59	56
Teachers listen to what I say.....	63	69	66	62	64	63	54	57	55
Teachers give me the marks I deserve....	77	83	80	74	79	76	72	76	74
Teachers take a personal interest in helping me with my work.....	43	49	46	40	43	41	42	40	41
Teachers help me to do my best.....	71	72	71	70	70	70	67	68	68
I feel safe and secure.....	74	81	77	73	79	76	70	77	74
Teachers treat me fairly in class.....	68	79	74	68	76	72	58	71	64
<i>Teachers: Average percentage agreement</i>	65	72	69	63	68	66	59	64	62
Relevance items									
The things I learn are important to me....	88	89	88	86	86	86	81	82	81
The work I do is good preparation for my future.....	84	83	84	85	85	85	80	81	81
I have acquired skills that will be useful when I leave school.....	87	85	85	86	85	86	78	81	79
The things I learn will help me in my adult life.....	87	87	87	86	85	86	81	82	81
The things I am taught are worthwhile learning.....	78	79	78	77	80	78	68	74	71
<i>Relevance: Average percentage agreement</i>	84	85	85	84	84	84	79	80	79
Success items									
I have learnt to work hard.....	78	81	79	75	79	77	70	75	72
I achieve a standard in my work which I consider satisfactory.....	81	85	83	82	85	84	79	82	81
I always achieve a satisfactory standard in my work.....	72	77	75	76	78	77	70	79	75
I always try to do my best.....	80	85	83	79	84	82	76	82	79
I know how to cope with the work.....	86	84	85	86	87	86	85	84	85
I can do well enough to be successful....	91	90	90	92	90	91	84	91	87
I am a success as a student.....	79	80	80	78	82	80	74	74	74
<i>Success: Average percentage agreement</i>	81	83	82	81	84	83	77	81	79

All of the items were positively worded, so that a higher percentage of students agreeing indicated a higher level of satisfaction with school. The combined percentages of students who strongly agreed or agreed with each of the items are displayed in Table 4.10, separately for three different groups of students. These groups were defined on the basis of their degree of involvement in part-time employment - non-workers, moderately involved workers (those who worked for eight hours or less per week) and intensely involved workers (those who worked for more than eight hours per week) - in each instance disaggregated by gender. (For those who were employed, eight hours was the mean number of hours worked per week.) In addition, Table 4.10 records the average percentage agreement for the set of items that made up each of the four scales.

There was a clear and consistent pattern in these data, indicating a negative relationship between the intensity of students' involvement in part-time work and their perceptions of their school life. With the exception of six of the thirty items, higher percentages of non-workers than workers agreed with the statements, and among working students, there was more agreement among moderately involved than intensely involved workers. Students who were not employed were happier with their schooling than those who had a job, and students who worked longer hours in their jobs were less happy than those who worked for shorter hours.

The most marked differences between the groups were found for the two sets of items concerned with general satisfaction with school and relationships with teachers. On eight of the 11 items dealing with general satisfaction, levels of agreement differed by a margin of five percentage points or more between non-workers and those who worked more than eight hours per week. The largest difference was for the item *The work we do is interesting*; 64 per cent of non-workers agreed with this statement, compared with 59 per cent of those who worked for moderate hours, and 53 per cent of students who worked for longer hours. The percentages of each group agreeing with the item *I like learning* were 74 per cent, 72 per cent and 67 per cent respectively, and for the item *I get excited about the work that we do* the figures were 24, 20 and 18 per cent. The pattern was consistent for males and females, yet the contrast, on almost all items, between non-workers, and intensely involved workers was greater for females than males. While 67 per cent of females who were not working agreed, in reference to their school work, that *The work we do is interesting*, among those who spent more than

eight hours per week in their jobs the figure was 52 per cent. Thirty nine per cent of non-working females indicated that school was a place where they really liked to go, compared with 28 per cent of those who worked long hours.

The average percentage agreement with the items that made up this general satisfaction scale provide a summary measure of the association between involvement in employment and overall attitude to school. While the average level of agreement among non-workers on these items was 53 per cent, it was lower for workers - 50 per cent for moderately involved workers, and 47 per cent for intensely involved workers.

There was a contrast between the three categories of students not only in their general satisfaction with school, but also in the relations that they had with teachers. For instance, among non-working students, 66 per cent indicated that *Teachers listen to what I say*, and 74 per cent agreed that *Teachers treat me fairly in class*. For students who worked moderate hours, these percentages were a little lower (63 per cent and 72 per cent respectively) and for workers who spent more than 8 hours in their jobs, the figures were considerably lower (55 per cent and 64 per cent). As a result of such differences on individual items, the average percentage agreement with the set of teacher items was highest for non-workers (69 per cent), lower for moderately involved workers (66 per cent), and lowest for intensely involved workers (62 per cent).

The variation in responses to items that made up the other two scales was slightly different to the pattern of responses found for the scales concerning general satisfaction and relationships with teachers. There was little or no difference between non-workers and moderate workers in responses to the statements which were concerned with the relevance that students saw their schooling had to what they would do in their later lives. For instance, the item *The things I learn will help me in my adult life* was endorsed by 87 per cent of non-workers, and 86 per cent of moderate workers. The average percentage agreement for this set of items for both non-workers and moderate workers, and for both males and females within those groups, was 84-85 per cent. However this contrasted with a lower average level of agreement (79 per cent for males, and 80 per cent for females) among those who worked long hours. That is, intensely involved workers were less inclined than other students to believe that school taught them things that would be useful in the future.

This more negative view of school among intense workers was also evident in responses to the items which dealt with students' perceptions of how successful they were at school. For instance, 74 per cent of intense workers agreed with the item *I am a success as a student*; among non-workers and moderate workers, the figure was 80 per cent. In fact, the average level of agreement across the success items was very slightly higher among moderate workers (83 per cent) than among non-workers (82 per cent), a finding that could be expected given that moderate workers actually had higher levels of achievement, measured by higher mean scores in reading and mathematics, than students who were not employed.

These bivariate analyses of the data reveal a consistent relationship between part-time work and students' attitudes to many aspects of their school life, with greater intensity of involvement in employment seen to be associated with negative perceptions of the quality of that school experience. Students who, in their middle years of secondary school, were less satisfied with school, and particularly their teachers, were more likely than other students to be working in a part-time job outside of school, and those who were least satisfied tended to be working longer hours. This is consistent with an observation by Ashenden (1990) that for some marginal students part-time work might provide a bridge out of school and into work. He cites as evidence Braithwaite's (1988) findings that among a sample of students who were intending to leave school, nearly half of those in Year 9 had part-time jobs.

Multivariate analyses of the relationships between part-time work and attitudes to school

Despite the links between part-time employment and attitudes to school apparent in the data presented in Table 4.10, there was a possibility that other variables - especially students' level of school achievement - also contributed to this pattern. Multivariate analyses were conducted to further explore the associations between attitudes to school and both employment status and employment intensity, while taking account of such factors. Table 4.11 contains the results of separate regression analyses in which the dependent variables were the likelihood of Year 9 students being employed, and, for those who were employed, the number of hours that they worked per week.

Table 4.11 Results of regression analyses of effects of student background characteristics on employment status and hours worked per week, Year 9 students in 1995

Independent variable	Employment status	Hours worked
Gender (compared with females)		
Males	0.18 ***	0.08
Home language (<i>cf</i> English)		
Other	- 0.74 ****	3.21****
Parents' occupation (<i>cf</i> Lower)		
Upper	- 0.10	- 0.33
Upper middle	0.19 **	0.12
Lower middle	- 0.03	0.23
Parents' education (<i>cf</i> Didn't complete secondary school)		
Higher education qualification	0.11	0.12
Trade/technical qualification	0.23 **	0.79
Completed secondary school	0.06	0.22
School type (<i>cf</i> Government)		
Catholic	- 0.19 **	- 0.23
Independent	- 0.29 ****	- 1.20 **
Achievement (<i>cf</i> Lowest quartile)		
Highest quartile	- 0.17	- 1.31 ***
Third quartile	- 0.07	- 0.33
Second quartile	- 0.01	0.79 *
Satisfaction with school (<i>cf</i> Lowest quartile)		
Highest quartile	- 0.28 ****	- 0.61
Third quartile	- 0.28 ***	- 0.05
Second quartile	- 0.07	- 0.41
	<i>N</i>	
	9118	2066

* $p < .05$ ** $p < .01$ *** $p < .001$ **** $p < .0001$.

For each outcome, the personal background variables that were included on the right hand side of the regression equation were gender, language spoken at home (in this instance, a dichotomous variable, English and other) as a measure of ethnicity, parents' occupation and education as two separate measures of family socioeconomic status, and type of school attended. School achievement was controlled using dummy variables based on achievement quartiles calculated from student's combined scores on reading and mathematics tests. Attitude to school was the independent variable that was the main focus of interest. Students' scores on the general satisfaction scale from the quality of school life measure were quartiled and these were used as the basis for dummy variables, with the omitted category being students who scored in the

lowest quartile - that is, those who were most dissatisfied with their schooling. (The other three scales of the attitude to school questionnaire - those relating to teachers, perceived relevance of schooling, and success as a student - were excluded from this model, but were investigated in separate analyses.)

Logistic regression was used to estimate the effect of satisfaction with school on the likelihood of a student being employed, while holding constant the effects of the other variables. It confirmed the negative association between part-time employment and satisfaction with school that was shown in the bivariate statistics in Table 4.10. Compared with students whose scores on school satisfaction were in the lowest quartile, students in the two highest quartiles were significantly less likely to be working in a job.

Although they are not displayed in the table, similar results were obtained using other models in which students' attitudes to more specific aspects of schooling were substituted for the general satisfaction score in the regression equation. Students who rated their relations with teachers most poorly were significantly more likely to be employed than students in the other three quartiles who had a more favourable view of their teachers. For the other two scales - those referring to relevance which students felt their schooling to have, and the extent to which they felt successful at school - when other variables were controlled, students from the highest quartiles were significantly less likely to be employed than those in the lowest quartile. Overall satisfaction with school, as well as attitudes to teachers, were significant influences on whether or not students had a part-time job in Year 9, with students who were less satisfied being more likely to be employed.

However Table 4.11 also reveals that level of school achievement did not have a significant impact on employment status, when the two were measured concurrently in Year 9. Although students who were in the top achievement quartile in that Year were a little less likely than those in the bottom quartile of achievement to have a job in 1995, the difference was not statistically significant after controlling for other factors, including attitude to school.

For those students who were employed in Year 9, the right hand column of Table 4.11 records the relative effects of different background variables on the number of hours

that they worked each week. The background variable that was most significantly linked to hours of work was language spoken at home, with students from non-English speaking homes reporting working much longer hours than those from English speaking homes. However the question of most interest was the interaction between achievement and employment. Although school achievement did not have a significant association with employment status, it did influence employment intensity - the most able students worked fewer hours per week. While there was some indication, from the direction of the coefficients, that students who were more satisfied with school tended to work shorter hours, this association was not statistically significant.

STUDENT-WORKERS AND THEIR ORIENTATION TO EDUCATION: AN OVERVIEW

What can be gleaned about the relationship between part-time work and school achievement from the analyses of these two datasets? A comparison of the results of the analyses are summarised in the table below.

	Year 9 in 1995		Age 17 in 1992	
	Employment status	Hours worked per week	Employment status	Hours worked per week
Gender	Males more likely to work	Not significant	Females more likely to work	Not significant
Achievement	Not significant	Higher achievers worked lower hours	Lower achievers less likely to work	Not significant
Satisfaction with school	Less satisfied more likely to work	Not significant	na	na

For students in the middle years of secondary school the more recent data, for 1995, revealed that achievement was not significantly associated with part-time employment status, after controlling for other factors, including gender, as well as satisfaction with school. It was this latter which was one of the strongest predictors of part-time work for Year 9 students. But among students who were working at that age, higher achievers worked fewer hours per week. In contrast, in 1992, among 17-year-old students, who were mainly in Years 11 and 12, those who had been the lowest achievers in their earlier years at school (at age 14) were significantly less likely to have a part-time job compared with other students. However while higher achievement

pointed to slightly shorter working hours per week by 17-year-old students who were employed, the association was not statistically significant.

These findings might initially be seen as somewhat contradictory, but there are a number of factors which together provide an explanation for these apparent differences. An obvious point is that the analyses for 17-year-old students, unlike those for the Year 9 cohort, did not incorporate a control for students' attitudes to school. Secondly, it seems probable that the association between achievement and employment varies depending on age and year level at school. Among more junior students, those who were dissatisfied with school were more likely to take on a part-time job. Students who are less satisfied about their schooling are also more likely to be early school leavers. Other analyses of these LSAY data have shown that students' attitudes toward their achievement at school - that is, their success as a student - had a moderate effect on the probability of their leaving school before Year 10 (Marks, 1998). By age 17 fewer of such students would remain in school. At this latter age the lowest achieving students may be less likely than other students to have a part-time job either because they recognise that they need to give priority to their academic work, or because they are overlooked by employers because they lack the necessary skills.

Furthermore, the different time periods to which the data refer should also be noted. The changes that have occurred since 1992 in the economy and in school retention rates, and the growing perception that post-school job prospects may be enhanced by experience of part-time work while at school, may have combined to attract a broader range of students into becoming part-time workers over the latter half of the 1990s. More recent data would be necessary to ascertain whether students of all ability levels are now more equally represented among student-workers in the senior years of school than they were in 1992.

THE CHARACTERISTICS OF STUDENT-WORKERS: SOME CONCLUSIONS

These analyses provided considerable detail about the background characteristics of students who work during their school years, and the time each week that they typically spent in their jobs. However it is instructive to focus on the two findings that emerged from the analyses that have the strongest implications in terms of equity considerations and educational outcomes.

The first concerns the question of the motivation to take on a part-time job, the social background of those students who did so, and the presumed link between the two. Student-workers tended to be from middle rather than from lower socioeconomic status backgrounds, although there was limited evidence that the more advantaged students (as indicated by parental education) worked slightly fewer hours per week. The assumption that can be drawn from these data is that most students were not working because they had to; while they may have been attracted by the monetary rewards from a part-time job, they were not driven by financial necessity. Therefore, while the data provided no insight into the effects, either positive or negative, of part-time work on students' educational performance, nor did they indicate that students from disadvantaged backgrounds were at risk of being further disadvantaged if the effects were negative, because such students were under-represented as workers.

The educational background of student-workers is integral to this question of the effects of part-time work, and concerns about its possible harmful impact on school performance. The *Youth in Transition* data showed that students who worked in the senior school years tended to be middle and higher achievers, and were not as likely to be from the lowest achieving group. This finding emphasises the need to take account of earlier school achievement when outcomes of employment, especially educational outcomes, are being assessed. Furthermore it suggests that school outcomes for student-workers are likely to be positive, given their previous educational performance. The analyses of the LSAY data also highlighted the importance of students' attitudes to school in investigating such outcomes. While it is likely that attitudes about school have some influence on students' propensity to work, the experience of part-time employment itself could also be expected to play a role in those outcomes. Students' views about their jobs form the basis of the following chapter.

SCHOOL STUDENTS' EXPERIENCE OF PART-TIME WORK

The research literature provides some evidence about how Australian school students feel about their part-time jobs - why they want to work in the first place, how they fare as workers, and the consequences that they perceive of having a job. Shedding light on these questions, previous studies have clearly identified students' desire to earn money as their primary motivation for working (Bentley & O'Neil, 1984; Coventry et al., 1984; Dalziel, 1989; Hobbs & Grant, 1991; Nolan & Hagen, 1989; Yap, 1991). Those earlier studies also claimed, though based on less evidence, that a majority of students were satisfied with their part-time jobs (Murphy, 1986a; Murphy, 1986b) and found that the effects of working were generally seen by students to be positive rather than negative, with personal and social development, especially enhanced confidence, independence and responsibility, being among the most frequently mentioned benefits (Coventry et al., 1984; Dalziel, 1989; Munro, 1989; Wilson, Wyn, Reeders, & Woock, 1987; Woolmer & Hill, 1990; Yap, 1991).

The picture derived from these earlier small-scale studies has been supplemented by a spate of more recent research, both qualitative and quantitative, which has also emphasised the perceived benefits of part-time work, from the perspective of students, as well as the views of their parents, employers, and teachers. This research has shown that students believed their part-time work was valuable mainly because it helped them to learn about getting on with other people, to both follow instructions and to think for themselves, and to develop confidence (Fullarton, 1999; Hull, 1999; National Institute of Labour Studies, 1999; Victorian Industry Education Partnerships, 1999).

Data with which to investigate students' opinions about their jobs, and their perceptions of the impact of working on their schooling, were available from *Youth in Transition* sample members - in particular, the more than one thousand school students who, as 17-year-olds in October 1992, were also part-time workers. Before examining their views of what it was like for them to be student-workers, however, it is pertinent to look at the types of jobs those students did, as it seems reasonable to assume that their experiences might vary, substantially or in part, according to the sort of job which they held.

TYPES OF JOBS

The school students who were employed in 1992, when they were aged 17, were asked details about the jobs that they did. These jobs were classified according to the Australian Standard Classification of Occupations (ASCO); the percentages that were employed in the various major occupational groups are shown in Table 5.1, with some groups combined due to the small numbers involved.

The majority of students were concentrated in a few occupations. Considering the figures for all persons, the largest single occupational category was sales, which accounted for over half (55 per cent) of all student-workers. Of these, 14 per cent specifically indicated they worked as cashiers and 41 per cent as other sales workers. (The distinction between those two job categories was not made by all students - responses that simply referred to working in a supermarket were coded to sales, hence possibly under-estimating the numbers who were actually cashiers. The sales category was further inflated by the inclusion of students who worked in jobs that involved

Table 5.1 Types of part-time jobs held by 17-year-olds school students, and mean hours worked per week by job type, 1992

Type of job	Per cent employed			Mean hours per week		
	Males	Females	Persons	Males	Females	Persons
Professionals & para-professionals	4	1	3	8.2	3.7	6.8
Clerks	4	3	3	9.2	6.0	7.8
Sales and personal service workers:						
Cashiers	6	21	14	10.8	9.2	9.5
Other sales	30	49	41	9.2	9.2	9.2
<i>Total sales</i>	<i>36</i>	<i>70</i>	<i>55</i>	<i>9.5</i>	<i>9.2</i>	<i>9.3</i>
Waiters	2	6	5	10.0	8.0	8.4
Other services	2	4	3	9.1	9.3	9.2
<i>Total 'white collar'</i>	<i>48</i>	<i>84</i>	<i>69</i>	<i>9.3</i>	<i>8.9</i>	<i>9.1</i>
Tradespersons, plant & machine operators	3	1	2	12.0	7.5	10.3
Labourers:						
Kitchenhands	16	9	12	11.4	10.7	11.1
Cleaners	7	2	4	6.4	6.9	6.5
Farmers and gardeners	5	-	2	6.5	2.0	6.3
Other labourers	21	4	11	8.8	8.5	8.7
<i>Total 'blue collar'</i>	<i>52</i>	<i>16</i>	<i>31</i>	<i>9.3</i>	<i>9.3</i>	<i>9.3</i>
Total per cent	100	100	100			
Mean hours worked per week				9.3	9.0	9.1
<i>Sample size</i>	<i>358</i>	<i>691</i>	<i>1049</i>	<i>346</i>	<i>664</i>	<i>1010</i>

both preparing and selling food, such workers being coded as sales assistants rather than as kitchenhands.) Twice as many females (70 per cent) as males (36 per cent) were employed as salespersons. This same gender imbalance was also found for the other categories of this broad ASCO occupational grouping - jobs as waiters and in other services (of which a large proportion were child care) were dominated by females.

Only small proportions of students were employed in the other types of jobs, apart from sales, that are considered to be white collar occupations - that is, clerical work, and professional and para-professional jobs such as musicians, sports coaches and referees. Males tended to outnumber females in both these groups. Nevertheless, due to the preponderance of females in the sales and personal service category, the total proportion of employed females who were in white collar occupations was more than four fifths, while the figure for males was less than half. This was in marked contrast to the gender composition of blue collar occupations.

Among the blue collar occupations, over 30 per cent of all students worked as labourers - 12 per cent as kitchenhands, 4 per cent as cleaners, 2 per cent as farmhands and gardeners, and 11 per cent did other labouring jobs, for instance, as packers and shelf stackers in supermarkets. But while almost one third of students were employed as labourers, males were far more likely than females to be in such work; around 50 per cent of males were in labouring jobs, while the figure for females was 15 per cent. For the purpose of this discussion, the small number of students who were coded as working in the separate ASCO groups of tradespersons and plant and machine operators were combined. The former included those with such jobs as mechanics and pastry cooks, although it is more likely that they would have been actually working as labourers in these areas, rather than as qualified tradespersons. Plant and machine operators included students with jobs in businesses such as photographic processing and dry cleaning. More males than females were also involved in this combined category.

Overall, then, among 17-year-olds students, females were primarily employed in white collar jobs, predominantly as sales workers, while a majority of the males who worked were in blue collar labouring jobs. This pattern among student-workers is consistent with that found in the wider labour market, where the greatest gender segregation is

experienced by younger workers. There is little evidence of change in this respect, with other more recent data on student jobs confirming the persistence of such segregation (Victorian Industry Education Partnerships, 1999).

The second set of columns in Table 5.1 provides information about the average number of hours worked per week by 17-year-old students in the different job categories. The pattern which emerges from those data is one where salespersons and personal service workers, the largest single occupational group, worked close to the average number of hours for all workers - about nine hours - with not much difference by gender, except for the above average hours worked by the small number of males who had jobs as cashiers and waiters. One other large group, kitchenhands, tended to work longer hours (about 2 hours more), while those in most other jobs worked less than the average number of hours for all student-workers - cleaners, for instance, worked between six and seven hours on average.

It was possible to compare these data on job types for 17-year-old student-workers in 1992 with similar data for the same cohort of young people at an earlier age - as 14-year-olds in 1989 (Robinson & Long, 1992). This comparison showed a marked growth in the proportion of students employed in sales and personal services (from 41 per cent of all student-workers at age 14, to 63 per cent at age 17), and a corresponding decline in the proportion in trades and labouring jobs (from 57 per cent to 31 per cent) (see Appendix 1, Table A5.1 for details). These figures reflect the tendency for increasing numbers of students to move, as they get older, from jobs in the informal economy, babysitting or lawnmowing for instance, to more structured employment in the formal economy (Berryman & Schneider, 1982; Lewin-Epstein, 1981; Mortimer et al., 1994). These and other studies of teenage employment (Lucas & Lammont, 1998; Victorian Industry Education Partnerships, 1999; Woolmer & Hill, 1990, for example) are broadly consistent in revealing the heavy concentration of student-workers in the retail sector, particularly in supermarkets and fast food outlets.

REASONS FOR WORKING

While students might work for a variety of reasons, North American research leaves little doubt that the majority of student-workers are motivated by the desire for a disposable income in an increasingly consumption-oriented youth culture (Anisef &

Johnson, 1993; Berryman & Schneider, 1982; Lowe & Krahn, 1992). Evidence from British studies point to the same conclusion (Hakim, 1998; Lucas & Lammont, 1998). What of the situation in Australia?

The literature

The question of what prompts Australian students to take on a part-time job while they are still at school has been investigated in a number of previous research studies, and these have revealed various overlapping motivating factors. The wish to earn money was the most widely cited reason (Bentley & O'Neil, 1984; Coventry et al., 1984; Dalziel, 1989; Hobbs & Grant, 1991; Latty, 1989; Munro, 1989; Nolan & Hagen, 1989; Wilson et al., 1987). This money was mainly used for personal spending, rather than to supplement the household income. (In this context, however, it should be noted that though student-workers generally did not contribute directly to family income, it could be assumed that their parents would be under less pressure to provide them with discretionary spending money than would the parents of non-workers.) A second and related reason that students worked was the desire for independence - this could be seen as financial independence, although it could also mean, from a student's perspective, increased personal autonomy, gained as a result of spending time away from the normal constraints of family and school.

A third reason for working that was endorsed by students was the longer-term one of acquiring experience that would help them in the future, particularly in getting a job (Dalziel, 1989; Nolan & Hagen, 1989; Wilson et al., 1987). Such experience only rarely involved specific technical skills pertaining to the job, but more commonly it was used as a broad term which encompassed many aspects of working - generic skills that would be of benefit, regardless of their efficacy in leading to particular future employment. Students (and their parents, and some of their teachers) believed that a part-time job provided them with the opportunity to develop a range of personal and social skills. These included improved communication skills and increased self-confidence gained through working and dealing with other people, as well as time management skills and a sense of competence and responsibility that came from turning up to work on time and carrying out designated tasks (Coventry et al., 1984; Hull, 1999; Munro, 1989; National Institute of Labour Studies, 1999; Victorian Industry Education Partnerships, 1999; Wilson et al., 1987; Yap, 1998).

Other possible reasons for students taking on a part-time job that were canvassed by previous researchers, but which were largely dismissed by students, were the notion of a job as something to do to avoid boredom, or as a useful contribution to the community, and the influence of peers on the decision to work (Bentley & O'Neil, 1984; Dalziel, 1989; Hobbs & Grant, 1991; Wilson et al., 1987).

The emphasis in almost all of these previous studies was on the perceived benefits of having a job – any job – rather than on particular skills that might be derived from the job. In the past, researchers (both in Australia and elsewhere) have been fairly dismissive about what students' jobs might teach them, adopting the view that the generally low level of skill required, and the often monotonous or repetitive nature of the tasks, would not lead to greatly improved occupational proficiency among student-workers (Greenberger & Steinberg, 1986; Hakim, 1998). On the other hand it has also been argued that the complexity of the tasks sometimes required of student-workers should not be under-estimated, with the range of skills in which student-workers must be proficient (related, for instance, to occupational health and safety, customer service, stock control and computer checkout) being cited as evidence (Hull, 1999). Some researchers have sought to highlight the diversity of jobs undertaken by students (Ruscoe, Morgan, & Peebles, 1996) and have recognised that certain jobs require particular skills or talents, perhaps related to students' hobbies, such as music teaching or sports coaching, which might represent future career opportunities (Yap, 1998).

The data

In 1992, members of the *Youth in Transition* cohort who were aged 17 were asked to respond to a series of items which probed their experiences of being a part-time worker while they were at school in that year. Some of these items tapped their reasons for working, being prefaced by the statement '*I worked because...*'. Table 5.2 records the combined percentages of students who agreed or strongly agreed with the various reasons for working. It could be expected that the relative importance of these reasons might vary for different sorts of students, yet previous studies have not dealt with such complexity. The large sample size and the detailed nature of the *Youth in Transition* data enabled more fine-grained analyses to be undertaken. In Table 5.2

Table 5.2 Percentages of student-workers who agreed with statements about reasons for working, by students' background characteristics, type of job, and hours worked per week, 1992

Students' reasons for working part-time	Student Achievement			Family Wealth			School type			Job type		Hours worked per week				
	High	Mid	Low	High	Mid	Low	Govt	Cath	Ind	White collar	Blue collar	1-10	>10	M	F	P
I liked the sense of independence the job provided.....	79	80	88	81	80	81	81	80	80	85	70	78	86	72	86	80
I enjoyed the work.....	57	67	68	70	58	66	65	65	52	66	58	65	60	59	67	63
It will help me get a job when I finish studying.....	54	63	67	61	61	59	62	58	54	65	51	60	62	56	64	61
It was the kind of work I want to do as a career.....	9	14	14	18	9	10	12	14	11	12	12	13	9	15	10	12
I needed money to support myself.....	76	77	76	75	78	74	79	76	66	76	78	74	83	77	76	77
The money I earned enabled me to remain a student.....	13	14	13	9	14	19	15	10	12	13	15	12	18	12	15	14
My family needs the money.....	15	13	9	8	14	19	14	12	11	14	11	15	10	9	17	13
It was the family business and I was expected to help.....	6	8	6	9	7	3	6	10	10	5	10	7	4	8	6	7
Total sample sizes	387	537	114	329	485	181	689	229	120	706	298	689	287	357	681	1038
	378	527	111	325	472	179	674	222	120	690	293	673	283	352	664	1016
	380	533	111	326	479	178	682	224	118	695	295	680	283	355	669	1024
	383	528	111	325	476	180	678	226	118	694	294	680	282	352	670	1022
	387	547	112	328	490	185	695	232	119	712	300	693	292	360	686	1046
	389	536	113	329	481	185	690	229	119	705	298	689	288	359	679	1038
	383	526	110	324	473	181	678	222	119	689	296	680	279	354	665	1019
	380	529	111	324	475	181	678	224	118	693	293	679	282	351	669	1020

Notes:

Student achievement is based on achievement tests at age 14.
 Family wealth is based on a factor scale derived from respondents' reports on the nature of their accommodation and on the possession of certain consumer durables.
 Job type based on ASCO major groupings, as detailed in Table 5.1
 Differences that are significant at the .05 level are shown in bold.

percentage responses are presented for different groups of students. Those groups were defined on the basis of personal background characteristics (gender, family wealth, earlier school achievement, and type of school attended) as well as two characteristics of students' jobs - the type of job in which they were employed (white collar or blue collar) and the number of hours (up to or more than ten hours) that they worked each week.

Present satisfaction with the job

Most students in the sample indicated that their reasons for working were related to positive aspects of their jobs - that they gained both independence and enjoyment from working, and hence, by implication, that they were generally satisfied with their jobs. Four fifths of all student-workers agreed that they worked because they liked the sense of independence that their job provided; in this instance, the phrase 'sense of independence' might refer to either or both personal or financial independence, there being no way of differentiating. And, despite concerns expressed by many researchers about the unchallenging, 'dead-end' nature of most student jobs, 63 per cent of students indicated that they enjoyed their work. This is similar to survey findings reported by Murphy (1986a), in which 67 per cent of students at three Melbourne high schools said that their job was enjoyable and satisfying. Such figures, however, do not necessarily contradict the view, expressed by Ashenden (1990), that students were satisfied with their jobs merely because they expected so little of them.

Females were much more likely than males to give those two reasons for working; for example, 86 per cent of females, compared to 72 per cent of males, agreed that they liked their job because it gave them independence. Earlier school achievement had some effect on these responses, with lower achieving students being about ten percentage points more likely than higher achieving students to endorse the statements relating to independence and enjoyment. For instance, among low achievers, 68 per cent agreed that they enjoyed the work, while the figure for the highest achievers was 57 per cent. Family wealth and school type did not influence responses to the item concerning independence, although there was an effect on enjoyment, with higher percentages of students from wealthier families and from government schools indicating that they enjoyed their work. There was a significant difference on these two items between those in white collar and blue collar jobs.

Higher percentages of white collar workers agreed that they liked the independence that came with their job (85 per cent, compared with 70 per cent of blue collar workers) and they enjoyed their work (66 per cent compared to 58 per cent). This reflected, in large part, the gender difference noted above, as females, who tended to be more positive about their jobs than males, predominated in white collar jobs. The amount of time which was spent in a job had a somewhat contradictory, yet plausible, effect on responses to these two items; students who worked longer hours (more than ten hours per week) were significantly more inclined than those who worked shorter hours (up to ten hours) to like the independence which came with a job, but were slightly less inclined to enjoy the work.

Future benefits

Other reasons why students take on part-time jobs were also canvassed in 1992. As Table 5.2 shows, a majority (61 per cent) believed that their part-time work would help them get a job when they finished studying. This overall figure masked a gender difference, with a higher percentage of females (64 per cent) than males (56 per cent), indicating they worked for this reason. Similar findings - that girls were more likely than boys to say they worked for extrinsic reasons, in order to learn skills and gain experience - have been reported in other research (Mortimer et al., 1994; National Institute of Labour Studies, 1999). While enhancing future job prospects may have been an important motivation for working, other evidence in the *Youth in Transition* data (not recorded in the table) revealed that student-workers were slightly but not statistically significantly more likely (59 per cent) than non-workers (55 per cent) to be confident of getting a job after completing their studies. Furthermore, among student-workers, fewer females (55 per cent) than males (64 per cent) expressed such confidence.

The view that their part-time work would help them get a job later was held more frequently by white collar workers (once more reflecting the gender difference) than blue collar workers. It was also significantly more likely to be held by lower and middle achieving students (two thirds of whom agreed with the statement) than by higher achievers (of whom just over a half agreed). There was also a variation, although not significant, in responses according to type of school attended -

government school students were more likely than those who went to independent schools to think that their part-time work would help them to get a job later on.

While very many students were working because they believed it would improve their future job prospects, most were not actually employed in jobs that they hoped to pursue as careers. Only 12 per cent of the student-workers indicated that their part-time job was the kind of work they wanted to do as a career. This accords with both other survey data (National Institute of Labour Studies, 1999) and earlier interview data reported by Munro (1989) and Coventry et al (1984:97) - in the words of one student quoted in the latter study, "*McDonald's is just a phase in life*". These data also add weight to the argument that students perceived the main value of a part-time job to be in enhancing their employability by providing the chance for them to develop generic rather than job-specific skills. Nevertheless, there were some students who were more likely to be working in a job that was similar to that which they envisaged they might have as a career - boys rather than girls, lower achieving students rather than mid and higher achievers, and students from wealthier families. An association with family wealth was also seen in the percentage of students who worked because they were expected to help in the family business -- although this was not a significant reason for students to work, it was a much more common response among students from the wealthiest backgrounds (9 per cent) than among the least wealthy (3 per cent).

Economic reasons

Consistent with the findings of earlier studies about the largely financial motivation of students to work, more than three quarters (77 per cent) of the 1992 sample of student-workers agreed with the statement that they needed money to support themselves. The percentages were significantly higher among students from government rather than independent schools (79 per cent compared with 66 per cent) and among those who worked longer rather than shorter hours (83 per cent compared to 74 per cent). However, there was little difference in responses according to family wealth, which may indicate a broad definition of 'need' that does not equate specifically with financial necessity. While the earnings derived from part-time work are clearly important to most students, it is doubtful that such high proportions of students were

literally dependent on the income from their jobs, as a narrow interpretation of the phrase ‘needed money to support myself’ would imply.

Further evidence as to the importance of these earnings to students was available from two additional statements about reasons for working. Approximately the same percentage of all student-workers indicated that their family needed the money from their job (13 per cent), and that the money they earned enabled them to remain a student (14 per cent); in both instances, these responses were a little more common among females than males. As family financial circumstances would not be expected to differ much by gender, this could indicate either a gender bias in the responses, or that females were more likely than males to use their earnings to contribute to family expenses. Not surprisingly, there was a strong and consistent relationship between family wealth and responses to these two items about needing money - students from the poorest families were significantly more likely to agree with the statements than students from the wealthiest families - in each case, 19 per cent compared with 8 and 9 per cent respectively.

It was possible to explore another aspect of this question of economic need as a motivation for employment by reference to additional information, also collected from students in 1992, relating to their receipt of an Austudy allowance in that year. As a means-tested payment, Austudy can be used as another partial indicator of family financial status.

Table 5.3 Percentages of students who agreed with selected reasons for working, by receipt of Austudy, 1992

Reasons for working	Austudy recipients	Did not receive Austudy	All student-workers
I needed money to support myself.....	82	75	77
The money I earned enabled me to remain a student.....	23	10	14
My family needs the money.....	23	10	13
<i>Sample size</i>	<i>289</i>	<i>802</i>	<i>1091</i>

Table 5.3 shows that considerably higher percentages of the students who were getting Austudy payments, compared with those who were not, indicated that the money they earned from their part-time job was an important reason for working. Within the group of students who received the Austudy allowance, there was variation in some of

these responses according to family wealth, the latter being measured by the possession of certain consumer durables. Some 23 per cent of all Austudy recipients said that their earnings enabled them to remain students, but analyses (not recorded in the table) showed that among the Austudy recipients from the wealthiest families it was 17 per cent, and among the poorest, 33 per cent. While, among Austudy recipients, family wealth did not have the same effect on responses to the item concerning the family need for money, among those who did not get Austudy, a higher percentage (14 per cent) of students from the poorest background said that their families needed the money from their jobs compared with students from the wealthiest families (5 per cent).

Table 5.4 Earnings from a part-time job as a proportion of student's total money in 1992 by receipt of Austudy in 1992, and family wealth

Proportion of money in 1992 coming from a part-time job	Per cent of student-workers											
	Austudy recipients				Did not receive Austudy				All student-workers			
	Family wealth				Family wealth				Family wealth			
	High	Mid	Low	All	High	Mid	Low	All	High	Mid	Low	All
None	5	1	9	4	4	1	5	3	4	1	7	3
Some	18	34	35	31	17	18	18	17	18	23	25	21
Half	19	25	20	22	15	13	8	13	15	16	13	15
Most	29	25	31	28	43	36	34	38	41	33	33	35
All	29	15	5	16	21	32	35	29	22	27	23	26
Total per cent	100	100	100	100	100	100	100	100	100	100	100	100
Sample size	49	133	72	267	277	336	109	753	326	469	181	1020

Some other information was available from the data about the extent to which students relied on the income from their jobs. They were asked to indicate the approximate proportions (ranging from *none* to *all*) of their money, while they were a student during 1992, that came from various sources - including their parents, their part-time job, and Austudy payments. Table 5.4 presents their responses relating only to their earnings from part-time jobs, separately for those who did and did not receive Austudy, and disaggregated according to family wealth. About one quarter (26 per cent) of all student-workers said that *all* of their money came from their part-time job; and a total of 61 per cent said that *most* or *all* of their money came from their job. For student-workers who were Austudy recipients these percentages were lower (16 and 44 per cent respectively) and for non-recipients of Austudy they were higher (29 and 67 per cent), illustrating the importance of the Austudy allowance as a supplementary

source of income for students. Among non-recipients of Austudy, family wealth did not have a marked effect on the percentages who said that most or all of their money came from their part-time job; for Austudy recipients, however, those from poorer families were less likely than those from wealthier families to indicate that all of their money came from their job (5 per cent compared with 29 per cent), further underlining the value of Austudy for the former group.

The motivation for working: some conclusions

These data about students' reasons for working, and the extent to which they relied on their earnings, support the implications of the analyses conducted in Chapter 4 that for the majority of students it was not economic necessity which prompted them to take a part-time job. Although they said that they depended on the spending money their job provided, most students indicated that they worked not only for this extrinsic reason. They liked the independence that resulted from having a job (assuming such independence to be broader than mere financial autonomy), they generally enjoyed the work, and believed that the experience of part-time work would help them obtain employment in later life. These benefits of part-time work were perceived to be true more often by middle and lower achieving students, highlighting the importance of a job for students who may not be as well served by the school system as those who are higher achievers. Nevertheless, despite the fact that most students worked because they wanted to, not because they had to, for a small proportion of students with jobs - perhaps as many as one in ten - there was some evidence of a financial imperative in their decision to work while at school; these were more often students from poorer families, especially those from such families who were receiving the means-tested Austudy allowance.

PERCEIVED EFFECTS ON SCHOOL WORK

The effect of a part-time job on a student's school performance is undoubtedly the issue of most concern to educators and to parents, if not to students themselves. Leaving aside the extensive North American literature on this subject, there have been only a few attempts by Australian researchers to examine this specific question (Coventry et al., 1984; Dalziel, 1989; Hobbs & Grant, 1991; Murphy, 1986b; Wilson et al., 1987). It can be concluded from those studies that the majority of students did not

believe their school work was harmed by their part-time jobs, while the views of teachers, though even less frequently canvassed than those of students, were more mixed.

In investigating the effects of working on schooling, it is important to make a distinction between the perceptions of those involved, and outcomes that may be more objectively demonstrated or measured. This chapter focuses on the former - the perceived effects - while the measured effects are examined in Chapter 6.

Students' views of effects of a job on school work

In 1992, among those students who were employed, opinions were sought on how their job affected their school work, and Table 5.5 summarises the extent of their agreement with various responses to the question *'What was it like having a job while studying?'* It should be noted again that these students were aged 17, and most were in Year 12 at school although about one quarter were Year 11 students. (In fact, there was little or no variation found in responses based on students' year level, except for the instance noted below in relation to students' perceptions of the views held by their teachers.) Some 41 per cent of student-workers either agreed or strongly agreed with the statement that if they hadn't been working they would have spent more time studying, while 31 per cent believed that their results would have been better. At the same time, 25 per cent agreed that they found it difficult to balance the demands of work and study, and 20 per cent said that they got behind in their studies because of their job.

In all instances, females were more likely than males to say that their school work suffered in these ways - on two items (time spent on study, and balancing work and study) the differences were statistically significant. Type of job, which was markedly gender segregated, therefore had a similar and significant effect on responses - white collar workers, predominantly female, more frequently indicated that they had difficulties combining work and study than did blue collar workers. While the reasons for such a gender difference in opinions are not clear, it was not because females worked longer hours - the mean hours worked per week for males and females was 9.3 and 9.0 hours respectively, and the distribution of the number of hours worked

Table 5.5 Percentages of student-workers who agreed with statements about the effects of having a job on school work, by students' background characteristics, type of job, and hours worked per week, 1992

Effects of part-time work	Student Achievement			Family Wealth			School type			Job type			Hours worked per week			
	High	Mid	Low	High	Mid	Low	Govt	Cath	Ind	White collar	Blue collar	>10	1-10	Gender		
														M	F	P
If I hadn't been working I would have spent more time studying.....	42	42	34	41	43	33	42	44	29	43	37	53	37	37	44	41
I think I would have got better results if I hadn't been working.....	31	33	28	31	32	27	32	30	26	34	27	46	26	30	32	31
It found it difficult to balance the demands of work and study.....	23	25	25	22	24	27	26	25	15	28	18	38	19	21	28	25
I got behind in my studies because of my job.....	17	20	24	22	16	24	21	16	16	22	16	32	15	17	22	20
Teachers encouraged students to give up their part-time jobs.....	18	20	15	22	19	13	17	26	16	20	16	28	15	14	22	19
Teachers made allowances for students with jobs.....	7	7	7	7	6	11	7	10	6	8	5	8	7	4	9	7
Sample sizes	388	535	113	329	480	185	688	228	120	704	297	289	687	356	680	1036
	389	532	112	330	475	185	686	227	120	698	300	288	685	356	677	1033
	389	535	113	331	478	185	690	228	119	705	297	290	686	358	679	1037
	384	530	113	326	478	180	682	225	120	697	296	282	684	354	673	1027
	382	532	112	328	473	182	685	224	117	695	296	286	679	351	675	1026
	383	535	112	330	476	181	687	225	118	698	297	287	682	355	675	1030

Notes:

Student achievement is based on scores on achievement tests at age 14.

Family wealth is based on a factor scale derived from respondents' reports on the nature of their accommodation and on the possession of certain consumer durables.

Job type based on ASCO major groupings, as detailed in Table 5.1.

Differences that are significant at the .05 level are shown in bold.

(recorded in Table 3.4) showed slightly more females (46 per cent) than males (41 per cent) working between 6-10 hours per week, and fewer females than males working 11-15 hours (19 per cent compared with 23 per cent). It may be in part because females are generally more concerned about their school work. From their survey of Queensland Year 11 and 12 students, Hobbs & Grant (1991) found that, compared with males, females reported spending more time outside school hours on study and assignments, yet the researchers did not detect a consistent gender difference in scores on what they termed the 'time availability scale' - a set of items concerned with students' perceptions of the time available for study and school assignments.

Hobbs and Grant (1991) considered a number of indicators, and concluded that while there was no evidence of a strong relationship between involvement in paid work and students' perceptions of school or their progress in school, they did find some small differences between non-workers, moderately involved workers (defined as those working up to nine hours per week), and highly involved workers. Students in this last category allocated slightly less time to study and assignments, and their responses to items on the time availability scale indicated lower levels of agreement that they were finding enough time for school work. It is not surprising, therefore, that the *Youth in Transition* data showed that in 1992 students who worked for longer hours (in this instance defined as working more than ten hours on average per week) were significantly more likely than those who worked for shorter hours (up to ten hours) to agree with the statements about some of the difficulties caused by having a job. For two of the four items related to school work, highly involved workers were twice as likely to agree that the effects of working could be considered detrimental - for example, 32 per cent said they got behind in their studies because of their job, compared with 15 per cent of moderate workers.

School type also had a consistent influence on the pattern of responses, reflecting the strong correlation between hours worked and type of school attended. Students from independent schools (who worked fewer hours on average than government school students) were less likely to indicate that their school work suffered as a result of their participation in a job. There was some variation in the influence of school achievement on students' opinions about how their school work was affected, but the difference in responses between achievement groups was not statistically significant. Students from the lowest achievement group were less likely (34 per cent) than higher achieving

students (42 per cent) to indicate that participation in their job was at the expense of time that would have otherwise been devoted to school work. It may be that such figures simply represent a realistic self-assessment on the part of lower achieving students - that they would have been less inclined to allocate more time to school study, regardless of their employment status. However, these lower achievers were somewhat more likely to agree that they got behind in their studies because of their job (24 per cent compared to 17 per cent). Differences on the other two items were very small - lower achievers were only slightly less likely to say that they would have got better results at school if they hadn't been working, and they were a little more likely than others to agree that they found it difficult to balance the demands of work and study.

Students' opinions varied a little according to family wealth, following a similar pattern to that for achievement. Compared with students from wealthier backgrounds, those from the poorest families were somewhat less likely to say that they would have spent more time studying, but were a little more likely to agree that they had difficulty in balancing their work and study. In fact students from the wealthiest and from the poorest families were more likely than those from the middle group to indicate that they got behind in their studies because of their job.

In summary, about one quarter of the students who were employed expressed a view that working had some kind of adverse effect on their schooling - the same proportion as that has been reported more than a decade earlier by Coventry *et al* (1984). These data suggest that students in general did not perceive their part-time jobs to have had a significant negative impact on their school performance. And for the students who could perhaps be considered most at risk in this respect, those who were the lowest achievers during their earlier years of secondary school, there was no strong indication that working part-time was seen by them to be any more of a problem than it was for other students. However, there was evidence that intensively involved workers were more concerned than moderately involved ones about juggling the competing demands on their time, and were more likely to feel that their school work suffered as a result.

The views of teachers

Another aspect of this question of the interaction between school and work that has been little researched in Australia is the attitude of teachers to students who have part-time jobs. In general, it would seem that the level of disquiet about student work in this country is not matched by that which has occurred in the United States. There, during the 1980s, the view that employed students gave lower priority to their school work was reinforced by claims that teachers collaborated in this by lowering their expectations of student-workers, for instance by setting less homework (Greenberger & Steinberg, 1986; McNeil, 1984). In the early 1990s a survey of over 300 educators from 10 midwestern high schools (Helms et al., 1994) found that their opinions about student employment varied with the grade level of the student and whether the work was on school nights or weekends. However, over 60 per cent of the respondents regarded student-workers in their schools as less involved in extracurricular activities, and almost 80 per cent indicated that they would prefer their school to place more emphasis on school activities than on employment - this latter figure was in contrast to 15 per cent who opted for the status quo in terms of the way that their school adapted to working students, and only 6 per cent who wanted their school to better accommodate the needs of working students (Helms et al., 1994).

The outcome of such concerns in the United States has been measures to restrict the hours that students can spend in their jobs and to regulate the times when they can work on school nights through negotiations with local employers in school districts, and by legislative means through child labour laws. For instance, in one state (New York) 14- and 15-year-olds are not permitted to work for more than 3 hours on a school day, for more than 18 hours per week, or after 7 pm on school nights (Graves, 1992; Lawton, 1994).

As noted above, little is known about the attitudes of Australian teachers towards student-workers. At the time of his review Ashenden (1990) cited only three studies (Dalziel, 1989; Munro, 1983; Wilson et al., 1987) which referred to the matter: all were small-scale, and found opinion was mixed, with some teachers concerned that school work would suffer, while others saw employment as beneficial to students. Two much more recent investigations of the student-worker phenomenon have also canvassed the role of teachers. A Western Australian study (Hull, 1999) incorporated the views

of a sample of five teachers from one school, but revealed a distinct contrast between their generally negative attitudes toward students' having part-time jobs and the positive opinions of the other stakeholders - students, their parents and employers. Another study conducted in Victoria included focus group interviews with senior students and found that they felt somewhat disappointed with the lack of acknowledgement, either formally or informally, that their teachers gave to their part-time work (Victorian Industry Education Partnerships, 1999).

Taken together, these Australian data suggest that teachers tend to disapprove of student involvement in part-time work, although the empirical basis for such a conclusion is sparse. While direct evidence about the views of teachers was not available from the student-focused *Youth in Transition* data, there was some indirect information - student-workers were asked to indicate their teachers reactions to their part-time employment. Table 5.5 shows that in 1992 almost one fifth (19 per cent) of students who were working believed that teachers encouraged students to give up their jobs, and only a very small proportion (7 per cent) of student-workers believed that teachers made allowances for those students who did have jobs. It must be remembered, however, that these figures relate specifically to students who were aged 17, of whom a majority were in their final year of secondary schooling. In fact the item concerning teachers discouraging their students from working part-time was the only one for which responses varied by students' year level - analyses not displayed in Table 5.5 revealed higher percentages of Year 12 students (21 per cent) in agreement than among those in Year 11 (15 per cent). Females and students who worked longer hours were also more likely to agree that teachers encouraged them to give up their jobs.

Such attitudes held by teachers, as perceived by their students, may not accurately reflect the views of teachers in general toward student-workers in general - either at that time, or in the present. For instance, it is possible that teachers would have a more positive attitude to part-time workers in the middle years of secondary school than in the later years, when they may expect students to give greater priority to academic work.

Furthermore, the increasing emphasis in recent years on vocational preparation within schools and the rapid expansion of structured workplace learning and other such

programs into the senior secondary curricula (see, for example, Ainley & Fleming, 1997; Malley et al., 1999) undoubtedly mean that these figures relating to attitudes held in 1992 reflect a situation that is much less likely to be true in the current period. Some of the implications for education policy of this growth in the numbers of student-workers will be further explored in a later chapter. It is sufficient to note here that while most schools have been slow to recognise that large proportions of their students have become part-time workers out of school hours, this reality must now be not simply accommodated but also built upon. There is reason to believe that, compared with past years, the prevailing mood in Australian schools is more favourable towards students combining their studies with some paid work. The perception is that part-time work enhances students' longer-term job prospects because it is seen by prospective employers as an indicator of motivation and initiative. As a sign that this view now has broader acceptance, some schools in the Independent sector have begun to employ consultants to run programs to teach their students strategies for finding and getting part-time work (Rance, 1997; Rance, 1998).

EFFECTS ON OTHER ASPECTS OF LIFE

The research literature, especially that from North America, contains numerous references to various other effects, not necessarily directly related to educational outcomes, which part-time employment is claimed to have on students. From an Australian perspective, the perceived positive effects of employment on a range of aspects of personal and social development have already been mentioned in the preceding discussion of students' reasons for working. These effects included increased self-confidence and responsibility, communication skills, knowledge of social processes, and time management skills (Hull, 1999; Victorian Industry Education Partnerships, 1999; Wilson et al., 1987; Yap, 1991; Yap, 1998). Little attention has been paid in the Australian research literature to potential detrimental effects of part-time employment on adolescent development.

In the United States, Greenberger and Steinberg and their colleagues have been the most vocal in drawing attention to what they claimed were the harmful consequences of student employment, especially the effects of intensive involvement in part-time work. (In the US context, this amounts to working more than 20 hours per week.) In a series of studies, they argued that part-time work resulted in anti-social behaviour

(increased use of alcohol and tobacco, and criminal activity such as theft from employers), undermined family relationships, and promoted poor attitudes among young people, including excessive materialism and cynicism about work (Steinberg & Dornbusch, 1991; Steinberg et al., 1993; Steinberg et al., 1982a; Steinberg et al., 1982b). Hypothesised reasons for such links included the access which student-workers have to financial resources to buy drugs and alcohol, and premature autonomy, when young people did not have adequate coping skills. Similarly, Bachman and Schulenberg (1993) reported positive correlations between work intensity and a range of problem behaviours such as drug abuse, interpersonal aggression, trouble with police, arguments with parents, and lack of sleep, and Wright, Cullen and Williams (1997) found that work intensity was positively and significantly related to delinquency, particularly for high risk males.

While potential effects, either positive or negative, on these various aspects of life cannot be investigated using the existing *Youth in Transition* data, a more general assessment of the association between part-time employment and students' quality of life could be undertaken. The 17-year-old students who were surveyed in 1992 were asked to indicate how happy they felt about different aspects of their lives. In order to obtain a measure of their subjective well-being, or quality of life, students were asked to rate a number of dimensions of their life in response to a question '*In 1992, all in all, how did you feel about...*', with the categories on the five point response scale being '*very happy*', '*happy*', '*fairly happy*', '*unhappy*' and '*not applicable*'. Reported influences on quality of life come from a number of areas, including status attainment, both occupational and educational (Fleming & Marks, 1998; Williams, 1988). Hence, one of the many possible influences on responses to this general measure of satisfaction with life could be participation in part-time work. The pattern of responses was analysed, to ascertain whether there was any evidence for this being the case. Table 5.6 displays the combined percentages of students who indicated that they were either very happy or happy with particular elements of their lives, disaggregated for workers and non-workers by gender, and by type of job and hours worked per week for those who were employed.

A comparison of all student-workers with non-workers revealed that employment was positively associated with higher levels of satisfaction with all aspects of life listed in the table, with the exception of a small negative effect on the item concerning spare

time. In particular, students who were employed were more likely than non-working students to be happy with their social life (73 per cent of workers were happy compared with 66 per cent of non-workers), and their independence (67 per cent compared with 59 per cent), and, as expected, very much more likely to be happy with the money they got each week (57 per cent compared with 34 per cent).

The association between students' employment status and satisfaction with many aspects of life could indicate a causal link between the two. It is reasonable to assume that the higher proportion of working students who were satisfied with the money they received each week was a direct result of their having a paid job, and it is also plausible that students who went to work would, as a consequence, develop a greater sense of independence, and wider social contacts and hence an enhanced social life, than those who were not employed. Nevertheless, caution is needed before attributing the apparent differences in levels of satisfaction between workers and non-workers directly to their employment status. It is possible that students who are more independent in spirit and more socially confident also have a greater propensity to involve themselves in a job. Either view - that certain kinds of students are more inclined to select into employment, or that employment has certain positive consequences - could be supported by these data. However, whichever view is adopted, it was clear that, in 1992, student-workers were happier with their lives than non-workers. Although not directly comparable with the 1992 data (because of differences in the number and wording of the response categories) a similar set of items about satisfaction with their lives was asked of an earlier cohort of students, who were aged 17 in 1982. Analyses of those data showed that, compared with students who were not employed, those who were working in 1982 had also been happier with the money they got each week, their social life, and their independence. The pattern of their responses revealed that among teenagers in the early 1980s employment status had a very similar though not quite as strong an impact on the likelihood of being happy as it had among students who were 17 years old in 1992.

Table 5.6 Percentages of students who were very happy or happy with various aspects of their lives, by employment status and gender, and, for those employed, type of job and hours worked per week, 1992

	Non-workers			Student-workers						
	M	F	P	Gender			Job type		Hours employed	
				M	F	P	White C	Blue C	1- 10	> 10
The work you did (on the job, at school, at home)..	50	46	48	52	50	51	52	48	50	51
The money you got each week.....	34	35	34	55	59	57	61	51	52	69
Your social life.....	63	70	66	73	74	73	74	73	71	76
Your independence.....	62	57	59	66	68	67	67	67	65	70
What you did in your spare time.....	78	69	74	81	65	72	69	75	72	68
How you got on with people in general.....	76	81	78	80	81	81	81	78	80	79
The people you work with.....	-	-	-	68	71	70	71	67	68	70
Your prospects for promotion.....	-	-	-	28	21	24	26	18	20	30
Your standard of living....	77	81	79	86	82	84	85	81	85	80
Life as a whole.....	62	60	61	67	59	63	65	57	64	60

Differences that are significant at the .05 level are shown in bold.

Table 5.6 also shows, for both non-workers and student-workers in 1992, percentages for males and females separately. Focusing on the gender gap in responses for workers compared with that for non-workers, it was possible to discern some differences, and hence to make some observations about the relative importance of part-time work for males and females. Among non-workers, while females were more likely than males to be happy with their social life (70 per cent compared with 63 per cent) and how they got on with other people (81 per cent compared with 76 per cent), among student-workers there were minimal gender differences on these items, implying that a part-time job may be more significant, at least in these respects, in the lives of males than in the lives of females. By contrast, with regard to levels of satisfaction with their independence, and the money they got each week, employment appeared to play a greater role for females than for males. Among non-workers, males were happier about their independence than females (62 per cent compared with 57 per cent), yet among workers this was reversed, with females slightly happier than males (68 per cent compared with 66 per cent). Employed females were slightly more likely (59 per cent) than employed males (55 per cent) to be happy with the money

they got each week, whereas for non-working students there was no gender difference for this item.

For students who were employed, Table 5.6 also displays the variation in responses according to both their types of job, classified into two broad categories, and the hours that they worked. There was no difference between white collar and blue collar workers in how they felt about their social life and their independence, and only small differences in their feelings about the work they did, and how they got on with people in general. However, considerably higher percentages of white collar workers were satisfied with certain aspects of their jobs - they were more likely than blue collar workers to be happy with the money they received and their promotion prospects. The explanation for such a pattern may include intrinsic differences in the nature of the jobs in each category, and the rewards that they brought, as well as differences in the gender balance of the workers in each category. For instance, a higher proportion of white collar workers (61 per cent) than blue collar workers (51 per cent) was happy with the money they got each week. Yet there was not a large difference between the average weekly earnings of each occupational group. Further analyses, not recorded in the table, showed a margin of just under \$2 per week in favour of white collar workers. Rather, as indicated above, females were more likely than males to be happy with the money they got, and they comprised the majority of white collar workers.

A higher percentage of males (28 per cent) than females (21 per cent) was happy with their prospects for promotion in their job. On this basis, it might be expected that (predominantly male) blue collar workers would be more likely than those in white collar jobs (mainly female) to agree that they were happy about that aspect of their job. However, this was not the case. While 18 per cent of students who had blue collar jobs were happy about their chances of promotion, the figure for white collar workers was larger - 26 per cent. Other analyses, not displayed in the table, showed that among blue collar workers, there was minimal difference by gender in the percentages who were happy about their promotion prospects, yet among white collar workers much higher proportions of males (36 per cent) than females (22 per cent) indicated that they were happy. The same pattern, although not as marked, was found in responses to the item concerning happiness about the work that students did. It seems that, in respect to the nature of the job that is being done and the prospects for improvement that are offered, the experience of part-time work is more favourable for white collar workers,

especially for males. This reinforces and explains the differences noted previously in the percentages of white collar and blue collar workers who indicated enjoyment as one of their reasons for working.

Overall, then, while type of job (when based on this broad categorisation) did not greatly influence students' responses about a large number of general aspects of their lives, it did have an impact on those items that most closely reflected their experience of the workplace. The number of hours per week which students worked also influenced some aspects of how they felt about their lives. Most notably, those who worked for more than ten hours each week were much more likely to be happy with the money they got (69 per cent were happy about this, compared with 52 per cent of those who worked for shorter hours - and 34 per cent for those who were not employed), and a little happier with their independence (70 per cent compared to 65 per cent and 59 per cent). Perhaps less predictable, students who worked these longer hours were also slightly more likely to be happy with their social life. Seventy-six per cent indicated they were happy in this regard, compared with 71 per cent of those who worked shorter hours, and 66 per cent of non-workers, suggesting that time spent in the workplace might be considered by many students as contributing to, rather than impeding, social activities. However there was a slight tendency for longer working hours to be negatively associated with the likelihood of students being happy about what they did in their spare time, and about their life in general.

PERCEIVED EFFECTS OF PART-TIME WORK: SOME CONCLUSIONS

These data reporting the subjective views of 17-year-old students who were part-time workers in October 1992 do not point to any significant problems experienced by those who took on a job while they were still at school. Most worked because they wanted to, and they enjoyed the work, and the independence, particularly the financial independence, which a job gave them. Those who were employed were more likely to be happy with many aspects of their lives - especially the money they got, their social life, and their independence - than non-workers. Measured in these ways, the outcomes of part-time employment for students, at least in the short-term, appeared to be generally positive. However, about one quarter of the students indicated that they thought that their job had some detrimental effects on their school work at the time.

The impact of part-time work on more objectively measured outcomes will be examined in the following chapter.

THE EDUCATIONAL OUTCOMES OF PART-TIME WORK

Most Australian teenagers did not believe their school work was seriously harmed by the hours they spent working in a part-time job, if the evidence presented in Chapter 5 is accepted. There may be a difference, however, between the perceptions of those involved, and outcomes that can be demonstrated in a more impartial way. This chapter uses longitudinal data from the 1975 birth cohort – the same young people whose views about their part-time jobs formed the basis of the preceding discussion – to investigate both school and post-school educational outcomes. The associations between part-time work and students' progress through and performance at school are examined, progress being measured by completion of Year 12 and performance by the standard of end of school achievement. Post-school outcomes – that is, the effects of having a part-time job while at school on students' participation in different types of further education and training after leaving school – are also considered.

THE MEASURED EFFECTS ON SCHOOLING

The apparently commonsense argument against students engaging in part-time employment is that a job detracts from commitment to school work, and therefore such employment has a negative effect on academic outcomes. According to this 'zero-sum model', time which students devote to their jobs reduces the time they can spend on academic activities such as homework (Marsh, 1991; Singh, 1998). However, in the Australian context, there is an absence of empirical evidence to support this view that student-workers do not perform as well academically as their non-working peers, while overseas studies have produced contradictory findings.

Existing evidence

Other Australian research provides almost no guidance as to the effect of students' part-time employment on their schooling; although some studies have dealt with perceived effects, very few have explicitly examined the impact of part-time work on school performance. The exceptions are a couple of small-scale studies, carried out more than a decade and a half ago, which made only fleeting reference to the issue. As a postscript to the research by Coventry et al (1984) the Victorian Higher School

Certificate results of a relatively small sample of working and non-working students were compared, and although the 'pass rate' was found to be slightly higher among workers than non-workers (79 per cent and 74 per cent respectively), this was not a statistically significant difference. Murphy (1986b) also analysed data from three Victorian schools and reported no significant correlation between poor school performance (measured on a five point scale and derived from school records) and part-time work.

By contrast, in the United States, much interest and debate, and a plethora of research studies, have focussed on the effects on achievement of working during high school. While those investigations yield insights into the possible role of part-time employment as one of a whole range of variables which might influence a student's academic progress, the conclusions drawn from them cannot be automatically assumed to apply in the Australian context. One clear limitation of the overseas studies is that their findings have lacked consistency; the American literature on the subject of the effects of working on school performance and on school completion contains contradictory results.

Some of these studies indicated reduced academic performance by students who worked (Greenberger & Steinberg, 1986; Marsh, 1991; Mortimer & Finch, 1986) while others found no negative effect (Berryman & Schneider, 1982; D'Amico, 1984; Green & Jaquess, 1987; Hotchkiss, 1986; Mortimer, Shanahan, & Ryu, 1993; Schoenhals et al., 1998; Steinberg et al., 1982b). Many, however, showed that the effects varied, depending on hours worked - that modest involvement in employment did not interfere with academic performance, and was sometimes associated with a positive impact on grades, but intense involvement had negative effects (Barton, 1989; Lillydahl, 1990; Ruscoe et al., 1996; Schill et al., 1985; Singh, 1998; Steinberg & Dornbusch, 1991; Steinberg et al., 1982a; Stern et al, 1997; Wirtz, Rohbeck, Charner, & Frazer, 1987).

There have been similarly mixed results from studies that have focused on the impact of employment on school completion. Carr, Wright and Brody (1996), for instance, found that working did not significantly influence the probability of completing high school. D'Amico (1984) concluded that while extensive work involvement was associated with an increased rate of dropping out of school for some groups of students, moderate work involvement generally appeared to lead to increased rates of

high school completion. Other researchers (Marsh, 1991; McNeal, 1995) also found that working longer hours led to a greater likelihood of dropping out. McNeal (1995) used *High School and Beyond* data to show that those who worked shorter hours were less likely to drop out of school than were non-workers, confirming D'Amico's (1984) earlier findings. Gilbert *et al* analysed data from the *Canadian School Leavers Survey* to show that moderate hours were associated with lower drop out rates for both males and females, even when holding constant academic performance and positive school experience, while high hours were associated with higher drop out rates, but for males only.

While the 'hours effect' has received most attention in the literature, more recently, McNeal (1997) focused on yet another aspect of the effect of part-time work on school completion, arguing that students' employment had a variable effect on dropping out of high school, depending not only on the hours worked but just as importantly on the type of job in which they were working, and that such effects differed by gender. Research by Mortimer and colleagues (Mortimer, Finch, Shanahan, & Ryu, 1992a; Mortimer, Finch, Shanahan, & Ryu, 1992b; Mortimer *et al.*, 1994; Mortimer *et al.*, 1993; Mortimer & Shanahan,) also pointed to the significance of the nature and quality of the working experience, with gender variations in school-related outcomes, particularly intrinsic motivation. This was in contrast to an earlier view (Steinberg *et al.*, 1982b) that there was relatively little evidence to indicate that the effects of employment on adolescents were substantially influenced by the type of work they performed.

Reasons for variations in findings

There are methodological differences among the numerous American studies that go a considerable way towards accounting for this variation in findings. Different types of samples have been used – some highly localised (Green & Jaquess, 1987), some confined to one state (Berryman & Schneider, 1982; Greenberger & Steinberg, 1986; Hotchkiss, 1986; Ruscoe *et al.*, 1996; Steinberg *et al.*, 1982a) and others national; some samples have been homogeneous in terms of gender, social class, or race (Green & Jaquess, 1987; Mortimer & Finch, 1986, for example) and others heterogeneous; and both cross-sectional and longitudinal datasets have been analysed. The cross-sectional nature of many of the studies, which investigated relationships between variables measured at the same time (for instance, Barton, 1989; Lillydahl, 1990; Ruscoe *et al.*,

1996; Schill et al., 1985; Singh, 1998; Steinberg & Dornbusch, 1991; Steinberg et al., 1982a) leaves unresolved the question of causal direction; such studies cannot be used to substantiate any hypothesis that attributes a causal link between having a part-time job and school performance.

As well as differences between samples there are differences both in the range of explanatory and outcome variables used in the analyses, and in the timing of the measurement of those variables. Although there is a generally accepted cluster of student background characteristics that are drawn upon as control variables when investigating outcomes of part-time work, there have also been attempts to acknowledge greater complexity by the inclusion of additional variables, such as the nature of the student's experience in the job. Variation in findings may also be attributable to differences in the way that the outcome variables and the independent variable participation in part-time work have been defined and operationalised. As a dependent variable school completion may be relatively easy to define, yet can be measured at different times, while a variety of measures of school achievement have been used. Most commonly this has been students' grade point average (GPA), either self-reported or obtained from school records (Mortimer & Finch, 1986; Singh, 1998; Steinberg et al., 1982a). However it has been pointed out (by those critical of the effects of part-time work) that GPA may not be the most appropriate outcome measure because working students may select less challenging courses as a means of maintaining their GPA (Steinberg et al., 1993). Other achievement measures used in analyses have included class rank (D'Amico, 1984), and standardised test scores such as those from the National Assessment of Educational Progress (NAEP) or Scholastic Aptitude Tests (Barton, 1989; Lillydahl, 1990).

There are many definitional issues which arise in operationalising the part-time work variable, and these may further explain divergent findings from different studies. At the outset, there is the question of whether vacation work is included; some studies have done so (Carr et al, 1996), while others focused only on employment during school term time. The major distinction that can be made is between studies that have used work status (whether students were employed or not, at a particular point in time, or at any time throughout a specified period) and others that used work intensity (the extent of involvement in part-time work, generally measured as hours worked per week). In a few instances work was operationalised in a manner which took account

of both the intensity and the period of employment - for example, the percentage of weeks during the year that the student worked for more or less than 20 hours (D'Amico, 1984). In general, particularly when attention is focused on examining school outcomes, work intensity rather than simply employment status has increasingly been recognised as the salient influence (Singh, 1998; Steinberg and Dornbusch, 1991).

This complexity involved in defining part-time employment for the purpose of investigating outcomes highlights another disparity when considering the relevance for Australia of conclusions drawn from American studies. That is the significant international difference between the intensity of involvement in part-time work by high school students, with American students typically working much longer hours per week than their Australian counterparts - conclusions from many studies (for instance, Lillydahl, 1990; Owings, 1995; Sunter, 1992) would seem to indicate an average of twice as long. Given the American findings which point to the greater importance of work intensity rather than work status, it might be expected that if there were negative effects of part-time work on school performance, for Australian students the severity of effects could be ameliorated by the fewer hours that they worked per week.

Hence the need for an assessment, using Australian data, of the impact on students of having a job while at school - and the data from *Youth in Transition* enabled this to be done. The influence of various factors on school performance could be examined, including the effect of students' labour force participation over a number of years. Secondary school completion could be considered as one indicator of success at school, while a student's end of school achievement measured by final year results also constituted another means of judging outcomes. Although these two outcomes were investigated separately in the following analyses, they represent different aspects of what is basically the same hypothesis. The most powerful argument against students' working part-time has been that a job could adversely affect school performance. It would seem to be self-evident that students who have a job have less time to study, and hence their school work would suffer. According to this view, student-workers would therefore be less likely to complete all years of secondary school, and those who did reach Year 12 would have poorer end of school results than non-workers. These

hypotheses were tested, and the results are discussed in the following sections of the chapter.

SCHOOL COMPLETION

There is an established body of research concerning the individual, family and school factors which influence students' decisions about staying at or leaving school. Social background, through its effect on family educational and cultural resources, is especially powerful, as is early school achievement (Ainley, Batten, & Miller, 1984; Braithwaite, 1989; Long, Carpenter, & Hayden, 1999; Williams et al., 1993). The importance of psychological variables has also been recognised; success at school builds self-esteem and reinforces educational aspirations (Braithwaite, 1989; Poole, 1983). Chances of school completion are enhanced when there is greater student involvement and identification with school, while conversely a sense of failure results in dissatisfaction and dropping out (Finn, 1989; Hemmings, Hill, & Kay, 1994; Marks, 1998). In this context, it might be argued that a part-time job is one of the factors that could have a negative influence on students' sense of identification with schooling, and hence on the likelihood of their completing school.

The analytic technique adopted to examine the association between this measure of a successful school outcome and part-time work was logistic regression. To create the dependent variable – secondary school completion – for the analyses, sample members were categorised according to whether or not, by the age of 19 in 1994, they had completed Year 12. When students in the sample were first surveyed at age 14 in 1989, the majority were in Year 9, although, because of state differences in the age of school commencement, a substantial number were also doing Year 8 and a few were in Year 10. The modal year of school completion was therefore 1992, with a smaller number of students doing so in 1993, while a few had finished Year 12 in 1991. (It is worth noting that the individual student-level data analysed here happen to coincide with the period in which national school retention rates reached their highest peak - in 1992 the apparent retention rate to Year 12 was 77 per cent, having grown from 36 per cent a decade before. This also raises the further question of what might be the relevance of the findings in a context of declining school retention rates, as has occurred in the several years since 1992.)

A range of student background variables was included in the regression analyses, in order to control for the effects of those variables when seeking to determine the impact of part-time work on the likelihood of students completing secondary school. (Refer to Appendix 2 for details of the control variables.) There were many ways in which the independent variable, participation in part-time work, could be defined, as the above discussion of the American studies shows. It was possible to consider the effect on school completion of whether or not a student worked in any one particular year level at school. Students could also be categorised as having been a student-worker at any time throughout any of their school years. Total number of years worked while at school could also be considered. Hours worked per week in any one school year was another measure of the extent of involvement in employment, with non-workers being compared with students classified as moderately or highly involved workers – that is, those working from one to ten hours or more than ten hours per week respectively.

The results of a series of regression analyses are presented in Table 6.1, with models that include three different measures of employment - one a broad comparison between students who had worked or not worked while at school, and two of them relating to part-time work during Year 11. It is pertinent here to note the relative sizes of the working and non-working categories of students – overall, more than half (52 per cent) of the sample of young people had been in part-time employment at some time while they had been at school, and more than one third (37 per cent) of Year 11 students had held part-time jobs. Among the latter group, one quarter (25 per cent) had spent more than 10 hours per week in their jobs.

Table 6.1 reveals, in the first instance, for all models presented there, the significance of a number of student background factors - both individual and family attributes - in predicting the likelihood of school completion. Foremost among these factors is the substantial and statistically significant impact of earlier school achievement. Students who, at age 14, were in the middle and top quartiles of achievement were more likely to finish school than those from the lowest achievement quartile. As could be expected, students' intentions about when they would leave school, also measured at age 14, were strong predictors of school completion. Gender was a significant variable, with girls being more likely than boys were to complete Year 12. Other factors that were associated with school completion were a non-English speaking background, high levels of parental education and attendance at an independent

school, all of which had a positive impact, while rural location had a small but negative effect (see also Long et al, 1999).

Effects of employment status

Overall, as shown by the results for Model 1, in comparing outcomes for students who had been workers across any year level at school, and those who had not, there was a statistically significant, although small, difference in favour of student-workers, who were slightly more likely to complete their schooling. To examine this relationship further, separate analyses were conducted for employment in each individual year level at school.

Part-time employment during Year 11 (measured in October) was not found to have a significant influence on the likelihood of school completion. As Model 2 indicates, controlling for the effect of other background variables, there was no significant difference between the rates of school completion of students who had been workers when in Year 11 and those who were non-workers. This analysis, by using employment status in Year 11 as the independent variable, necessarily excludes any students who left school prior to that time (that is, early school leavers). It was considered, however, that this would be a more critical year level in terms of making relatively greater demands on students academically, compared with Years 9 and 10. Similar results were found in other analyses (not reported in the table) that used employment status (in October) in Years 9 and 10 rather than in Year 11 - students who worked in either of those years were not less likely to complete Year 12 than their non-working peers. However, although the difference between school completion rates of workers and non-workers in each of Years 9 and 10 did not reach statistical significance, the regression coefficient in each case was positive for workers. As a result, there was an overall positive outcome for student-workers as a group when compared with non-workers, which was seen in Model 1.

Further analyses (also not recorded in the table) indicated there was no negative cumulative effect of employment over successive years – the total number of years worked by students up to and including Year 11 did not have a significant effect on the likelihood of school completion.

Effects of employment intensity

Other studies, based on American data, have demonstrated the importance of considering the intensity of involvement in a job, rather than simply employment status, when examining school outcomes. Therefore Model 3 shown in Table 6.1 included separate dummy variables for students who worked from one to ten and more than ten hours per week when in Year 11, compared with non-workers in that Year. As noted above, about one quarter of student-workers in Year 11 (or almost 10 per cent of the overall sample of all Year 11 students) were in this second category of more intense workers. (American researchers have invariably used a much higher cut-off figure, generally 15 or 20 hours, when categorising student-workers, but the far fewer hours worked by Australian students makes that distinction inappropriate for these analyses.) The results from Model 3 indicate that, at a low level of significance, Year 11 students who worked longer hours in their part-time job were slightly less likely to complete Year 12 than those who were not employed, but there was not a significant difference in school completion between moderate and non-workers. However, although they are not recorded in the table, other analyses, in which dummy variables for moderate and longer hours worked in each of Years 9 and 10 were substituted in the regression, did not produce any evidence that students who worked longer hours were less likely to complete their schooling than moderate or non-workers in those earlier year levels.

Alternative model specifications

In the preceding analyses concerned with employment intensity, the comparison was between non-workers (hours coded as zero) and two categories of workers, based on the number of hours per week they spent in their jobs. Also of interest is the effect of hours worked on outcomes - that is, school completion - only for those who were actually employed. Although the results are not displayed here, a direct comparison of moderate and higher intensity workers, by deleting non-workers and re-estimating the regression equation with moderate workers coded zero, did not show a statistically significant negative effect on school completion of intense involvement in employment during Year 11. A further analysis, however, using hours measured as a continuous rather than a dummy variable, did reveal a negative association between weekly hours worked in Year 11 and school completion (logit=-0.05, p=.04).

Table 6.1 Logistic regression analyses of influences on school completion, by age 19 in 1994

Independent variables		Model 1	Model 2	Model 3
Gender				
(cf Females)	Males	- 0.41 ***	- 0.53 ***	- 0.51 ***
Ethnic background				
(cf English-speaking)	Non-English speaking	0.56 ***	0.45 ***	0.35 **
Location				
(cf Non-rural)	Rural	- 0.53 ****	- 0.36 ****	- 0.44 *
Parental occupation				
(cf Semi-skilled and unskilled)	White collar and skilled Professional and managerial	0.02 0.13	- 0.00 0.23	0.02 0.22
Parental education				
(cf Primary and some secondary)	Completed secondary Post secondary	0.26 * 0.92 ****	- 0.06 * 0.75 ****	0.02 0.70 *
Family wealth				
(cf Poorest quartile)	Middle 50% Wealthiest quartile	0.09 0.06	0.23 - 0.40 +	0.21 0.34
School type				
(cf Government)	Catholic Independent	- 0.12 0.79 **	- 0.17 0.70 *	0.02 0.72 +
Early school achievement				
(cf Lowest quartile)	Middle 50% Highest quartile	0.55 *** 1.53 ****	0.64 **** 1.96 ****	0.69 **** 2.12 ****
Educational aspirations				
(cf Complete school)	Intention to leave early	- 2.09 ****	- 0.98 ****	- 0.98 **
Employment status in secondary school				
(cf Non-workers)	Part-time worker	0.38 ***	-	-
Employment status in Year 11				
(cf Non-workers)	Part-time worker	-	- 0.26	-
Employment intensity in Year 11				
(cf Non-workers)	1-10 hours More than 10 hours	- -	- -	- 0.21 - 0.54 *
N		2977	2531	2473

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Notes:

See Appendix 2 for descriptions of the independent variables.

Differences in sample sizes reflect differences in the numbers for whom labour force data were available.

Goodness of fit statistics:

Model 1: Somers' D = 0.650, Gamma = 0.652, Tau-c = 0.825, Log likelihood chi-square = 783.465 with 15DF

Model 2: Somers' D = 0.543, Gamma = 0.547, Tau-c = 0.771, Log likelihood chi-square = 193.796 with 15DF

Model 3: Somers' D = 0.560, Gamma = 0.565, Tau-c = 0.780, Log likelihood chi-square = 198.852 with 16DF

The relationship between employment and school completion

There is agreement, therefore, between these findings which indicate that Australian students who worked longer hours during their senior schooling were slightly less

likely than non-workers to complete Year 12, and the conclusions from some American studies that intense involvement in employment is associated with an increased probability of dropping out of school, despite the disparity between average hours worked by Australian and American students. But the process through which this relationship between intense involvement in part-time work and school non-completion might occur remains a matter for speculation.

It is probable that students who work longer hours in their jobs do so because they are less attached to school, and hence are less inclined to want to continue their schooling. There may be many reasons for this lack of attachment to school, previous academic performance being one. But, as shown in Chapter 4, students who at age 14 were the lowest achievers were, when aged 17, significantly less likely to be employed than other students. Hence students who were working during Year 11 were not more likely than non-workers to be lower achievers and be less attached to school for that reason. Furthermore, the regression analyses described here include controls for both levels of achievement and educational aspirations, based on students' intentions concerning when they planned to leave school, each of these variables measured at age 14. The results imply a small negative effect on the likelihood of school completion, over and above the effects of earlier achievement and educational intentions, for students working long hours in Year 11 when compared with those who were non-workers. However, this is not definitive evidence that it is longer hours of work *per se* that cause students to leave school before completing Year 12 - it is equally possible that other aspects of a student's school experiences could contribute to a process of disengagement from school that is also expressed in a greater involvement in part-time work in later years.

When considering outcomes only for students who were employed during Year 11, more intense involvement in work at that time did not have the same negative association with school completion; there was not a statistically significant difference in Year 12 completion between students who worked high compared with moderate hours. This is consistent with previous analyses which found no significant association between hours worked per week among 17-year-old students and their previous school achievement at age 14. That is, the amount of time which students invested in their jobs was not significantly related to a lack of prior academic success at school - among those who were working in their senior years, students who performed

poorly earlier in their secondary schooling were not shown to be significantly more likely to 'select' themselves into longer hours of part-time employment, although the regression coefficient tended in this direction.

YEAR 12 ACHIEVEMENT

The evidence from overseas about the effects of part-time work on school performance, measured by students' standard of achievement, is more extensive than that on school completion. The consensus from the North American literature is that employment in itself does not depress school grades, and that working a moderate number of hours does not have a detrimental effect. Some studies have reported an association between long hours of part-time work - in the American context, this means more than 15-20 hours - and lower school grades (Schill et al., 1985; Singh, 1998; Steinberg & Dornbusch, 1991; Steinberg et al., 1982a; Stern et al, 1997). But there have also been conflicting results - another group of researchers, using a different longitudinal dataset, concluded that higher hours of work were not associated with lower academic achievement in the later years of high school (Finch, Mortimer, & Ryu, 1997; Mortimer, Finch, Ryu, Shanahan, & Call, 1996).

Among the few non-American studies to have addressed this question there have been two that have analysed UK data on students' A-level results. One used 1989 data and, controlling for prior achievement, revealed a tendency for student-workers overall to gain slightly lower examination grades than non-workers, and those employed for more than 9 hours per week to achieve lower grades than those working less than 9 hours per week (Tymns & Fitz-Gibbon, 1992). Nevertheless the researchers regarded these findings as evidence of a selection process rather than a causal relationship. A second more recent study in the United Kingdom also reported a negative effect on A-level results among a small sample of students who worked longer hours compared with those who worked shorter hours (Thornton, 1998). Other British researchers argue that A-level results are less informative because they reflect differences in rates of staying-on at school (Dustmann et al., 1996). The latter focussed instead on examination performance at an earlier stage of schooling, finding that a few hours of part-time work had no significant effect, but that working 6-9 hours and more had a negative effect on the number of examination passes achieved at O level and CSE grade 1. But the researchers also concluded that hours worked are very likely to be

influenced by students' expectations about their exam results, with those who anticipated poor results being more inclined to work longer hours.

Effects of employment on Year 12 results

It was possible to test the hypothesis about the effect of working on the level of students' performance in their final year of school using the *Youth in Transition* data for the 1975 cohort. Data about end of school achievement were collected in 1994. Information was available from respondents about whether they received a Year 12 certificate, the name of the certificate they received, and, most importantly for this investigation, their tertiary entrance score.

End of school accreditation procedures vary from state to state within Australia, with each state assessment authority awarding its own version of a certificate of senior secondary school completion. In addition, students who complete Year 12 receive a numerical assessment of their level of achievement, which indicates their within-state ranking for entry to tertiary educational institutions. The method of calculation of these tertiary entrance scores, and the scales on which they are reported, differ between states. However, in order to facilitate inter-state tertiary enrolments, the university admissions centres in the various states collaborate to produce conversion tables which, with some caution, allow tertiary entrance scores for any one year to be compared between states. Hence, using these tables, individual tertiary entrance scores of the *Youth in Transition* sample of students from different states who completed Year 12 in the same year were able to be allocated a percentile ranking, providing an approximate overall measure of their Year 12 results.

There are three main caveats associated with this method of creating this outcome variable. One is that it relied on self-reported data, so there was an inherent risk that some students may have been tempted to inflate (or perhaps even lower) their scores. An informal check on the reliability of these data was to examine the relationship between scores that were provided by students and their post-school activities - the ranges of scores given by students who proceeded to study at university compared with those who went on to TAFE were found to be as expected. A second problem related to difficulties in interpreting the scores of a particular group of students. Depending on the combination and differing statuses of subjects that they studied,

three different tertiary entrance scores could be obtained by students in South Australia and the Northern Territory (students in the latter may undertake Year 12 courses that are accredited in the former). Because it was unclear which type of tertiary entrance score was reported by students from that state and territory, it was not possible to allocate a percentile ranking to them, and they were therefore excluded from the analyses, reducing the sample size somewhat. Thirdly, it must be remembered that the accuracy of the percentile ranking when comparing different state scores cannot be considered to be absolute - it represents at best an approximation of overall achievement.

The percentile ranking of tertiary entrance scores obtained by students who were in Year 12 in 1992 and in 1993 was used as the dependent variable in a series of multiple regression analyses, to investigate the effect of part-time employment on end of school achievement, while controlling for the effects of other background variables. There was a sample of over 1000 students for whom a percentile ranking of Year 12 achievement was known, and for whom the data for all the relevant background variables were available. Factors known to influence school achievement were included in the models, and these are listed in Table 6.2, which records the regression coefficients obtained from two of the analyses. In each case, the overwhelming influence of earlier school achievement on Year 12 results was starkly evident; students who had been in the top achievement quartile at age 14 obtained a percentile ranking when in Year 12 far above students who, at the same age, had been in the lowest quartile of achievement. Students from a non-English speaking background were more likely to have higher results, as were students whose parents were in professional and managerial occupations. Gender and school type were also shown to have an influence on Year 12 results, with females and students from non-government schools being slightly more likely to do better than males and those who attended government schools.

A number of analyses (not displayed in the table) revealed that Year 12 results were not significantly related to whether students worked in a part-time job in any year at school, from Year 9 to Year 12. That is, employment status *per se* did not influence results. However, there remained the more plausible question of whether the intensity of part-time employment, especially during the senior years of schooling, would have any impact on Year 12 attainment. As the figures in Table 6.2 show, the direction of

influence was the same for employment intensity in each of Years 11 and 12, but more markedly in Year 11. More highly involved workers reported slightly lower Year 12 results than non-workers; if two students who were essentially similar in most respects were compared, the student who did not have a part-time job in October of Year 11 achieved a tertiary entrance ranking that was 5 percentile points higher than a student who worked for ten hours or more per week.

Alternative model specification

When non-workers were excluded from the analyses, and the comparison of Year 12 results was confined to one between moderate and intense workers (with moderate workers coded as zero in the regression analyses), the findings were essentially similar to those described above. Students who worked more than ten hours per week in either of Year 11 or Year 12, but particularly in Year 11, scored slightly lower Year 12 results than those who worked for fewer than ten hours.

These findings, which point to a larger negative impact of intense Year 11 employment on Year 12 outcomes, are consistent with results reported by Marsh (1991). He analysed American *High School and Beyond* longitudinal data relating to the 1980s and concluded that working in Year 12 contributed only marginally to the negative effects of working in Years 10 and 11, and that the effect of working during Year 11 was greater than during Year 10.

AN OVERVIEW OF SCHOOL OUTCOMES

These analyses indicate that, for Australian students in the first half of the 1990s, their status as part-time workers during the school year did not have an adverse effect on the likelihood of their completing secondary school or on their academic performance in Year 12. There was evidence, however, that Year 11 students who were intense workers (spending more than ten hours per week in their jobs) were slightly less likely to finish Year 12 than were non-workers. Furthermore, the end of school results obtained by Year 12 students were a little lower for those who had been intense workers in Year 11.

Table 6.2 Multiple regression analyses of influences on Year 12 students' tertiary entrance rank, 1992-93

Independent variables		Model 1	Model 2
		Employment in Year 11	Employment in Year 12
Gender			
(<i>cf</i> Females)	Males	- 3.95 **	-3.40 **
Ethnic background			
(<i>cf</i> English-speaking)	Non-English speaking	6.91 ****	6.83 ****
Location			
(<i>cf</i> Non-rural)	Rural	- 0.85	- 0.97 *
Parental occupation			
(<i>cf</i> Semi-skilled and unskilled)	White collar and skilled Professional & managerial	- 0.31 7.14 ****	- 1.67 5.60 ***
Parental education			
(<i>cf</i> Primary and some secondary)	Completed secondary Post secondary	2.31 3.18 +	3.38 * 4.24 *
Family wealth			
(<i>cf</i> Poorest quartile)	Middle 50% Wealthiest quartile	- 0.24 2.59	- 0.75 2.31
School type			
(<i>cf</i> Government)	Catholic Independent	4.42 ** 5.50 **	4.91 ** 4.14 *
Early school achievement			
(<i>cf</i> Lowest quartile)	Middle 50% Highest quartile	18.42 **** 38.12 ****	19.26 **** 37.38 ****
Employment intensity in senior schooling			
(<i>cf</i> Non-workers)	1-10 hours More than 10 hours	0.03 - 5.62 *	2.11 - 3.92 +
<i>N</i>		1041	1031
<i>R</i> ²		.3207	.3034

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

Part-time work and the selection argument

Causal relationships between part-time employment and school achievement are very difficult to determine. Differences in outcomes between workers and non-workers, or between moderate and intense workers, may be due to the effects of working, but they may also result from a process of self-selection to work, or to work longer hours, that takes place on the basis of the same differences as the outcomes themselves. Therefore outcomes for intensely employed students (such as lower rates of school completion, or lower school marks or grades) may occur due to those same underlying attributes (for instance, a prior lack of ability or interest in school) that caused them to become intense workers in the first place.

There is a body of evidence to support this selection process, claiming that students whose schooling was already compromised were more likely to work excessive hours. Steinberg et al (1993) showed that high school students who entered the part-time work force had lower grades and lower educational expectations, and spent less time on homework in the year prior to becoming student-workers. Analysing NELS data, Singh (1998) found that, among a sample of 3752 student-workers in Year 10 in 1990, work intensity was related to previous achievement in Year 8 - students who did less well academically were more likely to work longer hours, and conversely the more able students worked fewer hours. Schoenhals et al (1998) also used NELS data to show that hours worked in Year 10 were related both to earlier school achievement and attachment to school. Such findings underline the need to ensure that pre-existing differences should not be confused with outcomes. As Bachman and Schulenberg (1993:232) concluded, 'prior education successes, failures and adjustments have a lot to do with adolescents' willingness to commit long hours to employment'.

While the presence of a selection process does not preclude causal effects operating as well, the challenge is to disentangle the two - in this case, to separate the antecedents from the consequences of intense employment. The problem of concurrent measurement of variables that is inherent in cross-sectional studies can be addressed by the use of longitudinal data, enabling analyses that control for the separate influences of background variables and the independent variable, and, when the relevant data are available, the lagged effect of the dependent variable. The analyses of the *Youth in Transition* data reported here include what has been shown to be a highly significant influence on school outcomes - a measure of early secondary school achievement, which is a strong predictor both of school completion and of Year 12 performance. These analyses indicate a small negative effect on school completion and on academic performance in Year 12, of working longer hours, over and above the effect of earlier school achievement. However there are other student and school-related variables that, if the data were available to consider them, could help to clarify the connection between intensive involvement in employment and these adverse consequences.

The relationship between part-time work and attachment to school

Part-time work is believed by some to reduce commitment to school. Steinberg, Greenberger, Garduque and McAuliffe (1982) argued that long hours of work led to lower involvement in school, which they regarded as the mediating variable that in turn resulted in poorer school performance. Several other American studies have reported a negative association between part-time work and students' level of school involvement, the latter indicated in a variety of ways – including reduced enjoyment of school, less time devoted to homework or study, less time given to extracurricular activities and poor school attendance and lateness (D'Amico, 1984; Green & Jaquess, 1987; Greenberger & Steinberg, 1986; Marsh, 1991; Mihalic & Elliott, 1997; Steinberg et al., 1982b). Supporting Greenberger and Steinberg's (1986) notion of investment in school, Marsh (1991) highlighted the importance of this motivational construct: he concluded that the negative effects of working could be attributed to the way in which working detracted from commitment to school.

However there have been other studies which have not confirmed these negative associations between part-time work and engagement with schooling, the latter variously measured by absenteeism, lateness to class, and participation in extracurricular activities (Gottfredson, 1985; Hotchkiss, 1986; Ruscoe et al., 1996). Mortimer, Shanahan and Ryu (1993) found no evidence that intense employment in Years 9 and 10 increased the risk of problem behaviour or poor school attitudes, or diminished the investment of time spent on homework or in extracurricular activities. Mortimer et al (1996) concluded that intense work was not related to reduced involvement in school – intense workers did not have lower motivation regarding school, and hours worked didn't generally predict time spent on homework (except in Year 12, when intense workers did less homework than non-workers). Schoenhals et al (1998) showed that work lowered the time Year 10 students spent watching television, but not the time that they devoted to homework or to reading outside class. Furthermore, to illustrate the complete reverse of what might be expected, Mihalic and Elliot (1997), analysing earlier data from the *National Youth Survey*, discovered that workers, especially intense workers, were significantly more involved in school activities than non-workers.

A limitation of the Youth in Transition data

Contradictory as they are, these American findings draw attention to the need for additional data when seeking to interpret the complex relationship between part-time employment while at school and educational outcomes. When investigating the multiple influences on school completion it would clearly be advantageous to include measures of students' attachment to school – such as attendance and lateness, time spent on homework, enjoyment of school, and the extent of involvement in extra-curricular activities. One of the deficiencies in the theoretical model used as the basis of the analyses reported here is that, due to lack of relevant data, it ignores a cluster of psychological variables such as school and goal commitment, social integration and the extent to which students' needs are accommodated by the school.

In the absence of these variables, the evidence from the *Youth in Transition* data concerning the negative effects of intense employment is less conclusive. These apparent outcomes – for students who worked longer hours in Year 11, a slightly lower likelihood of completing school, and slightly lower Year 12 results – rather than being the consequences of intense employment, could be attributed to a reduced attachment to school, with this same disengagement from school prompting students to choose to work longer hours in their jobs. For these students, the perceived benefits of part-time work may be stronger, operating as pull factors which encourage them into leaving school earlier.

THE TRANSITION TO POST-SCHOOL EDUCATION

It has been shown that part-time work *per se* did not have a negative effect on school completion, or on Year 12 results, although there is some evidence that on both of these measures of performance students who worked longer hours in Year 11 did not do quite as well as students who were non-workers in that year level. This gives rise to the question of whether part-time employment at school has any impact on students' subsequent participation in post-school study.

Existing evidence

A distinction has been made in the American literature between effects of part-time work that occur over differing time frames. Many studies demonstrated that long

hours of work had negative effects on school grades in the short-term, although increasingly there is a recognition that such outcomes could be largely attributable to a selection process and to pre-existing differences in students who opt to work long hours. There has also been a claim that employment causes reduced educational attainment in the longer-term. Carr et al (1996) analysed *National Longitudinal Survey of Youth* data to examine various outcomes, including total years of educational attainment, more than a decade after students had been at school. Hours worked (including vacation employment) during 1979 among students aged 16-19 at that time had a small negative effect on educational attainment by 1990, especially for males. In seeking to explain this finding that linked part-time work while at high school with fewer years of attendance at college, the researchers argued that student-workers tended to come from more affluent families, and had higher scores on tests of cognitive ability, hence their college attendance would be less likely to be constrained by lack of financial resources or qualifications. They contended that these factors implied a greater preference among student-workers to enter the labour force.

Although there has been almost no previous Australian research into the effects of a part-time job on students' academic performance at school, there is some evidence about the relationship between part-time work and the transition from school to higher education from two other studies. Prior and Beggs (1989) analysed *Australian Longitudinal Survey* data to investigate a range of variables, mainly relating to family background, that influenced the likelihood of Year 12 students in 1985 proceeding to university. Part-time work, defined as having had a job at any time in the preceding four years at school, was found to have a significant negative effect on the probability of boys attending university in 1986, but this was not the case for girls. However contradictory results were reported by Wooden, Robertson and Dawkins (1992) who used the same longitudinal data source to examine the subsequent participation in higher education of students who did Year 12 in 1985, 1986 or 1987. These researchers also concluded that the net effect of part-time employment differed by gender, but not in the way shown by Prior and Beggs (1989). Wooden et al (1992) found that long hours of part-time employment had a significant negative effect on female participation in higher education but was not significant for males. It was postulated that this could be due to what was termed the 'taste effect' - after leaving school students who had experienced the advantages which flow from a job opting for

employment rather than further study, due to an increased desire for independence - but no suggestion was offered as to why this occurred only among females. One of the most likely factors accounting for the contrast between the findings of these two studies is the different way in which part-time employment variable was operationalised; the first used employment status over the previous four years of schooling, while in the second part-time employment referred only to the final year of schooling. As the authors of the latter study point out, there is a need, too, for caution in interpreting conclusions, because of uncertainty as to whether the measured effects of part-time work are the result of that work, or reflect joint decisions about work and education made prior to Year 12 (Wooden et al, 1992).

Participation in post-school education

Youth in Transition data from the 1975 birth cohort enabled the question of the post-school outcomes of in-school employment to be re-examined. The following analyses consider the proportions of the cohort that by age 19 (in 1994) had participated in the two major forms of post-school education – in either higher education or in further education and training at TAFE. It was possible that, by age 19, sample members had participated in both types of study after leaving school. Nevertheless, in investigating these types of study as outcomes it was decided to make the two categories of study mutually exclusive. Hence, a small number of students who had participated in study both at university and at TAFE were included in the first category, but not in the second. The bivariate data in Table 6.3 provide a picture of the levels of participation in study at university and in TAFE among young people, disaggregated according to their involvement in part-time employment while they had been at school.

The first panel of Table 6.3 shows that a slightly higher percentage (40 per cent) of students who had held a part-time job during their school years went on to university compared with non-workers (35 per cent), while there was almost no difference between workers and non-workers in the percentage that participated in TAFE (31 and 30 per cent respectively). Gender differences in participation rates were fairly consistent in that, for both workers and non-workers, males had lower rates of participation than females in university and higher rates in TAFE, a pattern that was comparable to gender differences in university and TAFE participation in the overall population (Burke, 1997). Among females, 38 per cent of non-workers participated in

university study, compared with 43 per cent of workers, while for males this gap was smaller – 32 per cent compared with 35 per cent. A slightly higher percentage of males who had been workers went on to TAFE than did non-workers (39 per cent and 35 per cent), but there was no difference in TAFE participation between female workers and non-workers. On the basis of this evidence, part-time workers were not disadvantaged in terms of later transition to post-school study generally, or to higher education in particular.

Focusing on outcomes of employment in a single year level (and hence on outcomes only for sample members who were school students in that year level), the second panel of Table 6.3 indicates that students who were moderate workers when in Year 11 were more likely to participate in higher education (52 per cent) than non workers (43 per cent), while the lowest university participation rate was among intense workers (31 per cent). This curvilinear relationship between employment intensity in Year 11 and later participation in higher education was similar for males and females, although, as noted above, females participated in higher education at a consistently greater rate than males across the three categories of employment intensity. For Year 12 students, this curvilinear pattern was less pronounced, with little difference between non-workers and moderate workers (53 per cent and 56 per cent), but a markedly lower rate of participation in higher education among intense workers (37 per cent), especially among females (34 per cent).

The pattern of post-school participation in TAFE across the three categories of employment in Year 11 differed markedly from that for participation in higher education, and was strongly gendered, with males much more likely than females to attend TAFE. For both males and females, there was almost no difference in TAFE participation rates between non-workers and moderate workers. However students who worked longer hours were more likely to go to TAFE – 34 per cent of this group overall, and a considerably higher 46 per cent of males who were intense workers. This association between employment intensity and TAFE participation was also found among Year 12 students – 28 per cent of those who worked more than 10 hours per week in Year 12 continued their post-school study in TAFE, compared with 22 per cent of other students, with the contrast across the categories of employment being most evident for females.

Table 6.3 Percent of students who participated in higher education and in TAFE by age 19 in 1994, according to previous employment status in secondary school and gender

Part-time employment variables	Per cent in Higher education			Per cent in TAFE			<i>Sample sizes</i>		
	M	F	P	M	F	P	<i>M</i>	<i>F</i>	<i>P</i>
<i>Ever worked</i>									
Non-workers	32	38	35	35	25	30	<i>658</i>	<i>834</i>	<i>1492</i>
Workers	35	43	40	39	25	31	<i>660</i>	<i>1054</i>	<i>1714</i>
<i>In Year 11</i>									
Non-workers	40	46	43	29	22	25	<i>714</i>	<i>991</i>	<i>1705</i>
Moderate workers	52	52	52	29	20	24	<i>235</i>	<i>445</i>	<i>680</i>
Intense workers	25	35	31	46	26	34	<i>88</i>	<i>161</i>	<i>249</i>
<i>In Year 12</i>									
Non-workers	51	54	53	25	20	22	<i>565</i>	<i>852</i>	<i>1417</i>
Moderate workers	51	60	56	30	17	22	<i>186</i>	<i>390</i>	<i>576</i>
Intense workers	42	34	37	28	28	28	<i>81</i>	<i>172</i>	<i>253</i>

The data in Table 6.3 indicate that the post-school outcomes of part-time work were not detrimental for students who were employed for a moderate number of hours in either of Years 11 or 12 – the latter were just as likely as non-workers to make the transition to higher education. Compared with the percentages of non-workers and moderate workers, a lower percentage of students who spent more than ten hours per week in their jobs in those year levels went on to higher education. While this might be regarded by some as a negative outcome, this group of intense workers was also pursuing further education and training, as they were over-represented in TAFE.

The relationship between part-time work and post-school study: Multivariate analyses

Logistic regression analysis was used to investigate the influence of part-time employment on participation in the two categories of post-school education - in higher education and in further education and training - while controlling for the effects of other variables that are known to impact on students' transition to tertiary study. For each of these two outcomes, the results of analyses using three models are presented in Table 6.4 for participation in higher education, and in Table 6.6 for participation in TAFE.

In both these tables, Model 1 encompasses the social background variables of gender, ethnicity, and family socioeconomic status, as well as students' educational characteristics – that is, type of school attended, school achievement, post-school study aspirations, and school completion. In Model 2 the effect of being a student-worker at any time across a number of years while at school was also included, as Table 6.3 had pointed to a possible link between part-time work and later university study. Model 3 is confined to sample members who were at school in Year 11. Instead of employment status *per se*, this third model added a measure of the extent to which students were involved in part-time work, contrasting the likely outcomes for students who worked shorter (up to 10) and longer (more than ten) hours per week during Year 11 with those who were not employed when in that Year at school. This was to test the strength of the associations between moderate hours of work and later university attendance, and high hours of work and later TAFE study that were shown in Table 6.3.

Participation in higher education

These analyses reveal that many student background characteristics were predictors of participation in higher education, confirming the findings of other studies (for instance Prior and Beggs, 1989). As Model 1 in Table 6.4 shows, females, students from non-English speaking backgrounds, and those from wealthier and higher socioeconomic status families (measured by parental occupation and level of parents' education) were significantly more likely to go on to higher education. School factors were also influential, with a greater likelihood of participation in higher education among students who attended non-government schools, and among those who, when in their earlier years at secondary school, aspired to later university study. However, an even greater effect was that of earlier school achievement - students who were higher achievers when in junior secondary school were much more likely than lower achievers to go on to university study. In addition, and not unexpectedly, as Model 1 indicates, the variable which had the single largest effect on participation in higher education was completion of Year 12.

Although the data in Table 6.3 indicated that a larger percentage of student-workers than non-workers at school went on to higher education, Table 6.4 shows that when other variables were controlled, student-worker status did not have a significant

positive or negative effect on later participation in higher education. In Model 2, part-time workers were defined as students who had worked across any of their later years at school. Other analyses, which are not displayed in the table, produced results consistent with Model 2 – those who were employed in any one particular year level were not significantly more or less likely than non-workers in that Year to go on to university.

The pattern that was apparent in the bivariate statistics contained in Table 6.3, in which moderate workers in Year 11 were more likely to go on to higher education and intense workers were less likely to do so, was confirmed by results shown in Model 3 of Table 6.4. After controlling for other variables, students who worked for up to 10 hours per week had a slightly greater probability of participation in higher education by age 19 than those who did not work, while those who worked for more than 10 hours per week were slightly less likely than non-workers to have entered higher education. This small negative effect of employment intensity during Year 11 on later participation in higher education was also found in parallel analyses, not recorded in the Table, for student-workers in Year 12.

Table 6.4 displays results of analyses conducted for all persons in the sample, and provides an indication that students who were employed for longer hours in a senior year at school had a slightly lower probability of attending university than did non-workers. However the previous Australian studies that have examined this issue have emphasised that the effects of part-time work on the transition to higher education have differed according to gender. Outcomes for *Youth in Transition* sample members were therefore investigated separately for males and females, and the effects of employment in each of Years 11 and 12 were also considered. Such an approach provided greater comparability with the earlier analyses of Wooden *et al* (1992), while being based on sample sizes that were more than twice as large as those used in that study.

Table 6.5 presents the results of these separate regression analyses. After controlling for other influences, the association between moderate involvement in part-time employment in Year 11 and a slightly increased probability of participation in higher education that had been revealed in Table 6.4 was shown to be true for males, but not for females. And the negative effect of intense involvement in a part-time job, in

reducing the likelihood of entry to university, was found for females who had worked in either Year 11 or Year 12, but not for males who had spent longer hours in part-time jobs in those Years. This is consistent, therefore, with the results of Wooden et al (1992) who had also discovered a negative relationship between hours worked in Year 12 and female participation in higher education. Although these researchers regarded such a finding as providing support for the hypothesis that students who worked part-time were exposed to a 'taste effect' that encouraged them to prefer employment to further study after leaving school, there was no evidence offered as to why this should be a

Table 6.4 Logistic regression analyses of effects of working during secondary school on the likelihood of participation in higher education by age 19 in 1994

Independent variables		Model 1	Model 2	Model 3
Gender				
(<i>cf</i> Females)	Males	- 0.46 ****	- 0.47 ****	- 0.44 ****
Ethnic background				
(<i>cf</i> English-speaking)	Non-English speaking	0.64	0.64 ****	0.65 ****
Location				
(<i>cf</i> Non-rural)	Rural	- 0.08	0.08	0.07
Parental occupation				
(<i>cf</i> Semi-skilled and unskilled)	White collar and skilled	0.53 ***	0.54 ***	0.58 ***
	Professional & managerial	0.87 ****	0.87 ****	0.84 ****
Parental education				
(<i>cf</i> Primary & some secondary)	Completed secondary	0.27 *	0.27 *	0.42 **
	Post secondary	0.38 **	0.38 **	0.41 **
Family wealth				
(<i>cf</i> Poorest quartile)	Middle 50%	0.11	0.11	0.13
	Wealthiest quartile	0.41 **	0.42 **	0.47 **
School type				
(<i>cf</i> Government)	Catholic	0.41 **	0.41 **	0.34 *
	Independent	0.84 ****	0.83 ****	0.77 ****
Early school achievement				
(<i>cf</i> Lowest quartile)	Middle 50%	1.43 ****	1.43 ****	1.39 ****
	Highest quartile	2.74 ****	2.74 ****	2.68 ****
Post-school study intentions				
(<i>cf</i> No post-school study)	Higher education	1.32 ****	1.32 ****	1.32 ****
	TAFE	- 0.32	- 0.32	- 0.35 +
School completion				
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	4.73 ****	4.73 ****	3.69 ****
Employment status in secondary school				
(<i>cf</i> Non-worker)	Part-time worker	-	- 0.07	-
Employment intensity in Year 11				
(<i>cf</i> Non-worker)	1-10 hours per week	-		0.23 +
	Over 10 hours per week	-		- 0.44 *
N		2913	2907	2408

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Goodness of fit statistics

Model 1: Somers' D = 0.752, Gamma = 0.754, Tau-c = 0.876, Log likelihood chi-square = 1537.545 with 16 DF.

Model 2: Somers' D = 0.752, Gamma = 0.753, Tau-c = 0.876, Log likelihood chi-square = 1534.638 with 17 DF.

Model 3: Somers' D = 0.702, Gamma = 0.703, Tau-c = 0.851, Log likelihood chi-square = 1059.693 with 18 DF.

more powerful influence on females than on males. Similarly, while the *Youth in Transition* data reveal the same gender variation in the effect of intense employment on higher education participation, there is no ready explanation for this difference in outcomes for males and females.

Table 6.5 Logistic regression analyses of effects of working during Year 11 and Year 12 at secondary school on the likelihood of participation in higher education by age 19 in 1994, by gender

Independent variables	Employment in Year 11		Employment in Year 12	
	Males	Females	Males	Females
Ethnic background				
(<i>cf</i> Eng-speaking) Non-English speaking	0.58 **	0.67 ***	0.58 *	0.54 **
Location				
(<i>cf</i> Non-rural) Rural	0.16	0.003	0.10	- 0.07
Parental occupation				
(<i>cf</i> Semi-skilled & unskilled) White collar & skilled Prof & managerial	0.55 *	0.58 **	0.65 **	0.59 **
	0.96 ****	0.75 ****	1.08 ****	0.70 ***
Parental education				
(<i>cf</i> Primary & some secondary) Completed secondary Post secondary	0.56 **	0.41 *	0.50 *	0.39 *
	0.66 **	0.21	0.59 *	0.35
Family wealth				
(<i>cf</i> Poorest quartile) Middle 50% Wealthiest quartile	0.11	0.11	0.10	0.06
	0.24	0.63 **	0.33	0.47 *
School type				
(<i>cf</i> Government) Catholic Independent	- 0.16	0.72 ****	- 0.07	0.75 ***
	0.25	1.12 ****	0.29	1.33 ****
Early school achievement				
(<i>cf</i> Lowest quartile) Middle 50% Highest quartile	1.51 ***	1.37 ****	1.34 **	1.33 ****
	2.64 ****	2.77 ****	2.32 ****	2.57 ****
Post-school study intentions				
(<i>cf</i> No study) Higher education TAFE	1.64 ****	1.17 ****	1.46 ****	1.18 ****
	- 0.38	- 0.29	- 0.61 +	- 0.28
School completion				
(<i>cf</i> Didn't complete Year 12) Completed Year 12	3.23 ***	4.04 ****	0.94	3.56 ***
Employment intensity				
(<i>cf</i> Non-worker) 1-10 hours per week Over 10 hrs per week	0.52 *	0.09	- 0.19	0.19
	- 0.50	- 0.44 +	- 0.24	- 0.60 *
N	949	1459	764	1296

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Goodness of fit statistics

Employment in Year 11

Males: Somers' D = 0.725, Gamma = 0.727, Tau-c = 0.863, Log likelihood chi-square = 489.120 with 17 DF.

Females: Somers' D = 0.684, Gamma = 0.685, Tau-c = 0.842, Log likelihood chi-square = 591.040 with 17 DF.

Employment in Year 12

Males: Somers' D = 0.649, Gamma = 0.650, Tau-c = 0.824, Log likelihood chi-square = 331.709 with 17 DF.

Females: Somers' D = 0.634, Gamma = 0.635, Tau-c = 0.817, Log likelihood chi-square = 445.869 with 17 DF.
Participation in TAFE

Table 6.6 records the associations between students' background characteristics and post-school participation in TAFE. In many instances, these are the reverse of those shown in Table 6.4 relating to higher education. From Model 1 of Table 6.6, it can be seen that males were much more likely than females to participate in TAFE after leaving school, a result which reflects the predominance of males in apprenticeships. The association with socioeconomic status was weaker for participation in TAFE than it was for higher education, and was negative - students whose parents had the highest level of education, and were in the highest occupational category were slightly less likely to go to TAFE after leaving school. Students who attended non government schools, especially independent schools, were less likely to pursue post-school study in TAFE. Educational characteristics were important too - both high achievement in the early secondary years, and Year 12 completion were negatively related to such study. Students' post-school study intentions measured at age 14 were also linked to outcomes in that those who had indicated they planned to go to TAFE after leaving school were significantly more likely to do so, while there was a small weak negative association between intention to study at university and later participation in TAFE.

When all of these factors were held constant, however, Model 2 indicates that students who had a part-time job while at school were slightly but significantly more likely to have participated in TAFE than those who did not work during their school years.

Additional analyses which are not recorded in Table 6.6 showed this to be the case when workers were compared with non-workers at each school year level, from Year 9 to Year 11. Although both males and females who were employed during Year 9 were more likely to go to TAFE, among Year 11 workers this was true only of males. The reasons for such a finding are unclear. While the model attempts to take account of the effects of students' aspirations and educational achievement, the association between participation in TAFE and part-time work at school may be due to certain other characteristics of students - perhaps an individual preference to continue to combine study with work, an outcome which is more easily realised through enrolment in TAFE.

Table 6.6 Logistic regression analyses of effects of working during secondary school on the likelihood of participation in TAFE by age 19 in 1994

Independent variables		Model 1	Model 2	Model 3
Gender				
(cf Females)	Males	0.58 ****	0.59 ****	0.55 ****
Ethnic background				
(cf English-speaking)	Non-English speaking	- 0.08	- 0.05	- 0.01
Location				
(cf Non-rural)	Rural	0.06	0.08	0.20
Parental occupation				
(cf Semi-skilled and unskilled)	White collar and skilled	0.08	0.06	- 0.08
	Professional & managerial	- 0.18	- 0.20 +	- 0.22 +
Parental education				
(cf Primary & some secondary)	Completed secondary	- 0.13	- 0.14	- 0.18
	Post secondary	- 0.38 *	- 0.37 *	- 0.32 *
Family wealth				
(cf Poorest quartile)	Middle 50%	0.19 +	0.16	0.06
	Wealthiest quartile	0.02	- 0.02	- 0.01
School type				
(cf Government)	Catholic	0.23 +	0.23 +	0.28 *
	Independent	- 0.45 *	- 0.41 *	- 0.19
Early school achievement				
(cf Lowest quartile)	Middle 50%	- 0.16	- 0.20 +	- 0.32 *
	Highest quartile	- 0.90 ****	- 0.95 ****	- 1.26 ****
Post-school study intentions				
(cf No post-school study)	Higher education	- 0.27 *	- 0.26 *	- 0.50 ***
	TAFE	0.65 ****	0.66 ****	0.37 *
School completion				
(cf Didn't complete Year 12)	Completed Year 12	- 0.78 ****	- 0.83 ****	- 0.55 ***
Employment in secondary school				
(cf Non-worker)	Part-time worker	-	0.31 ***	-
Employment intensity in Year 11				
(cf Non-worker)	1-10 hours per week	-	-	0.11
	Over 10 hours per week	-	-	0.35 *
N		2913	2907	2408

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Goodness of fit statistics

Model 1: Somers' D = 0.459, Gamma = 0.461, Tau-c = 0.730, Log likelihood chi-square = 473.877 with 16 DF.

Model 2: Somers' D = 0.462, Gamma = 0.463, Tau-c = 0.731, Log likelihood chi-square = 488.635 with 17 DF.

Model 3: Somers' D = 0.443, Gamma = 0.444, Tau-c = 0.721, Log likelihood chi-square = 287.819 with 18 DF.

The positive relationship between intense employment in Year 11 and later participation in TAFE that was seen in Table 6.3, notably for males, was confirmed by regression analyses. As Model 3 in Table 6.6 reveals, when other factors were controlled – particularly earlier school achievement, as well as Year 12 completion and gender – there was a small but significant association between high hours worked per week during Year 11 and the likelihood of post-school study in TAFE. However, when these analyses were repeated separately for males and females, as displayed in

Table 6.7, the effect of intense involvement in part-time work in Year 11 was shown to be only significant in predicting participation in TAFE for males. There was also an association between TAFE attendance and moderate employment in Year 12, again only for males.

Table 6.7 Logistic regression analyses of effects of working during Year 11 and Year 12 at secondary school on the likelihood of participation in TAFE by age 19 in 1994, by gender

Independent variables	Employment in Year 11		Employment in Year 12	
	Males	Females	Males	Females
Ethnic background				
(cf Eng-speaking) Non-English speaking	0.20	- 0.17	0.10	- 0.02
Location				
(cf Non-rural) Rural	0.05	0.29 +	- 0.05	0.18
Parental occupation				
(cf Semi-skilled & unskilled) White collar & skilled Prof & managerial	- 0.13	- 0.03	- 0.16	- 0.10
	- 0.18	- 0.6	- 0.42 *	- 0.14
Parental education				
(cf Primary & some secondary) Completed secondary	- 0.40 *	0.05	- 0.59 **	0.11
Post secondary	- 0.33	- 0.36	- 0.42 +	- 0.46
Family wealth				
(cf Poorest quartile) Middle 50%	0.01	0.06	0.39 +	0.11
Wealthiest quartile	- 0.82 ***	- 0.14	0.14	0.04
School type				
(cf Government) Catholic	0.75 ***	- 0.11	0.49 *	- 0.20
Independent	0.09	- 0.33	- 0.15	- 0.90 **
Early school achievement				
(cf Lowest quartile) Middle 50%	0.02	- 0.58 **	0.21	- 0.77 ***
Highest quartile	- 0.73 **	- 1.75 ****	- 0.47	- 1.59 ****
Post-school study intentions				
(cf No study) Higher education	- 0.81 ****	- 0.26	- 0.88 ***	- 0.34
TAFE	0.59 **	0.17	0.64 *	0.20
School completion				
(cf Didn't complete Year 12) Completed Year 12	- 0.82 **	- 0.44 +	- 0.009	- 0.98 +
Employment intensity				
(cf Non-worker) 1-10 hours pr week	0.15	0.09	0.45 *	- 0.05
Over 10 hrs pr week	0.56 *	0.13	0.15	0.23
N	949	1459	764	1296

+ p < .1 , * p < .05, ** p < .01, *** p < .001, **** p < .0001

Goodness of fit statistics

Employment in Year 11

Males: Somers' D = 0.484, Gamma = 0.486, Tau-c = 0.742, Log likelihood chi-square = 181.450 with 17 DF.

Females: Somers' D = 0.379, Gamma = 0.380, Tau-c = 0.689, Log likelihood chi-square = 123.746 with 17 DF.

Employment in Year 12

Males: Somers' D = 0.476, Gamma = 0.478, Tau-c = 0.738, Log likelihood chi-square = 128.982 with 17 DF.

Females: Somers' D = 0.413, Gamma = 0.415, Tau-c = 0.707, Log likelihood chi-square = 105.794 with 17 DF.

An overview of post-school study outcomes

The fact of having had a part-time job while at school did not reduce a student's likelihood of participating in higher education after leaving school. This finding supports the view that students do not jeopardise their future educational opportunities by engaging in part-time work during their school years. Nevertheless, the probability of going on to higher education study was slightly less for students who spent a substantial time each week in their senior secondary years in part-time employment. Such students may have chosen to work longer hours in Year 11 or Year 12 because they were less committed to a post-school pathway that included higher education. However, further investigation is required in order to more adequately account for the finding that this effect of intense part-time work occurred for females but not for males.

On the other hand, there was a slightly greater likelihood of student-workers – notably males – participating in TAFE after they left school. It could be that the experience of combining study with part-time employment while at school may predispose some students to want to maintain this combination after leaving school, making TAFE – particularly an apprenticeship – an attractive post-school option to them.

The relationship between part-time work and academic aspirations

There has been a view in the American literature that one of the negative consequences of intense involvement in part-time employment is a lowering of students' academic aspirations. Barton (1989) suggested that those who worked longer hours were less likely to take academically more demanding courses, and were less likely to expect to go on to college, while Lewin-Epstein (1981) found a similar association – longer mean hours worked per week by students taking vocational and general courses compared with those taking academic courses. Those two studies were based on bivariate analyses of cross-sectional data, however, and therefore cannot be taken as evidence that work intensity undermines academic commitment.

Other American researchers have used longitudinal data to examine the question. For instance, Finch and Mortimer (1985) concluded that long hours worked in grade 11 depressed educational and occupational aspirations in the following year, although this was based on data collected in the late 1960s, and for males only. Marsh (1991)

analysed *High School and Beyond* data relating to students who were in grade 10 in 1980 and grade 12 in 1982, and found that the expectation of attending college, measured as an end of school outcome, was negatively associated with total hours worked across grades 10, 11 and 12. According to this argument, intense involvement in work results in lowered aspirations, and, subsequently, reduced educational attainment. More recently, Ruhm (1997) noted that the effects of part-time work on educational attainment differed by gender. His analyses of U.S. *National Longitudinal Survey of Youth* data showed that girls who worked during their final year of high school completed fewer years of post-school education, and college graduation rates declined when employment was greater than 10 hours per week, but that these effects were not found among males.

Analyses of the *Youth in Transition* data have revealed broadly consistent findings. Part-time work *per se* did not deter Australian secondary school students from an academic path, although those who spent a lengthy time each week in their job in their senior years were a little less likely to pursue post-school study at university than were non-workers – this was especially true for females who worked longer hours per week, while males who did so were a little more likely than non-workers to continue their post-school training in TAFE.

EDUCATIONAL OUTCOMES OF PART-TIME WORK: SOME CONCLUSIONS

When the results of these analyses of the effects of part-time employment while at school on school completion, school performance, and the transition to post-school education and training are combined, as they are in Table 6.8, the picture which emerges can be said to be a positive one. In aggregate, students who had part-time jobs were not disadvantaged in terms of their education. Workers were just as likely as non-workers to complete all 12 years of school, their results in their final year at secondary school were not significantly lower, and they were not significantly less likely to continue into higher education.

Table 6.8 Relationships between part-time employment and educational outcomes

Part-time employment variables	School completion	Year 12 results	Post school participation in	
			Higher Education	TAFE
Ever student-worker	+ve ***	ns	ns	+ve *** (males)
Student worker in Year 11	ns	ns	ns	+ve * (males)
Hours worked per week in Y 11				
Moderate	ns	ns	+ve * (males)	ns
High	-ve *	-ve *	-ve + (females)	+ve * (males)
Hours worked per week in Y 12				
Moderate	(na)	ns	ns	+ve * (males)
High	(na)	-ve +	-ve * (females)	ns

+ p < .1 * p < .05

Nevertheless there was evidence in the data that students who, in Year 11, spent relatively longer hours in their jobs were slightly less likely to complete Year 12, and among those who did so, their results were a little lower, and, consistent with this, the probability of their proceeding to university was reduced - although this last effect occurred only for females. Intense employment during Year 12 was linked to Year 12 results and later participation in higher education in a similar manner.

This association between intense involvement in a part-time job and such educational outcomes is difficult to interpret as a direct cause and effect relationship. The explanatory models used in the analyses included controls for important variables, particularly earlier school achievement, as well as a range of social background characteristics. However psychological factors, particularly motivation and experience of schooling, were not able to be considered - factors which are known to exert a strong influence over students' decisions about remaining at school, their academic results, and their aspirations to continue with post-school study. Students who choose to work longer hours in their senior school years may have a weaker orientation to education, and perhaps a stronger attraction to the labour market. It is therefore instructive to investigate the experiences of students in the post-school labour market - a comparison of the outcomes for in-school workers and non-workers is undertaken in the next

chapter, providing some further evidence about the efficacy of part-time employment for secondary students.

THE LABOUR MARKET OUTCOMES OF EMPLOYMENT DURING SECONDARY SCHOOL

There is a widely held belief that early experience gained through part-time employment provides an advantage for later participation in the labour market. Such a perception was shared by the majority of Australian secondary school students who, as 17-year-olds, were part-time workers in 1992 – at that time, more than 60 per cent thought that working while they were at school would improve their post-school job prospects (see Chapter 5). Anecdotally, too, there is evidence to support this idea.

..... and when their numbers were few, graduates at master of business administration courses could look forward to catapulting from their books, lectures and hypotheticals into a challenging job and a king's ransom in salary.

Alas, those days have melted away. Two graduate MBAS biting hard on the bullet of desperation applied recently for the job of office junior with a local law firm. The duties were none too complex for anyone who can operate a photocopier and a fax, and at \$17,000 the pay packet wouldn't keep them. in caviar.

They missed out, however. The lucky 18-year-old woman who topped the 400 applications for the job had what it took: a history of part-time work through her school years, indicating a dash of initiative and diligence.

(News Diary, The Age, 17 April, 1991)

Part-time work at school is presumed to enhance post-school employability. Students indicate they gain various benefits from their jobs, which mainly relate to being socialised into the workforce - in particular, learning about getting along with other people and being confident (Fullarton, 1999). Parents also have positive views about the effects of youth employment, in that they see it as encouraging better work habits and personal traits such as greater independence and higher self-esteem in adolescents (Aronson et al., 1996; Dalziel, 1989).

While there has been debate about whether employers actually need the academic credentials that they frequently demand when recruiting young people to fill entry level positions (Rosenbaum & Binder, 1997), there is greater consensus about the personal attributes that they seek. Employers want young workers with the right

attitudes - among which they include punctuality, honesty, trustworthiness, enthusiasm, initiative, and willingness to work - as well as good interpersonal skills (National Institute of Labour Studies, 1999). A survey of store managers in fast food outlets and supermarkets clearly demonstrated their priorities; among the criteria they used in selecting employees (who included both student-workers and non students) they placed the greatest weight on the ability to work with others, personality (including qualities of friendliness, maturity, and confidence), willingness to learn new skills and personal appearance, with almost no attention given to academic results (National Institute of Labour Studies, 1999).

It is generally assumed that employers also favour job applicants with a previous history of part-time work, and there is some empirical support for this, albeit in relation to the recruitment of graduate employees rather than school leavers. A recent study of employers' views, using qualitative data gathered through focus group interviews, showed that they included interpersonal skills and time management high among the list of desired skills that they sought in new graduates (ACNeilsen, 1998). The report of the study noted that time management was a capacity that was difficult to assess formally in a recruitment situation, so employers looked at an applicant's achievement across a number of areas - including the ability to hold down a part-time job while studying - because a combination of activities was seen as evidence of time management skills. Similarly, employers regarded previous work experience, especially in customer service jobs such as supermarkets or fast food outlets, as an indicator of an applicant's interpersonal skills. As one employer quoted in the report remarked

....we say we're looking for a good degree with a serving of chips and fries, because if they've stuck at McDonald's for a few years and become a manager or whatever, or Myers or a factory, or working at Woollies or Coles for say 5 or 6 years, and they stick to it, they have to put up with a whole lot of things, so we do look at that. (ACNeilsen, 1998: 13).

So there is unanimity among the major stakeholders regarding their perceptions of the outcomes of part-time work; students themselves, parents and employers all say that part-time work enhances students' employability. The question of whether those who acquire experience of employment while they are still at school actually benefit when

they leave school and enter the job market has been addressed in a number of American studies. These studies sought to compare the post-school labour market experiences of young people on the basis of their in-school employment, and found that in the first few years after leaving high school student-workers had generally fared more successfully - they had lower rates of unemployment, longer periods of employment, and higher earnings compared with students who had not worked (Carr *et al*, 1996; Meyer and Wise, 1982; Mortimer and Finch, 1986; Rich, 1996; Steel, 1991; Stephenson, 1981; Stern and Nakata, 1989; Stern *et al*, 1997; Stern, McMillion, Hopkins and Stone, 1990). Other non-American studies have also reported that part-time work by students was associated with an increased probability of later employment (Lowe and Krahn, 1992; Main and Raffe, 1983; McRae, 1992).

To ascertain the extent to which these hypothesised advantages of part-time work while at school have occurred among young Australians, the post-school labour market experiences of the 1965 and 1975 *Youth in Transition* cohorts were investigated, and the experiences of students who had been employed while at secondary school compared with those who had not been. A number of indicators of post-school labour force experience were considered, when sample members were aged 19 - that is, for the 1975 birth cohort, in 1994, and in 1984 for the 1965 cohort. In addition, these same outcomes were explored at a slightly older age, using data for the 1975 cohort at age 21 in 1996. For labour force participants in each of the relevant years (1994, 1984, and 1996), the two outcomes that were examined, by means of multivariate analyses, were employment status at a single point in time (in October of the particular year), and the proportion of time since leaving school that had been spent unemployed. However the definition of the labour force used for these analyses differed from that used by the ABS; sample members who were doing full-time post-school study in October of those years were excluded from the analyses, even if they were employed or looking for work, on the grounds that their employment patterns would be likely to reflect different priorities to those of young people who were not engaged in any study.

As well as the two measures of labour force activity noted above, two additional outcomes were investigated for the 1975 birth cohort. For non-students who were full-time workers, the type of job held and average hourly earnings in 1994 and in 1996 were examined, to test the hypotheses that early experience of employment during

high school could be translated into higher status jobs and higher earnings after leaving school.

EMPLOYMENT OUTCOMES AT AGE 19 IN 1994: THE 1975 COHORT

Employment status

The percentages in Table 7.1 show the main activities of sample members in October 1994, at age 19. These activities are disaggregated by secondary school employment - that is, by whether or not the respondent had been employed during any one of the middle or later years of secondary school. Data on students' employment status and year level at school were available for each of the years from age 14 in 1989 until the time that the student left school, with 1992 being, for the majority, their final year at school. In 1994, more than two fifths of the sample of over 3000 young people was engaged in full-time study, with the same percentage (43 per cent) of students coming from those who had been workers and non-workers in secondary school. As has been also demonstrated in the previous chapter, there is no evidence in these data that part-time employment while at school harms school results or jeopardises the likelihood of continuing with post-school study. Among those who had previously worked during secondary school, the percentage who, at age 19, were full-time students as well as part-time workers was much higher (28 per cent) than the comparable percentage for those who had been non-workers at school (17 per cent). Such figures indicate that young people who combined study with a job while they were at school were more likely to continue this pattern into their early post-school years.

Table 7.1 Major activities of sample members in October, 1994, by previous employment status during secondary school, 1975 cohort

Activity at age 19 in 1994	Employment status during secondary school	
	Non-workers	Workers
<i>Full-time students</i>		
Employed	17.1	28.1
Not employed	26.1	14.5
<i>Non full-time students</i>		
Employed full-time	35.8	42.0
Employed part-time	9.6	9.4
Unemployed	8.0	4.1
Not in labour force	3.6	2.0
Total per cent	100.0	100.0
<i>Sample size</i>	<i>1486</i>	<i>1712</i>

Table 7.1 also shows that, among those who were not full-time students, a higher percentage (42 per cent) of in-school workers than non-workers (36 per cent) was employed full-time at age 19. There was no difference in the percentage who were employed part-time, but the percentage unemployed was much lower for those who had been part-time workers at school than for non-workers - 4 per cent and 8 per cent respectively. (These unemployment rates are not comparable to ABS estimates of unemployment levels at the time, as the calculations are based on different populations). On the basis of these bivariate analyses, working while at school seemed to provide a clear advantage later in terms of lower rates of unemployment. Multivariate analyses were also undertaken, in order to examine the effects of being a part-time worker when at school, while controlling for other background factors which have been shown to influence a young person's job prospects after leaving school (Chapman & Smith, 1992). Because the dependent variable for these analyses was dichotomous - either employed or unemployed at age 19 - logistic regression was the statistical technique used.

As noted previously, sample members who were full-time students in October 1994 were excluded from the regression analyses, regardless of their employment status, as were those who were non-students but indicated they were not looking for a job - that is, they were not in the labour force. Due to these exclusions, and also because of missing data for some of the independent variables, the sample size was substantially reduced for these analyses. The measurement of the background variables used in the model has been described elsewhere (see Appendix 2). In addition to the personal background characteristics detailed in Chapter 4, two further variables were included in the present analyses, to control for completion of Year 12, and for participation in any study since leaving school, both of which could reduce the likelihood of unemployment in the early years after leaving school (Chapman & Smith, 1992). The independent variable of most interest to this investigation was part-time work while at school; this was operationalised as having a part-time job (at the reference point of October) in any year level at secondary school, from Year 9 to Year 12.

Table 7.2 Logistic regression analysis of effects of working during secondary school on likelihood of unemployment, labour force participants at age 19 in 1994

Independent variables		Regression coefficient
Gender		
(<i>cf</i> Females)	Males	- 0.05
Ethnic background		
(<i>cf</i> English-speaking)	Non-English speaking	0.26
Location		
(<i>cf</i> Non-rural)	Rural	- 0.29
Parental occupation		
(<i>cf</i> Semi-skilled & unskilled)	White collar and skilled	- 0.16
	Professional & managerial	- 0.21
Parental education		
(<i>cf</i> Primary & some secondary)	Completed secondary	0.05
	Post secondary	0.58 *
Family wealth		
(<i>cf</i> Poorest quartile)	Middle 50%	- 0.25
	Wealthiest quartile	- 0.70 **
School type in post-compulsory years		
(<i>cf</i> Government)	Catholic	0.17
	Independent	- 0.24
Early school achievement (at age 14)		
(<i>cf</i> Lowest quartile)	Middle 50%	- 0.59 **
	Highest quartile	- 0.65 *
School completion		
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	- 0.28
Post-school education		
(<i>cf</i> No post-school education)	Post-school education	- 0.97 ****
Employment in secondary school		
(<i>cf</i> Non-workers)	Part-time worker	- 0.61 ***
<i>N</i>		1577

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

As can be seen from Table 7.2, most of the personal background variables had no significant effect on the probability of being unemployed at age 19 – these included gender, ethnic background, and the location and type of school previously attended. However, certain aspects of socioeconomic background, family wealth in particular, were important influences on the likelihood of a young person being unemployed. When all other things were held constant, those who came from families in the highest wealth quartile were significantly less likely to be unemployed - half as likely as those who were from the lowest quartile of family wealth. This finding is consistent with that reported by McRae (1992) concerning the influence of family income.

A strong association between (higher) family wealth and (lower) unemployment was found to exist regardless of which of the two other measures of family socioeconomic status were included in the regression analysis. When both parental occupation and parental education were included, as in Table 7.2, parental occupation did not significantly effect unemployment, although the direction of that effect was as might be anticipated (Marks & Fleming, 1998a). However higher levels of parental education appear to have an unexpected effect; when all other factors, including family wealth and parental occupation, were held to be equal, higher parental education was associated with a greater likelihood of unemployment - perhaps as a result of multicollinearity arising from the correlation between the various aspects of socioeconomic status.

In addition to family wealth, educational factors, especially school achievement, were significant predictors of unemployment at age 19. Compared to those who had been lower achievers in their early years of secondary school, young people who had been middle and higher achievers were significantly less likely to be unemployed five years later. This is consistent with findings reported by Lamb (1997) whose analyses of longitudinal data from the *Australian Youth Survey* showed that students who had poor numeracy and literacy skills at age 14 were significantly more likely to be unemployed when they were aged 19 in 1994 or 1995 (see also Marks & Fleming, 1998a). Table 7.2 reveals that, net of other factors, completion of Year 12 was not significant in predicting unemployment among this subset of the *Youth in Transition* sample, that is non-students at age 19, although participation in some form of post-school education reduced the likelihood of unemployment at that age.

But the focus of this investigation was the effect on later employment status of being a part-time worker while at school, and it is clear from Table 7.2 that, even when other factors - including the important ones of early school achievement and involvement in post-school education - are controlled, in-school workers were less likely than non-workers to be unemployed after leaving school, when aged 19. Thus experience of a job while at school appears to confer a benefit in terms of a lower expectation of being unemployed once having left school, at least in the short term.

Such a finding raises further questions about the association that might exist between in-school and post-school employment, and Table 7.3 presents the results of a series of

additional analyses which examined the effects of part-time work at different times during schooling, and at different levels of involvement. The consistent feature of the table is that part-time work during high school, whenever measured, was negatively associated with post-school unemployment, and in most cases significantly so. Part-time workers at each year level at school were less likely to be unemployed when aged 19 than non-workers in the same year, with the exception of those in Year 9, when the difference was not significant. Compared with non-workers at school, student-workers in more than one of their school years had a slightly higher probability of being employed after leaving school than those who had worked in only one year, but the difference was small.

Table 7.3 Regression coefficients for the effects of various measures of secondary school employment on the likelihood of unemployment at age 19 in 1994

Secondary school employment variables	Coefficient	N
Work status		
Student-worker in Year 9 (<i>cf Non-worker in Year 9</i>)	- 0.25	1402
Student-worker in Year 10 (<i>cf Non-worker in Year 10</i>)	- 0.60 **	1491
Student-worker in Year 11 (<i>cf Non-worker in Year 11</i>)	- 0.76 ***	1220
Student-worker in Year 12 (<i>cf Non-worker in Year 12</i>)	- 0.55 *	933
Student-worker in one year only (<i>cf Non-workers</i>)	- 0.51 *	
Student-worker in more than one year (<i>cf Non-workers</i>)	- 0.70 **	1577
Work intensity (<i>cf Non-worker in relevant Year</i>)		
Year 11 : Moderate worker (up to 10 hours per week)	- 0.52 *	
Year 11 : Intense worker (more than 10 hours per week)	- 1.41 **	1188
Year 12 : Moderate worker (up to 10 hours per week)	- 0.15	
Year 12 : Intense worker (more than 10 hours per week)	- 1.08 *	904

* p < .05, ** p < .01, *** p < .001, **** p < .0001

When the intensity of involvement in a part-time job during any year level was considered, hours worked per week were found to have an effect on employment outcomes. Compared with non-workers in Year 11, students who spent longer hours (more than 10 per week) in their jobs were advantaged more than those who worked fewer hours, although both groups of workers were significantly less likely than non-workers to be unemployed at age 19. For Year 12 students, it was only intense workers who were significantly advantaged over non-workers in terms of a lower likelihood of unemployment at age 19. It appears from these data that, regardless of whether outcomes are academic results in Year 12 (as was shown in the previous chapter) or

experience in the post-school labour market, part-time work while in Year 11 had a greater impact than that during Year 12.

Extent of unemployment

Rather than simply relying on a snapshot view of employment status at a single point in time as in the preceding analyses (in that instance, status in October, 1994), it was also possible to investigate the extent of unemployment experienced by sample members over the period since they had left school, up to the end of 1994, the year in which they were aged 19. Data were available on the activities of respondents on a month by month basis. For the purpose of this analysis only a subset of sample members - those for whom these data about monthly activities were available for the three years 1992, 1993 and 1994 - was used. For those who were labour force participants in October 1994, the total number of months that had been spent *not working but looking for work* was expressed as a proportion of the time since finishing school. Consistent with the approach to the analyses reported in the preceding section, full-time students were not counted as labour force participants. Sample members who were at school in October of any year were considered to be full-time school students for the whole of the year, and so were not counted as unemployed for any part of that year. Nor were other, post-school full-time students considered as unemployed in any month that they indicated their full-time student status. Table 7.4 records, for the total of 1363 young people who were in the labour force at age 19 in 1994 and who were not full-time students, the percentage of time they had spent unemployed since leaving school, separately for those who had been part-time workers while at school and those who had not.

After they left school, student-workers spent a greater percentage of their time employed. Almost 69 per cent of them indicated no months of unemployment, whereas just over 52 per cent of non-workers in secondary school reported no months of unemployment from the time of leaving school up to the end of 1994. The proportions of workers and non-workers who were unemployed for relatively low percentages of time (up to 10 per cent and 11-20 per cent of their time since leaving school) were about the same, but the figures for the two groups for all categories above 20 per cent of time spent unemployed consistently favoured student-workers over non-workers – for instance, non-workers were almost three times more likely (6.7 per

cent compared to 2.3 per cent) to have been unemployed more than 50 per cent of their time since leaving school.

Table 7.4 Per cent of time spent unemployed after leaving school, by employment status during secondary school, labour force participants at age 19 in 1994

Per cent of time unemployed after leaving school	Employment during secondary school	
	Non-workers	Workers
No time unemployed	52	69
1-10 per cent	16	15
11-20 per cent	7	7
21-30 per cent	8	4
31-40 per cent	5	1
41-50 per cent	5	2
More than 50 per cent	7	2
Total per cent	100	100
<i>Sample size</i>	<i>611</i>	<i>752</i>

Multiple regression analyses, with the percentage of time unemployed since leaving school as the dependent variable, confirmed the significance of a part-time job during secondary school in reducing the amount of time spent unemployed after leaving school. The results from one such analysis are displayed in Table 7.5. It should be noted at the outset, however, as the R-square of .08 indicates, that the model does not explain a very high proportion of the variation in the percentage of time unemployed. Among other variables, local labour market conditions and the overall state of the economy, for which no controls were included in the equation, could be expected to play major roles.

The factors which had been shown in Table 7.2 as significant in explaining the likelihood of being unemployed at one point in time - that is, in October 1994 - were also important here, where the outcome was the extent of unemployment over a period of years. Family wealth was influential: both middle and higher categories of family wealth had a significant effect on lowering the duration of unemployment. Higher levels of early school achievement and participation in post-school education were also both significantly associated with reduced unemployment after leaving school. (Additional analyses with separate controls for the two forms of post-school education

Table 7.5 Multiple regression analysis of effect of working during secondary school on percent of time spent unemployed since leaving school, labour force participants at age 19 in 1994

Independent variables		Regression coefficient
Gender		
(<i>cf</i> Females)	Males	- 1.11
Ethnic background		
(<i>cf</i> English-speaking)	Non-English speaking	1.53
Location		
(<i>cf</i> Non-rural)	Rural	- 0.44
Parental occupation		
(<i>cf</i> Semi-skilled & unskilled)	White collar and skilled	- 0.67
	Professional & managerial	- 2.53 *
Parental education		
(<i>cf</i> Primary & some secondary)	Completed secondary	- 0.87
	Post secondary	- 1.02
Family wealth		
(<i>cf</i> Poorest quartile)	Middle 50%	- 3.19 **
	Wealthiest quartile	- 4.51 **
School type in post-compulsory years		
(<i>cf</i> Government)	Catholic	- 0.10
	Independent	0.89
Early school achievement (at age 14)		
(<i>cf</i> Lowest quartile)	Middle 50%	- 4.43 ***
	Highest quartile	- 5.20 ***
School completion		
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	0.44
Post-school education		
(<i>cf</i> No post-school education)	Post-school education	- 2.97 **
Employment in secondary school		
(<i>cf</i> Non-workers)	Part-time worker	- 5.48 ****
R^2		.0820
N		1283

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

- university and TAFE - showed each to have similar effects, so the combined variable was included here.) But of all the variables included in the model, having a part-time job when at school was the most significant predictor of the amount of post-school time that was spent unemployed; student-workers tended to experience less unemployment after leaving school than did non-workers.

The results of other analyses which examined the effect of high school employment at different year levels and in different intensities are presented in Table 7.6. They confirm the significant employment advantage experienced by student-workers in

their first few years after leaving school, while showing the relatively greater benefit gained from working in the senior years, and from working longer hours per week in those years. Intense workers in Years 11 and 12 were unemployed for even less time when compared with those who had been non-workers at school than those who had been moderate workers. It can also be seen that the number of school years in which students were part-time workers had a small influence on the extent of post-school unemployment - that is, while student-workers as a group experienced less unemployment than non-workers, those who had worked in two or more school years were comparatively better off than those who had worked in only one year, in that they experienced slightly less unemployment.

Table 7.6 Regression coefficients for the effects of various measures of secondary school employment on the extent of unemployment to age 19 in 1994

Secondary school employment variables	Coefficient	N
Work status		
Student-worker in Year 9 (<i>cf Non-worker in Year 9</i>)	-2.97 *	1145
Student-worker in Year 10 (<i>cf Non-worker in Year 10</i>)	-3.11 **	1236
Student-worker in Year 11 (<i>cf Non-worker in Year 11</i>)	-5.55 ****	1029
Student-worker in Year 12 (<i>cf Non-worker in Year 12</i>)	-7.07 ****	833
Student-worker in one year only (<i>cf Non-workers</i>)	- 4.73 ***	
Student-worker in more than one year (<i>cf Non-workers</i>)	- 5.97 ****	1283
Work intensity (<i>cf Non-worker</i>)		
Year 11 : Moderate worker (up to 10 hours per week)	-4.12 ***	
Year 11 : Intense worker (more than 10 hours per week)	-8.37 ****	1003
Year 12 : Moderate worker (up to 10 hours per week)	-5.68 ****	
Year 12 : Intense worker (more than 10 hours per week)	-9.00 ****	810

* p < .05, ** p < .01, *** p < .001, **** p < .0001

EMPLOYMENT OUTCOMES AT AGE 19 IN 1984: THE 1965 COHORT

A unique feature of the *Youth in Transition* program of surveys is that comparable data have been collected from successive cohorts of young people over a period of more than 20 years. This enables an investigation of how educational and labour market participation and outcomes have varied over time. As seen above, the results of analyses of data from the cohort born in 1975 and aged 19 in 1994 showed that in-school employment had beneficial effects on post-school labour market outcomes. To further test this finding, parallel analyses were conducted for an older *Youth in*

Transition cohort – a sample of young people born a decade earlier, in 1965, who were aged 19 in 1984. As indicators of prevailing economic circumstances, teenage unemployment rates (based on ABS labour force data for August) were approximately 20 per cent in 1984 and in 1994, while total unemployment rates were about 10 per cent in each year (Wooden, 1998). In this respect, then, the situation confronting school leavers in each of the years was similar. The association between in-school employment and both employment status at age 19 in 1984 and the extent of unemployment experienced up to that age, from the time of leaving school, were examined. (A set of tables displaying the results of these analyses for the 1965 cohort is presented in Appendix 1, Tables A7.1-A7.4.)

Employment status at age 19 in 1984

There was almost no difference between workers and non-workers, defined on the basis of whether they had held a part-time job at any time when at school (across Years 10, 11 and 12) in the proportion that was unemployed at age 19 in 1984 – the percentages were 5 per cent and 6 per cent respectively (see Table A7.1). Logistic regression analyses established that for this group of young people, having a job while at school did not provide significant protection against the likelihood of being unemployed when aged 19, if the comparison was between students who had worked in any years, and non-workers as a whole. However, when this outcome was considered only for Year 11 students, there was a small but statistically significant difference in favour of in-school workers (see Table A7.2). These findings were therefore partially consistent with those derived from the 1975 cohort; although, among the 1965 birth cohort, student-workers as a group were not greatly advantaged over non-workers, part-time work during Year 11 was shown to be important in reducing the likelihood of unemployment at age 19.

Extent of unemployment to age 19 in 1984

For sample members who were labour force participants in 1984, and for whom data were available on their month by month activity (both student and labour force status) across the years 1982, 1983 and 1984, the proportion of time after leaving school that they spent unemployed was compared for student-workers and non-workers. Cross-tabulations showed that, of those who had been student-workers while at school, 68

per cent experienced no months of unemployment in the time between leaving school up to the age of 19, while the figure for non-workers was a much lower 49 per cent; and more than twice as many non-workers as student-workers (22 per cent compared with 10 per cent) were unemployed for over 20 per cent of their time after leaving school (see Table A7.3). Multivariate analyses provided confirmation of a significant effect of in-school employment on the amount of time unemployed. After controlling for other factors, student-workers experienced a lower percentage of unemployment in their post-school years (see Table A7.4). The magnitude and significance of this effect for the 1965 cohort by age 19 in 1984 was similar to that found for the 1975 cohort at the same age, a decade later, and reinforces the conclusion that in-school employment is beneficial in contributing to the employability of young people in the initial years after they leave school.

EMPLOYMENT OUTCOMES AT AGE 21 IN 1996: THE 1975 COHORT

The question of whether such advantages measured at age 19 persisted into later years was also addressed. Turning from the 1965 birth cohort to the more recent experiences of the 1975 cohort, and considering the labour market activities of the latter, not at age 19 but two years further on, the same outcomes - the likelihood of being unemployed, and the extent of unemployment from the time of leaving school - were investigated at the age of 21.

Employment status at age 21

The study and labour market activities of sample members when aged 21 in 1996 are recorded in Table 7.7. About one third of young people were full-time students, and therefore, in the following multivariate analyses, not considered to be labour force participants. A higher percentage (22 per cent) of those who had been part-time workers when at school was also employed while studying full-time when aged 21, compared with full-time students who had been non-workers at school (17 per cent) - this is consistent with the tendency identified earlier, at age 19. The proportion employed full-time in 1996 was also greater among former student-workers (52 per cent) than among those who had been non-workers (44 per cent).

Table 7.7 Major activities of sample members in October, 1996, by previous employment status during secondary school, 1975 cohort

Activity at age 21 in 1996	Employment status during secondary school	
	Non-workers	Workers
<i>Full-time student</i>		
Employed	16.6	22.3
Not employed	16.0	8.0
<i>Non full-time student</i>		
Employed full-time	43.8	52.0
Employed part-time	12.3	11.0
Unemployed	6.2	3.8
Not in labour force	5.2	3.1
Total per cent	100.0	100.0
<i>Sample size</i>	<i>931</i>	<i>1139</i>

Part-time work while at school appeared to have a beneficial effect on later experience in the labour market that continued beyond the age of 19. Based on the information presented in Table 7.7, student-workers were a little less likely than those who had been non-workers at school to be unemployed when they were aged 21, unemployment rates among the two groups in 1996 being 4 per cent and 6 per cent respectively. Further analyses were conducted to determine the effect of this independent variable, in-school employment, on the likelihood of being unemployed at age 21, while controlling for other variables. Results from two of these logistic regression analyses are recorded in Table 7.8.

Model 1 shows the effect on the likelihood of being unemployed at age 21 of involvement in part-time employment during any time while at school, when background variables and certain aspects of school and post-school experience were held constant. Among these control variables, there were few that were significant, family wealth being the most influential. Completion of Year 12 did not significantly reduce the likelihood of unemployment at age 21 for those who were not full-time students at that time. Post-school study was significant, but only for those who had participated in TAFE, reflecting the involvement of apprentices in both study and employment. Although the impression derived from Table 7.7 was that labour force participants who had been student-workers had a reduced likelihood of being unemployed when they were aged 21, Model 1 reveals that the association between in-school employment measured across any school year and later unemployment was not statistically significant.

To investigate whether there were different effects for students depending on the number of years that they had been employed during their schooling, Model 2 included dummy variables for students who were employed in one year and in more than one year. However neither group of student-workers had significantly different outcomes compared with non-workers - when it came to employment status at age 21, those who had a more extended experience of part-time work while at school were not more advantaged over non-workers than those who worked for just one year during their schooling.

Table 7.8 Logistic regression analyses of effects of working during secondary school on the likelihood of unemployment at age 21 in 1996

Independent variables		Model 1	Model 2
Gender			
(cf Females)	Males	0.02	0.02
Ethnic background			
(cf English-speaking)	Non-English speaking	- 0.55	- 0.55
Location			
(cf Non-rural)	Rural	- 0.01	- 0.00
Parental occupation			
(cf Semi-skilled & unskilled)	White collar and skilled	- 0.58 +	- 0.59 +
	Professional & managerial	- 0.45	- 0.44
Parental education			
(cf Primary & some secondary)	Completed secondary	- 0.52 +	- 0.51 +
	Post secondary	0.21	0.21
Family wealth			
(cf Poorest quartile)	Middle 50%	- 0.92 ***	- 0.93 ***
	Wealthiest quartile	- 0.59 +	- 0.60 +
School type			
(cf Government)	Catholic	- 0.57	- 0.57
	Independent	- 0.46	- 0.38
Early school achievement			
(cf Lowest quartile)	Middle 50%	- 0.72 *	- 0.73 *
	Highest quartile	- 0.17	- 0.19
School completion			
(cf Didn't complete Year 12)	Completed Year 12	- 0.37	- 0.38
Post-school education			
(cf No post-school education)	Higher education	- 0.14	- 0.14
	TAFE	- 1.01 ***	- 1.01 ***
Employment status in secondary school			
(cf Non-worker)	Part-time worker	- 0.30	-
	Worked in 1 year	-	- 0.44
	Worked more than 1 year	-	- 0.20
<i>N</i>		<i>1246</i>	<i>1246</i>

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Goodness of fit statistics

Model 1: Somers' D = 0.392, Gamma = 0.396, Tau-c = 0.696, Log likelihood chi-square = 57.976 with 17 DF.

Model 2: Somers' D = 0.392, Gamma = 0.397, Tau-c = 0.696, Log likelihood chi-square = 58.425 with 18 DF

These results (and others not displayed here, which examined the effects of hours worked per week at each year level) indicated no benefit from part-time work while at school in contributing to a lower likelihood of being unemployed when aged 21. (It should be recalled that labour force participants specifically excluded full-time students - these analyses did not investigate the employment outcomes for young people who were in full-time study at this age.) However, while employment status at a single point in time might be regarded as one measure of success or otherwise in the labour market, it could be argued that a more accurate indicator is the extent of unemployment which young people experience over a period of time – that is, the proportion of time that is spent unemployed after leaving school – in this instance, up to the age of 21.

Extent of unemployment to age 21

Information on the labour force activity of sample members, on a monthly basis, from the age of 17 to 21 (that is, spanning the years 1992-1996) was used to establish the proportion of time after leaving school that young people were unemployed. As for the analyses at age 19, sample members who had left school were categorised as unemployed in any given month if they reported that they were looking for work, were not employed either full-time or part-time, and were not full-time students.

For labour force participants at age 21, Table 7.9 records the differences between those who had been student-workers while at school and those that had not, and shows a negative relationship between in-school employment and the extent of post-school unemployment. While 65 per cent of student-workers reported no months of unemployment after leaving school, the figure for non-workers was 50 per cent; conversely, 15 per cent of the latter indicated that for over one fifth of the time since they had left school they were unemployed, only 4 per cent of student-workers were in this category.

Further detail provided in Table 7.9 indicates the variation in the percentage of time unemployed after leaving school according to the number of years that students were working while at school. There was a tendency for those who worked for more than one year to be better off - the percentage of respondents reporting no unemployment generally increased with number of years worked at school, and the percentage

reporting that over one fifth of their time had been spent unemployed decreased. It was hypothesised that a lengthier involvement in part-time work over a number of school years could have a stronger positive effect on employment outcomes.

Table 7.9 Per cent of time spent unemployed after leaving school, by employment status during secondary school, labour force participants at age 21 in 1996

Per cent of time unemployed after leaving school	Employment status during secondary school					
	Overall		Number of years employed while at school			
	Non-workers	Workers	1 year	2 years	3 years	4 years
No time unemployed	50	65	61	67	67	63
1-10 per cent	25	24	28	21	20	33
11-20 per cent	10	7	6	7	10	3
Over 20 per cent	15	4	5	5	3	1
Total per cent	100	100	100	100	100.	100
					0	
<i>Sample size</i>	<i>503</i>	<i>642</i>	<i>246</i>	<i>196</i>	<i>145</i>	<i>55</i>

To test the strength of the relationship between in-school employment and post-school unemployment, a series of regression analyses controlling for the effect of other variables was carried out, with the per cent of time unemployed as the dependent variable. Some results are presented in Tables 7.10 and 7.11.

It can be seen from Table 7.10 that, just as they had at age 19, certain background aspects had a significant impact on the extent of unemployment experienced by young people to the age of 21. Compared with those from less affluent families, young people from wealthier families spent a lower proportion of time unemployed after leaving school. Similarly, higher achievers at school experienced less time unemployed. Participation in either form of post-school education - university or TAFE - by age 19 was also significantly associated with less unemployment up to the age of 21, with this effect being slightly greater for those who had been in higher education than those who had been enrolled in TAFE.

Table 7.10 Multiple regression analyses of effect of working during secondary school on per cent of time spent unemployed after leaving school, labour force participants at age 21 in 1996

Independent variables		Model 1	Model 2
Gender			
(<i>cf</i> Females)	Males	- 1.15	- 1.18 +
Ethnic background			
(<i>cf</i> English-speaking)	Non-English speaking	1.58	1.58
Location			
(<i>cf</i> Non-rural)	Rural	- 1.72 *	- 1.75 *
Parental occupation			
(<i>cf</i> Semi-skilled & unskilled)	White collar and skilled	- 1.86 *	- 1.83 *
	Professional & managerial	-1.70 *	- 1.69 +
Parental education			
(<i>cf</i> Primary & some secondary)	Completed secondary	- 0.14	- 0.18
	Post secondary	0.18	0.14
Family wealth			
(<i>cf</i> Poorest quartile)	Middle 50%	- 2.09 *	- 2.04 *
	Wealthiest quartile	- 3.71 ***	- 3.69 **
School type			
(<i>cf</i> Government)	Catholic	- 1.55 +	- 1.55 +
	Independent	- 0.49	- 0.44
Early school achievement			
(<i>cf</i> Lowest quartile)	Middle 50%	- 2.95 ***	- 2.90 **
	Highest quartile	- 3.57 ***	- 3.50 **
School completion			
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	- 0.91	- 0.84
Post-school education			
(<i>cf</i> No post-school education)	Higher education	- 3.45 ***	- 3.49 ***
	TAFE	- 2.58 ***	- 2.57 **
Employment status in secondary school			
(<i>cf</i> Non-worker)	Part-time worker	- 3.71 ****	-
	Worked in 1 year	-	- 3.29 ***
	Worked more than 1 year	-	- 3.99 ****
<i>R</i> ²		.1027	.1023
<i>N</i>		1096	1096

+ *p* < .1, * *p* < .05, ** *p* < .01, *** *p* < .001, **** *p* < .0001

Model 1 in Table 7.10 included employment in any year during secondary school as the independent variable, whereas Model 2 used dummy variables to investigate the effect of number of years worked. According to both models part-time employment while at school was a significant predictor of reduced time spent unemployed in the post-school years. From Model 2 it can be seen that the magnitude and significance of the effect of working in two or more school years was larger than that for employment in one year, but not greatly so. Two or more years in part-time work while at school lowered the time spent unemployed by only a small amount relative to working in a single year. This could suggest that although student-workers may gain skills that

help them in the post-school labour market, the number of years which they spend in their jobs is not a crucial factor. One interpretation of this finding is that it adds weight to the argument that in-school part-time employment (of whatever duration) is also a surrogate measure of important personality dimensions that contribute to the greater employability of young people in their post-school years.

The results of additional analyses of outcomes to age 21, using different measures of the independent part-time work variable, are recorded in Table 7.11. They corroborate the findings of the preceding analyses concerning the significance of part-time employment during any year level at school in reducing the extent of post-school unemployment, not just up to the age of 19 but beyond, to the age of 21. When considering the number of hours spent in part-time work, both moderately and intensely involved student-workers in both Years 11 and 12 experienced less unemployment up to the age of 21 than those who had been non-workers, with a slightly larger advantage experienced by students who had worked longer hours, particularly in Year 11.

Table 7.11 Regression coefficients for the effects of various measures of secondary school employment on the extent of unemployment since leaving school, labour force participants at age 21 in 1996

Secondary school employment variables	Coefficient	<i>N</i>
Work status		
Student-worker in Year 9 (<i>cf Non-worker in Year 9</i>)	- 1.69 **	974
Student-worker in Year 10 (<i>cf Non-worker in Year 10</i>)	- 2.04 ****	1068
Student-worker in Year 11 (<i>cf Non-worker in Year 11</i>)	- 2.15 ****	945
Student-worker in Year 12 (<i>cf Non-worker in Year 12</i>)	- 2.25 ****	805
Employment intensity (<i>cf Non-workers</i>)		
Year 11: Moderate worker (Up to 10 hours per week)	- 1.73 **	
Year 11: Intense worker (More than 10 hours per week)	- 3.45 ****	926
Year 12: Moderate worker (Up to 10 hours per week)	- 2.81 ***	
Year 12: Intense worker (More than 10 hours per week)	- 3.45 **	784

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

EMPLOYMENT OUTCOMES: AN OVERVIEW AND SOME EXPLANATIONS

It is evident from the analyses above that, regardless of how part-time work at school was measured, labour market outcomes of such employment were positive. In the first few years after leaving school and entering the labour force many young people who had been student-workers experienced less unemployment than their peers who had not worked while at school.

Findings from other research

It is useful at this point to review the results derived from other studies of the effects of part-time work on later employment, and their implications for the present study. Some researchers have compared outcomes for student-workers and non-workers. Stephenson (1981) found that high school employment reduced the incidence of unemployment in the year after leaving school in a sample of U.S. males surveyed between 1966 and 1971. Among a sample of 2600 Scottish school leavers, having a job in the last year of school was associated with an increased probability of being employed in the following year (Main & Raffe, 1983). Canadian data showed that, for young people who did not go on to further study after high school, students who had worked in their final year of high school in 1985 experienced more months of full-time employment in the period 1986-1987 than did non-workers (Lowe & Krahn, 1992). McRae, (1992) analysed *Australian Longitudinal Survey* data to investigate the activities of a subset of the sample - young people who had been in Years 10-12 at school in 1985. Three years later, in 1998, among those who were not in full-time post-school education, young people who had been part-time workers while at school were less likely than non-workers to be unemployed.

Most other researchers - mainly American - have focussed on the effects not of part-time employment *per se* but of hours worked while at high school, although the way in which this variable has been operationalised in different studies has varied considerably, as has the time frame in which outcomes have been assessed. Drawing on data from the National Longitudinal Study of 1972 High School Seniors, Meyer and Wise (1982) showed that the amount of time in employment during the first four years after high school graduation was positively associated with hours worked per week during the final year at high school. Steel (1991) reported similar findings after analysing data from a subset of the National Longitudinal Survey of Youth; those who were aged 17-18 in 1979 (one third of whom were in grade 12, and almost one quarter in grade 11) and who worked longer hours in that year experienced greater employment during the following two years. Stern and Nakata (1989) had used the same data to investigate outcomes for non-College bound youth. They concluded that those who worked longer hours in grade 12, measured as the average number of hours worked per week in 1978-79, had less unemployment in the period 1980 to 1982. Marsh (1991), using High School and Beyond data, also reported a similar relationship

between hours worked by students across grades 10 to 12 and unemployment among young people during their first two years after high school, up to 1984. In that study, hours worked in grades 10 and 12 were based on the number of hours spent in the students' current job (at the time of survey), or in the most recent job, weighted according to when the student last worked, while hours worked in grade 11 were a retrospective estimate made by the student when in grade 12.

A longer-term view was taken by more recent researchers, using data from the National Longitudinal Survey of Youth (NLSY). Rich (1996) looked at a sample of young people who left school - either because they dropped out or graduated - between 1980 and 1984, and who did not go on to post-secondary education. When the outcomes for this group during each of the years to 1990 were examined - that is, for a minimum of five and a maximum of eight years after leaving high school - student-workers were more likely than non-workers to be employed, and to work more hours per year. Furthermore, these effects were found to be related to the total number of hours worked while in the last year at high school. Carr, Wright and Brody (1996) also investigated the outcomes of in-school employment for those who had been aged 16-19 and enrolled in high school in 1979, and who remained in the NLSY sample in 1991. They discovered that the number of hours worked during 1978 significantly increased the probability of both being in the labour force in 1991, and of being employed in 1991 - for many, that was more than a decade after leaving high school. However a caveat must be attached to those findings, because of the inclusion of vacation employment in the calculation of hours worked while a student - the motivation for, and outcomes of, holiday employment being possibly different to that undertaken during school term.

Despite differences between these American studies in the method by which the independent variable of part-time work was measured, their findings have been robust and consistent - controlling for a range of other variables, they showed a positive association between time spent in part-time work during high school and reduced unemployment after leaving school. Such findings are compatible with the theory of human capital formation in which on-the-job training opportunities available to workers enable them to increase their level of skill, in turn making them more employable.

The Australian data

Results of the analyses of the *Youth in Transition* data described in the preceding sections of this chapter are summarised in Table 7.12. It shows that, at age 19, young people who had been workers at school were less likely to be unemployed than those who had been non-workers, although this effect on employment status had waned by the age of 21. Student-workers who did not go on to full-time post-school study also benefited more than their non-working peers in that they experienced less unemployment after leaving school - an advantage that was maintained through the initial years in the labour market and up to the age of 21. While the analyses demonstrate that the consequence of in-school part-time work for post-school labour market experience was positive in terms of reduced unemployment, questions remain about how and why this should be the case. Although a number of possible explanations can be suggested, no definitive answers can be drawn from these data.

Table 7.12 A summary of the relationship between part-time work while at school and post-school employment outcomes, 1975 *Youth in Transition* cohort

Secondary school employment	Employment status		Extent of post-school unemployment	
	at 19	at 21	at 19	at 21
Work status				
Ever student-worker	- 0.6 ***	ns	- 5.5 ****	- 3.7 ****
Student-worker in Year 11	- 0.8 ***	ns	- 5.6 ****	- 1.7****
Number of years worked				
One year	- 0.5 *	ns	- 4.7 ***	- 3.3 ***
More than one year	- 0.7 ***	ns	- 6.0 ****	- 3.9 ****
Hours worked per week in Year 11				
Moderate (up to 10 hours)	- 0.5 *	ns	- 4.1 ***	- 1.7 **
High (more than 10 hours)	- 1.4 **	ns	- 8.4 ****	- 3.5 ****

* p < .05, ** p < .01, *** p < .001, **** p < .0001; ns Not significant.

Some possible explanations

The most obvious explanation is that part-time employment during the school years increases employability because student-workers develop useful skills - that is, an interpretation based on the human capital model. Over 60 per cent of 17-year-old student-workers in the *Youth in Transition* sample in 1992 agreed that they worked because they thought it would help them to get a job when they finished studying. There is also evidence from numerous other studies that student-workers feel that they

learn important skills from their part-time jobs that help them to gain further employment .

The consensus from various research studies, both in Australia and elsewhere, is that students acquire generic, transferable skills rather than specific occupational skills from their part-time jobs. Evidence gathered in the United States in the 1980s showed that young employees in the fast food industry gained supervisory and inventory control skills, as well as skills in 'dealing with customers; taking directions; getting along with co-workers; being on time; being dependable; being well-groomed' (Barton, 1996:2). The opportunity that student-workers have to develop social and communication skills, such as the ability to work in teams and to handle difficult customers with diplomacy, have also been identified by British research (Lucas & Lammont, 1998).

Australian studies confirm these findings concerning the generic skills that are promoted by part-time work. Student-workers in Year 10 in 1996 rated their jobs highly in teaching them confidence and how to get along with other people, as well as following instructions and thinking for themselves (Fullarton, 1999). A recent survey of several hundred young people who had been employed in the fast food and supermarket industries in 1995 (two thirds of whom had been students at that time) found that seven in ten respondents believed that their job would provide a stepping stone to another job, and that employers would value the generic skills they learned in their job. The majority of these workers agreed that their job taught them better communication skills (84 per cent of workers endorsed this), teamwork skills (78 per cent), self-confidence (70 per cent), improved work habits (66 per cent), and organisation and time management (63 per cent) (National Institute of Labour Studies, 1999). The benefits of increased independence and initiative derived from part-time work were also cited in an earlier survey of McDonald's employees, many of them school students (Woolmer & Hill, 1990). A recent qualitative study of the views of students, parents, and employers indicated that each of these stakeholder groups regarded part-time work as helping to develop self-esteem, confidence, and communication skills, as well as greater maturity and responsibility, and teamwork and coping skills (Hull, 1999).

Another perspective on the skills acquisition process, and the nature of the skills acquired, can be obtained from a consideration of the type of work-based training that young people receive, which also reinforces the conclusion that generic not occupational skills are the more important by-product of early work experience for students. From the outset it should be noted that relatively little is known about the amount or quality of job training available to school age student-workers, and how this compares with other categories of employees - for instance, the 1993 ABS Survey of Training and Education which investigated workplace training excluded full-time secondary students, and few research studies have dealt specifically with the issue. However some information can be gleaned from studies that have investigated the incidence of training among young casual and part-time workers in general, who include both school and post-school students, as well as non-students.

The level of provision of formal structured job-related training for both young and adult part-time and casual employees is generally lower than for full-time and permanent employees. It has been argued that young workers have low exposure to formal on and off the job training mainly due to the lack of skills inherent in most part-time and casual jobs. It is relatively easy to learn the skills needed in such jobs by watching others, or by teaching oneself - this informal on-the-job training is the type of training most commonly reported by young workers (Wooden, 1995). In addition, with reference to part-time and casual employment among young people, concordance has been found between the views of employees and employers - many such workers thought there was no need for any more training than that which they received (Wooden, 1995), while employers regarded on-the-job training as more important than formal training for the skill development of such employees (National Institute of Labour Studies, 1999).

In a context in which young part-time workers have limited access to formal job training, researchers have concluded that there is little difference between the level of participation in such training by students and non-students, although these comparisons have mainly involved post-school students (Flatau & Simpson, 1996; National Institute of Labour Studies, 1999; Wooden, 1995). Nevertheless *Australian Youth Survey* data cited by Flatau and Simpson (1996) showed that, among part-time employees aged 17-19 in 1989, higher proportions of those who were at secondary school received training - both formal and informal - than did non-student employees.

Furthermore, though on the basis of a very small sample and with no comparison group, Hull (1999) concluded that student-workers were positive about their training opportunities; of the 18 student-workers in that study, 17 indicated that they received formal induction training, and many also had ongoing informal training, which helped them to develop a range of specific skills related to occupational health and safety, customer service, stock control, and computer checkout processes.

On balance it can be concluded that there is a strong likelihood that student-workers develop skills - especially generic skills - which improve their employability. Apart from increasing an individual's human capital, part-time work might also serve a screening function; a history of part-time work may create a favourable impression with employers, who judge it to be indicative of the attitudes and qualities that they want when recruiting young employees (ACNeilsen, 1998). Work experience while at school may also improve the employment prospects of young people by providing them with personal contacts with a network of potential employers. One researcher who looked at the recruitment practices of employers noted that many did not base their decision on the academic credentials of school leavers, and that prior connections, for instance through work experience, played a role in the selection process (Keating, 1995b). Hull (1999) also reported that some employers (those from larger organisations) saw student-workers as potential longer term employees, and rather than advertising vacancies when they occurred recruited from their existing pool of part-time workers.

Although there is a correspondence between these hypothesised benefits of part-time work and the favourable post-school employment outcomes enjoyed by student-workers, a direct cause and effect relationship cannot be assumed to be the sole explanation. Other factors may also contribute to this outcome. It is pertinent here to consider the findings concerning the relative importance of the amount of exposure to part-time work while at school in reducing the extent of post-school unemployment. The number of weekly hours spent in a job, especially in Year 11, had a small effect in reducing post-school unemployment, and the number of school years during which students were employed had a similar effect. These results might be interpreted as supporting human capital theory and the hypothesis that students who worked for longer hours or for more years had more opportunity during that time to acquire the

knowledge, skills and attributes desired by employers, which in turn enhanced their later employability.

Nevertheless, the size of the effects of more intense involvement in part-time work (measured in hours and in years) was found to be small. The absence of a substantial effect on the extent of post-school unemployment of greater involvement in part-time work when at school undermines the human capital argument but adds weight to the selection to work argument. That is, it was the fact of having had a job at any time during schooling, no matter for how many years or for how many hours per week, that conferred a benefit in terms of later employment. According to this view reduced unemployment in the post-school years resulted not from early exposure to part-time work while at school but was largely attributable to the unmeasured characteristics - such as greater motivation and personal drive - of students who took on part-time jobs. These young people may simply have had a stronger predisposition to work, both in their school and post-school years.

Overall, findings from the *Youth in Transition* data provide empirical evidence that student-workers had a consistent advantage in the post-school labour market, with those who had been more intensely involved workers when at school enjoying a small additional advantage. But it is not possible to conclude from these analyses whether or to what extent this latter outcome was the result of greater exposure to part-time work as a student.

OTHER LABOUR MARKET OUTCOMES

Apart from the likelihood of being unemployed, two other aspects of the post-school labour market experience of student-workers were investigated. One was the possible link between the types of part-time jobs which students had and the occupations in which they were employed once they finished their secondary education. In addition, a number of American studies have suggested that earnings in post-school jobs are related to previous experience gained through in-school employment. These two issues were explored using the *Youth in Transition* data for the 1975 birth cohort.

Occupation

Young workers are concentrated in certain industries - most notably the retail trade sector. In August, 1996, among teenagers, 40 per cent of male employment and 57 per cent of female employment was in retail trade; the proportion of teenagers employed in this sector was over three times that for the total workforce. The only other sectors in which teenagers were over-represented relative to adults, although by a much smaller margin than in retail trade, were accommodation, cafes and restaurants, and cultural and recreational services - that is, in service sectors supporting recreation and tourism (Wooden, 1998).

Both in and out of school, teenage workers also participate in a narrow range of occupations, and this participation is strongly differentiated by gender. For the *Youth in Transition* sample members who, as 19 year olds, were not full-time students, and were in full-time employment in October, 1994, information about the kind of work they did was used to categorise their jobs according to the Australian Standard Classification of Occupations (ASCO). Part-time workers were excluded - the main focus of the investigation was the experiences of those who were in the primary labour market. The distribution of job types for males and females is shown in Table 7.13, with a further breakdown according to whether they had previously been part-time workers while at school. The second panel of Table 7.13 presents these same data for sample members who were in full-time employment at age 21 in 1996.

There were substantial differences between the patterns of full-time employment of males and females. At age 19 over two thirds of males were in either trades or labouring jobs, while an even larger proportion - three quarters - of females worked in the two categories of clerical and sales and personal service jobs. When the occupations of young people who had been student-workers were compared with non-workers at school, the former were slightly over-represented among sales and personal service workers: for males almost 15 per cent of in-school workers were in this type of job, compared with around 11 per cent of non-workers, and for females, the figures were 36 per cent and 32 per cent respectively.

It is not surprising that student-workers had a higher likelihood of being in a sales job in the first few years after leaving school. Although the figures are not displayed in

the table, additional analyses showed that at each year level during school (except at Year 9) sales was the occupational category which employed the largest percentage of students - growing from 58 per cent of all jobs among Year 10 workers, to 63 per cent in Year 11 and 66 per cent in Year 12. Further investigation of the relationship between in-school and post-school job type revealed that, among young people who were working part-time when in Year 11 at school and then full-time after leaving school, 75 per cent of those who were in sales and personal service occupations at age 19 had been similarly employed as Year 11 students. By comparison, among those who were in trades and in labouring jobs as 19 year olds, the percentages that had been sales workers previously in Year 11 were considerably lower - 32 per cent and 45 per cent respectively.

Table 7.13 Type of full-time job at ages 19 and 21, by gender and previous employment status during secondary school, 1975 YIT cohort

Type of job	Males			Females		
	Employment status at school			Employment status at school		
	Non-worker	Worker	All Males	Non-worker	Worker	All Females
At age 19 in 1994						
Managerial, prof, para-prof	10	7	9	7	8	7
Trades	45	49	47	12	8	10
Clerical	7	5	6	42	40	41
Sales & personal service	11	15	13	32	36	34
Plant & machine operators	6	6	6	0	2	1
Labourers & related workers	22	19	20		6	7
Total per cent	100	100	100	100	100	100
<i>N</i>	288	320	608	228	366	594
At age 21 in 1996						
Managerial, prof, para-prof	16	19	18	23	23	23
Trades	35	40	38	9	6	7
Clerical	10	8	8	28	37	33
Sales & personal service	9	16	13	32	29	30
Plant & machine operators	6	5	6	1	1	1
Labourers & related workers	25	12	18	9	4	6
Total per cent	100	100	100	100	100	100
<i>N</i>	171	236	407	212	317	529

Note: Percentages may not add to 100 due to rounding.

For most respondents, the particular job that they had when they were aged 19 was not the same job as they had held when they had been Year 11 students: about 60 per cent of the subgroup who had also been student-workers in Year 11 had been in their job at age 19 for less than one year, and only 9 per cent had been in their job for more

than 2 years. These figures, taken together, suggest that the experience and competencies gained while working in the area of sales and personal service while at school may be of continuing benefit for many students, at least in providing access to a similar kind of occupation in the initial post-school years.

However, apart from this possible occupational link, the connections between other types of in-school jobs and post-school employment at age 19 were not strong. There were differences between males and females when the post-school occupations of student-workers and non-workers were compared. Among males, a slightly higher percentage of student-workers than non-workers (49 per cent compared with 45 per cent) was in trades occupations, while fewer student-workers were labourers (19 per cent compared with 22 per cent) and in managerial, professional and para-professional jobs (7 per cent compared with almost 10 per cent). Among females, that pattern was the same for labourers - that is, fewer female student-workers than non-workers were in labouring jobs at age 19 - but reversed for trades and managerial and professional occupations. It is clear that other factors, apart from the nature of their in-school part-time employment, influenced the types of full-time jobs that young people had at age 19.

The distribution of job types for full-time workers in this same cohort of young people two years later, in 1996, is recorded in the second panel of Table 7.13. Between the ages of 19 and 21 the percentage in managerial, professional and para-professional occupations increased for both males and females, but the gender segregation seen at the earlier age was similar at age 21. Over three times as many females as males were employed in clerical and sales and personal service occupations (63 per cent compared with 21 per cent), while four times as many males as females worked as either tradespersons or labourers (56 per cent compared with 13 per cent).

Among males, student-workers were over-represented, relative to those who had not been part-time workers during their school years, in managerial, professional and para-professional, trades and sales and personal service occupations, and under-represented in labouring occupations. Female student-workers were more likely than non-workers to be employed in clerical occupations when they were 21, and, as was the case for males, less likely to be working as labourers. While they are not

conclusive, these data do not point to negative consequences of part-time work in terms of leading to what might be deemed lower status occupations.

Income

Another hypothesis concerning the benefits of a part-time job while at school could be tested using the *Youth in Transition* data. Based on the assumptions of neoclassical economics and human capital theory that employers pay workers according to their skills, the contention is that early experience of employment contributes to greater productivity on the part of young workers, which is then rewarded by employers in the form of higher wages.

The literature

American research has provided evidence that there is a positive relationship between high school employment and wage rates in the years immediately after graduation. Stephenson (1981) found student-workers had higher wage rates than non-workers in their first year after leaving high school. Mortimer and Finch (1996) showed that earnings five years after high school were related to the number of years worked while a high school student. Both of those studies, however, used data for samples of males only, and referred to the period of the late 1960s to early 1970s. Other studies have examined the association between the intensity of involvement in part-time work in high school and post-school earnings. Stern and Nakata (1989) reported that, in the three years following graduation, earnings were positively related to hours worked in the final year of high school, in 1979. Meyer and Wise (1982) concluded - also based on data for males only - that in the first four years after high school graduation, those who had worked when at school received higher wage rates than those who had not, and that higher hours worked at school were associated with higher earnings per hour. But they qualified this finding by noting that additional weekly hours beyond 10 were not associated with increased wage rates until hours exceeded 30. Using three categories of hours worked per week, there was actually a slightly U-shaped relationship between hours and wage rates; that is, for students who worked between 16-30 hours per week in high school, wage rates were a little lower than those who worked from 1-15 or more than 30 hours.

Furthermore, Carr, Wright and Brody (1996) claimed that effects on earnings were even longer-term. They analysed national longitudinal data and found hourly earnings in 1990, more than a decade after sample members had left high school, were positively related to hours worked when in school in 1978 - although this result may have been skewed by the inclusion of vacation employment in the calculation of hours worked while a student.

However, contradicting these findings, Rich (1996) investigated wage rates over a lengthy period ranging between 5 and 8 years after leaving high school in a sample of young people that included both high school graduates and dropouts. She concluded that students who worked longer hours during high school were not more highly paid in those post-school years than those who worked fewer hours. British researchers have also cast similar doubts on the view that hours of part-time work as a student (when aged 16) had any influence on wage rates measured several years after leaving school (Dustmann et al., 1996). They argued that after a few years in the post-school labour market the relative importance of the amount of human capital acquired through early in-school employment was reduced as a proportion of total work experience, while the value of an in-school job as a screening device used by employers was also reduced as individuals gained other work experience. For both of these reasons, the impact of student part-time work in explaining wage variation could be expected to diminish after a few years in the post-school labour force. Such was also the conclusion of a recent American study (Light, 1999) which found that high school employment had a small and relatively short-lived effect on post-school wages.

The Australian data

Information on average hourly earnings was available for the *Youth in Transition* sample members who were employed in 1994. Multiple regression was used to investigate the influences on this dependent variable of a range of factors, among them participation in employment while still at school. Once again, only those who were in full-time jobs at age 19 in 1994 were included in this analysis, on the assumption that there could be differences between the pay scales of part-time and full-time workers.

Table 7.14 Regression analysis of effects of working during secondary school on hourly wage rates for full-time workers at age 19 in 1994

Independent variables		Model 1	Model 2
Gender			
(<i>cf</i> Females)	Males	0.09	- 0.10
Ethnic background			
(<i>cf</i> English-speaking)	Non-English speaking	- 0.43 +	- 0.39
Location			
(<i>cf</i> Non-rural)	Rural	- 0.32 +	- 0.04
Parental occupation			
(<i>cf</i> Semi-skilled & unskilled)	White collar and skilled	- 0.34 +	- 0.37
	Professional & managerial	- 0.49 **	- 0.45 +
Parental education			
(<i>cf</i> Primary & some secondary)	Completed secondary	0.09	0.41 +
	Post secondary	0.19	0.26
Family wealth			
(<i>cf</i> Poorest quartile)	Middle 50%	0.48 *	0.20
	Wealthiest quartile	0.57 *	0.20
School type			
(<i>cf</i> Government)	Catholic	0.44 *	0.52 +
	Independent	0.16	0.49
Early school achievement			
(<i>cf</i> Lowest quartile)	Middle 50%	0.12	0.27
	Highest quartile	0.54 *	0.45
School completion			
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	0.01	0.24
Post-school education			
(<i>cf</i> No post-school education)	Post-school education	- 0.76 ****	- 0.71 ***
Length of time in current job			
(<i>cf</i> One year or less)	More than one year	0.65 **	0.25
Employment in secondary school			
(<i>cf</i> Non-workers)	Part-time worker	0.00	-
(<i>cf</i> Non-workers in Year 12)	Year 12: moderate workers	-	0.26
	Year 12: intense workers	-	0.56 +
<i>R</i> ²		.0547	.0543
<i>N</i>		978	549

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

The results of the analyses considering the effect of employment status in secondary school are presented in the first column of Table 7.14. It shows that family wealth had a small positive effect on earnings, consistent with finding about the relationship between wage rates and parent's income reported by Meyer and Wise (1982). Early school achievement was also positively related to earnings at age 19. Other studies have demonstrated the influence on adult earnings of cognitive skills or ability measured during adolescence (Bedard and Ferrall, 1996, cited in Marks & Fleming,

1998b). The latter also found that school achievement had a moderate effect on earnings. However, in contrast to the analyses detailed here, their analyses of *Youth in Transition* data from the 1961, 1965 and 1970 birth cohorts involved a considerably longer time frame and a different approach to measuring the variables, leading them to conclude that school achievement had little impact on earnings until after age 22, but a moderate effect on earnings after that age.

It can be seen from Table 7.14 that, for the 1975 cohort at age 19, the largest negative influence on earnings was participation in post-school education; this can be explained by the generally low wage rates of apprentices, who, although full-time workers, are also categorised as part-time students. On the other hand there was a positive association between the amount of time which sample members had been in their job and earnings, with those who had been employed in the same job for longer than one year earning more per hour than those who had been working for a year or less.

The variable of most interest, however, was found not to be a significant predictor of earnings. Based on these data, there was no relationship between a person's hourly earnings in their full-time job at age 19 and their having had a part-time job while at school. Nor did additional analyses (not tabulated here) of hourly income among full-time workers at age 21 in 1996 find any effect for previous employment status while at school.

This result from the *Youth in Transition* data, which indicated no association between secondary school employment and early post-school wage rates, accords with a previous Australian study. McRae (1992) used *Australian Longitudinal Survey* data to model wage rates in 1988 for a sample of young people who had been at school in 1985, and found no relationship with in-school employment status. Nevertheless the *Youth in Transition* data enabled a more detailed investigation; varying measures of participation in part-time work during the school year could be used to identify possible associations that might not be revealed by the broad comparison of wage outcomes between young people who had been workers and those who had been non-workers while at school. Those extra analyses were generally consistent in showing no association between hourly income at age 19 and secondary school employment in any one year level, with the exception of students who had been part-time workers when in Year 12. Such students were shown to have slightly higher hourly earnings in 1994

compared with non-workers. When time spent per week in the Year 12 job was taken into account, so that the comparison was between non-workers and moderate workers, and between non-workers and intense workers, it was only the latter who were very marginally advantaged in terms of income. For those who were employed at age 19, then, there was a likelihood of a very small additional benefit that may have been attributable to earlier part-time employment, - but only for those students who had committed a greater number of hours to their Year 12 job.

EMPLOYMENT OUTCOMES: SOME CONCLUSIONS

The results of these analyses show that, compared with students who did not have part-time jobs while at school, student-workers were both significantly less likely to be unemployed when aged 19 and more likely to experience shorter periods of unemployment, and, in one instance, more likely to earn slightly higher hourly wages. This positive effect of part-time work in reducing post-school unemployment continued at least to the age of 21. As others have postulated (Meyer & Wise, 1982; Rich, 1996; Steel, 1991) the apparent association between work experience gained while at school and these advantages in the post-school labour market might be explained in a number of ways. A part-time job may enhance post-school employment prospects by providing transferable work-related knowledge and skills - most commonly, skills such as money handling and relating to customers - which students can draw upon when seeking later employment. Alternatively, or additionally, students may develop work habits and attitudes - punctuality and reliability for instance - that are valued by employers. Furthermore, the fact that a job applicant has a history of part-time work may act as a signal to potential employers, who may take it as an indicator of personal qualities such as motivation and initiative that they want in their workers; this assumption has been confirmed by surveys of employers' attitudes (ACNeilsen, 1998). And finally it is possible that a part-time job provides a 'first step in the door' opportunity for student-workers, and that personal contact with employers may lead to future employment. However none of these explanations preclude the possibility that a part-time job is also a proxy for other individual attributes, such as ambition, drive and enthusiasm, which in themselves are seen to contribute to success in the labour market.

Although it was not possible from these data to produce unequivocal evidence in support of any one of these competing or complementary explanations, the analyses demonstrated that labour market outcomes were undeniably positive for student-workers. There was a clear relationship between part-time employment while at school and a lower incidence of unemployment in the post-school years. It seems that Australian school students who had part-time jobs gained a knowledge of the labour market and developed skills and contacts which provided them with some advantage in that labour market, at least in the early years after leaving school. On the basis of these aggregated data it can be concluded that having a part-time job while at school is one of the ways in which a young person can achieve a smoother transition into the post-school full-time labour market.

ISSUES AND IMPLICATIONS

In the process of considering the implications of this investigation of various aspects of the student-worker phenomenon, a necessary first step is to review the results from the analyses that were undertaken in relation to each of the five key research questions. It is important to assemble such information so that policy issues can be assessed on the basis of evidence rather than speculation: education and training policy directions and decisions that are informed by what students actually experience can be assumed to be more effective, and be of greater benefit to those young people. This review also provides the opportunity to identify areas in which additional research is required, in order to improve further the knowledge base upon which future policy can be built.

THE EXTENT OF PART-TIME EMPLOYMENT AMONG SCHOOL STUDENTS

The question of the extent of part-time work among Australian students - both how many secondary school students have part-time jobs, and how much time they spend in those jobs - was addressed by examining the labour market activities of 17-year-old students from four separate cohorts of young people, at specific points in time (in October) in 1978, 1982, 1987 and 1992. Employment rates among students increased over that period; in 1978, one in four students was employed, while by 1992 the proportion was one in three - with greater growth in participation by females compared with males. Age and year level at school, as well as gender, influenced the incidence of employment, and this was further illustrated by additional analyses of data from a more recent sample of Year 9 students; in 1995, about one quarter of those students had part-time jobs, with boys slightly over-represented as workers, although this pattern was reversed by the time that the students were in Year 10 in 1996. Average hours worked per week by those who were employed were fairly similar across ages groups, ranging from 8 hours (by Year 9 students in 1995) to 9 hours (among 17-year-olds in 1992), and while males tended to work slightly longer hours than females in Year 9, this gender difference in time spent in the workplace was not found among older students in 1992.

A number of implications can be drawn from these findings about the extent of students' paid part-time work. They provide evidence of a substantial change in the

nature of the transition from school to work; they can be used as a benchmark against which students' exposure to the workplace through school based programs designed to improve students' work readiness can be compared; and when placed in the context of the international research literature, they provide an indicator of the probability and dimensions of any potential negative effects of part-time work among Australian students.

Empirical evidence that the school to work transition has changed

These data show that in the first half of the 1990s, somewhere between one quarter and one third of Australian secondary school students were part-time workers during the school year, for about the equivalent of one full working day each week. (Furthermore, these are conservative estimates of the extent of student participation in the labour market, as they are based on employment status in a single month, rather than labour force activity measured over the entire year.) Thus there is empirical support for the claim that student-work is now a common occurrence, and a normative part of the broader transition from school to work.

Such data also underline the claim that the linear developmental model, which still dominates thinking at a policy level, is inadequate in describing the experiences of young people. This linear model assumes that school completion marks a boundary between full-time education and the beginning of employment, the time at which young people who do not proceed to further study then move into the labour market for the first time. However this sharp transition is not born out when tested against the actual choices made by young people; their lives are characterised by greater complexity, with changes in direction and a commitment to multiple roles, as both school students and part-time workers for instance. The findings hence also add weight to the argument that rather than defining youth as an extended period of people's lives, there is instead a need to adopt a new approach in which young people are seen to be entering a 'new adulthood' in stages that start relatively earlier (Dwyer et al., 1998).

Furthermore these data (for the 1975 birth cohort, that is) refer to students who finished their secondary school in the early years of the 1990s. The data concerning their experiences of combining schooling with work relate mainly to 1992, yet it is only

now, almost a decade later, that policy makers have begun to recognise these trends. While a time lag between policy and practice in any domain of government activity may be commonplace, in this instance there would seem to be a strong case for acknowledging the changes that have occurred in the lives of school students, and incorporating that knowledge when relevant education policy is being formulated.

Comparisons with school based programs

It is pertinent to contrast these results concerning the incidence of paid work among Australian students with what is known about student participation in school based workplace programs, because throughout the decade such programs have been strongly promoted as a means of improving the work readiness of young people. Data for 1996 obtained from other research studies enable some comparisons which highlight the relative importance of part-time work in this respect, in both the compulsory and post compulsory years of schooling.

In 1996, among Year 10 students, 41 per cent had part-time jobs, although a larger proportion, 62 per cent, was involved in work experience programs (Fullarton, 1999). However, it can be inferred that the amount of time spent in the workplace was significantly greater for those who were student-workers. From the data reported by Fullarton (1999) it can be calculated that 37 per cent of all Year 10 students were in work experience programs of one week duration (that is, for 5 school days), and 22 per cent did two-week programs (for 10 school days). By contrast, student-workers were in the workplace for far longer; assuming they worked an average of 8 hours per week in a job, as was indicated by the 1995 *LSAY* data for Year 9 students, and were employed for 40 weeks over the year, student-workers spent at least eight times longer in the workplace than Year 10 students who completed a one-week work experience program.

In the same year, 1996, other survey data showed that around 12 per cent of students in Years 11-12 participated in school-industry programs that involved a work placement (Ainley & Fleming, 1997), whereas the part-time employment rate among these students in the post compulsory years could be assumed to be at least three times higher, given the findings (for 1992) reported in Chapter 3. Furthermore, as shown above for Year 10 students, time spent in the workplace by Year 11-12 students who

took part in school-initiated programs was much less than for those who were student-workers; 7.5 per cent of all Year 11-12 students were in school based programs with work placements of 10 days or less per year, while only 2 per cent of them were in programs that had 20 or more days in the workplace (Ainley & Fleming, 1997). Student-workers, employed for an average of 9 hours or the equivalent of one day per week, were in the workplace for a far greater time throughout the year.

Hence it is clear that more students spend more time in a workplace as a result of their part-time jobs than do so through school based programs. The ramifications of this disparity are significant when considered in the light of the strong policy focus on improving the work readiness of young people. Within the programs that have been developed at the school level with that goal in mind, the fact that many of those same young people have already entered the part-time labour market, presumably having displayed such skills as were necessary to at least get a job in the first place, has been largely ignored, while little account has been taken of the knowledge and skills that students may be acquiring while in their paid jobs. The argument that schools and policy makers need to take note of and accommodate the trend towards student-workers is not new (Ashenden, 1990). Nevertheless the case is strengthened by these new data about the extent of paid work among students.

The potential negative effects of part-time work

It is helpful to put these findings about the extent of student-work in Australia in a wider global context, particularly when assessing the relevance of findings reported in the literature about the outcomes of student employment that have been derived from research studies conducted in other countries - notably in countries where the incidence and intensity of student-work is very different. While rates of student participation in part-time employment in Australia may be relatively high by comparison with some European countries (France, for instance), and similar to others (such as the United Kingdom), they are not as high as in the United States. More significantly, especially when educational outcomes are under scrutiny, Australian student-workers spend considerably less time per week in their part-time jobs than their American counterparts - an average of eight to nine hours in Australia, compared with around fifteen to twenty hours often recorded in the United States. On this basis, therefore, American research studies that have shown adverse effects on school

performance of excessive involvement (of over 15- 20 hours per week) in part-time employment have limited applicability in Australian circumstances.

WHICH STUDENTS ARE PART-TIME WORKERS?

The issue that was designated as the second research question for this study concerned the characteristics of young people who were most likely to be student-workers - that is, whether there were variations in either employment rates or employment intensity according to any of a number of background attributes of students. The two characteristics which were considered to have the most significant implications were the socioeconomic status and the educational achievement of student-workers compared with non-workers.

Social background

Information about the family social background of student-workers provides some insight into the relative importance of the factors which might prompt them to take on a part-time job in the first place. There was no evidence in these *Youth in Transition* data that students from disadvantaged backgrounds were over-represented among workers; in fact student-workers were more likely to be from middle and higher socioeconomic status families. This is consistent with research results from elsewhere; student-workers in both North America and Britain have generally been found to be from more affluent backgrounds. The inference from such data is that, for most students, financial necessity did not rank high as their motivation to work; it appears that students worked because they chose to work, rather than because they were under economic pressures to do so. This conclusion, deduced from social background data, was confirmed by reference to students' own responses about their reasons for working. The issue of motivation to work was addressed as part of the third research question, that which considered students' perceptions of their part-time jobs; few (about one in seven) students cited family financial need as a reason for having a part-time job, whereas the great majority indicated that they enjoyed the sense of independence that a job afforded them (four in five students endorsed this view), or agreed that they worked because they enjoyed it and because they thought it would help them to get a job in the future (two in three supported these reasons).

Investigating the question of whether some students are more likely than others to be part-time workers provides evidence about the relative impact of structural factors and of individual agency in explaining that behaviour. Students from poorer backgrounds were not more likely to be employed, so that the decision about whether or not to be a part-time worker may be interpreted as a case of young people constructing their own choice biographies. The majority were enthusiastic rather than reluctant participants in the labour market, making the choice to take on a part-time job because they saw it as economically and personally advantageous. As Hakim (1998:146) concluded in relation to student employment in the UK, it *'...is a complex and sociologically interesting phenomenon rather than a simple story of financial hardship.'*

Conversely, however, students from lower status social backgrounds were less likely to be part-time workers; for this group, structural factors such as limited access to employment opportunities through a lack of family contacts may be obstacles to their participation in the part-time labour market. The equity implications of this situation need to be examined, especially when it is shown that, in the post-school labour market, those who have worked part-time while at school enjoy advantages over non-workers - that is, those who are disadvantaged initially by social background experience further disadvantage.

Educational background

Arguments about the potentially harmful effects of part-time work on schooling must take account of the pre-existing characteristics of student-workers, particularly their earlier educational achievement, as well as their attitudes to school. If better than average students are workers, then it would be unlikely that their school work would suffer, whereas the academic progress of weaker students who also work part-time may be more problematic. Analyses of the *Youth in Transition* data revealed that in the senior school years student-workers were more likely to be middle and higher achievers rather than lower achievers. It could therefore be expected that if employment had a negative effect on school performance, this would be ameliorated, at least in part, by the students' previous higher level of achievement. When this finding concerning the prior educational achievement of most student-workers is combined with information about the amount of time that they generally spend in their jobs - average hours worked per week being relatively low when compared with

the United States - then it seems even more likely that concerns about detrimental effects on schooling attributable to student work that have arisen in that country might be largely unfounded in Australia.

Overall, it can be concluded from this analysis of their background characteristics that student-workers are not disproportionately drawn from groups traditionally regarded by policy makers as 'at risk' - they are not more likely to be from lower socioeconomic status families or to be lower achievers at school. Rather, they are from a broad range of backgrounds, because part-time work has become an experience of the mainstream student population. This implies a shift of focus for policy-makers, away from concerns primarily with minority groups to the needs of the majority, if they are to address the issues raised by student-work. Furthermore, student-work is not an issue solely for those with responsibility for school education, but also a matter for consideration by post-school education authorities. These data showed that students who had previously indicated that they planned to combine study and work after leaving school were significantly more likely to be student-workers when in their senior school years; it is therefore likely that the propensity to combine education and employment that student-workers exhibited while at school will continue into post-school education.

STUDENTS' PERCEPTIONS OF PART-TIME WORK

The way in which participants perceived their experience of part-time work was the subject of the third question posed for this study. Students' reasons for working, and opinions about how their job effected their schooling, as well as the association between employment and quality of life more generally, were examined. The broad conclusion that can be drawn from those analyses is that student-workers felt positive about their employment. The majority worked because they enjoyed the job, and the financial independence that it gave them. Compared with non-workers, student-workers were more likely to be happy with many aspects of their lives - particularly the money they earned, their social life, and their independence.

One of the implications of these findings about part-time work from the perspective of the participants is that a job while at school is an important factor in young peoples' social and personal development. Students value the experience they obtain as part-

time workers, enjoying broader social contacts and deriving a sense of autonomy, responsibility, and maturity as they take on 'adult' roles in a work setting.

The views of student-workers were also optimistic in relation to the key issue of the potential effects of part-time employment on educational and labour market outcomes. They regarded their part-time jobs as a worthwhile investment in their future - two thirds believed that working while at school would help them to get a job after they finished studying. When reflecting on the possible impact on their schooling, student-workers did not regard their part-time jobs as a serious cause for concern, although about one quarter indicated that they thought that it had some detrimental effects on their school work at the time they were employed.

Another consideration arising from findings about what students felt about their part-time work is the question of how these perceptions compare with their perceptions of school-initiated workplace learning programs. It can be surmised from the available evidence that students have fairly positive views about part-time work, about work experience, and about structured work placements that are undertaken within VET in schools programs. While research studies have shown that young people develop a similar range of skills from these three different modes of experiencing the workplace, with an emphasis on enhanced personal and social skills such as confidence, self-reliance, and communication skills, very few studies have directly compared the three types of workplace learning. Limited evidence is available from the United States, where there has been some research comparing learning in work placements in secondary school based cooperative vocational programs (in office education and marketing) with similar non school based paid employment. Students in the school-supervised work placements more often reported that their jobs were more challenging, and provided them with opportunities to practice what was learned at school and to learn new things (Hopkins, 1993).

The issue of the relative efficacy of each of these different forms of workplace experience in promoting skills acquisition, and the ways in which student learning in each type of workplace setting can be optimised, are questions for future research.

EDUCATIONAL OUTCOMES

The accuracy of students' perceptions about the short-term effect of part-time work on their schooling was tested by analyses that capitalised on the longitudinal nature of these data. Because information was available on the labour force and educational activities of individuals over a lengthy time period, the relationships between part-time employment while at school and more objectively measured educational outcomes - school completion, school performance, and the transition to post-school education and training - could be investigated. Results of these analyses showed that, in aggregate, students who had been part-time workers were not disadvantaged compared with non-workers when the standard measures of educational success were considered. Student-workers were just as likely as non-workers to complete secondary school, their final year results were not significantly lower, and they were not significantly less likely to go on to university. Such results are consistent with what could be expected on the basis of other generalisations derived from this study regarding both the moderate hours that Australian students spend in part-time jobs and the educational background of those students who work.

However the analyses did reveal a slightly reduced likelihood of Year 12 completion among Year 11 students who worked longer hours. There was also a small negative effect on Year 12 results for this group of student-workers, compared with non-workers, and consequently the probability of their proceeding to university was reduced, although this last effect was only found among females. Long hours of part-time work in Year 12 were linked to both Year 12 results and subsequent university study in a similar way. Despite the association of marginally lowered educational performance with longer hours in a part-time job, a direct cause and effect relationship between the two cannot be inferred. While controls for earlier school achievement were included in the analyses of outcomes, other important psychological factors, especially motivation and attitudes to school, were not able to be considered. In the absence of such information it may be equally plausible to regard the educational outcomes of those students who worked longer hours as attributable not to their part-time jobs, but to pre-existing attributes - such as a weaker attachment to school - that predispose them to choose to work long hours in the first place.

From a policy perspective, therefore, these data produce no cause for alarm about Australian students' endangering their educational performance by taking on a part-time job. While the findings do not necessarily negate the concerns of some teachers about the extra demands which employment places on individual students who may be struggling with their academic work, nor do they point to any serious or widespread problems for schooling that are associated with students having part-time jobs.

LABOUR MARKET OUTCOMES

Analyses of young peoples' post-school labour market experiences produced strong evidence for the efficacy of part-time employment for secondary students. Compared with students who did not have part-time jobs while at school, student-workers were both significantly less likely to be unemployed when aged 19 and more likely to experience shorter periods of unemployment in the first few years after leaving school. This positive effect of part-time work in reducing post-school unemployment continued at least to the age of 21.

One explanation for the success of student-workers in the labour market relies on selection effects; according to this argument individual 'drive' or motivation may underlie both secondary school employment and labour force success in the initial post-school years. Other explanations attribute such success to either human capital or screening effects. According to the former view, student-workers acquire knowledge, skills and attitudes while in their jobs that enhance their later employability. These skills are most commonly people skills - relating to supervisors, cooperating with others, dealing with customers - and personal attributes such as responsibility, punctuality, time management, and confidence, as well as some practical skills, such as money handling and operating a cash register. Employers may also use part-time work as a screening device, indicating that a job applicant has the requisite skills, as well as other personal qualities like initiative and ambition. These three effects may operate separately or in combination; regardless of the explanation, however, the evidence from the *Youth in Transition* data is that student-workers do better than non-workers in the post-school labour market.

Furthermore a 'smooth transition' is a desirable outcome, not only of itself, but because it has been demonstrated that a poor start in the labour market can be difficult to overcome. Evidence from longitudinal data analyses from several countries (including Australia, as well as France, Germany, Ireland and the United States) showed that, compared with those who found work early (in the first year after leaving education), young people who were at that time unemployed or not in the labour force spent less time in work over the following five years. This points to the ongoing importance of a successful start in the labour market - if a job is obtained soon after leaving education, then longer-term employment prospects are improved (OECD, 1998).

Comparisons with school based programs

These beneficial post-school labour market outcomes for student-workers match those that have begun to be identified among participants in some other work based learning programs offered within education systems. Sweet (1995) reported that 1993-94 TRAC program graduates in the following year had lower unemployment rates and higher rates of participation in further education and training than non-university bound school leavers in general. More recent evidence of a similar kind is available from Victorian research that tracked the 1996 Year 12 students who were enrolled in VET in schools subjects. That study found positive outcomes two years later for about 80 per cent of those students; almost 40 per cent were in tertiary education, and over 40 per cent were in full-time work or on-the-job training, while 12 per cent had part-time work and 7 per cent were unemployed. On the basis of these figures it was argued that VET in schools has lasting benefits (Polesel, Teese, O'Brien, & Unger, 1998), although it should be noted that comparative data concerning outcomes for non-VET students would also be necessary to confirm such a conclusion.

Other studies have shown that work placements through VET in schools programs may be more likely to lead to part-time rather than full-time employment, at least in the short-term. Over one third of work placement students surveyed in 1997 indicated that they were offered a part-time job as a result of their placement, but few were offered full-time employment or apprenticeships or traineeships (Misko, 1998), and a link between work placements and part-time job opportunities has also been reported in other research (Cumming & Carbines, 1997).

Therefore, while it may be that students who engage in school based workplace learning programs enjoy similar beneficial results in the post-school labour market to those who have part-time jobs, further research is required to more clearly delineate the relative benefits to students of formal compared with unplanned workplace experience.

EDUCATION FOR WORK AND LIFELONG LEARNING

It is useful to put these findings about student-workers in the context of the wider issues with which education policy is currently engaged. There are two connected themes that are pertinent to any discussion of the importance of part-time work in the lives of Australian school students, and its role in preparing them for later employment. On the one hand there is the debate about general versus vocational education and the relative emphasis that schools should give to each, while on the other is the potentially unifying perspective that is provided by the concept of lifelong learning.

Lifelong learning

Analyses of the needs of labour markets of the future highlight the importance of generic, transferable skills such as the ability to communicate and handle information, and to work collaboratively. In addition, to meet the demands created by new forms of work, it is argued that the need is for individuals with the capacity to constantly learn new skills, to engage and re-engage in the learning process itself; hence students must acquire a lifelong learning ability (Caston, 1996). Education and training policies and programs at all levels - international, national and state - have been increasingly based on this key idea of lifelong learning. Australia's national strategy for vocational education and training was framed in terms of the need for continual learning over the life span of an individual (Australian National Training Authority, 1994). This recognition that young people must be equipped to be active, engaged learners throughout their adult lives emphasises skills training and retraining to improve employability, although, as a long-term planning strategy, lifelong learning does not preclude other personal and social objectives (McKenzie, 1999).

General and vocational education

The relative merits of vocational and general education must be considered in the light of this need to promote the capacity for lifelong learning. In the past, general and vocational education have been defined on the basis of their essentially different purposes - the main goal of general education has been the preparation of students for further study, while vocational education, embodying the principles of applying skills in real situations to optimise learning, has mainly aimed at preparing students for direct entry to the workforce.

What do young people want from their schooling?

Sweet (1994) argued that various surveys over a lengthy period have indicated that young people want, as part of their general education, relevant practical courses, connected to the real world of working life. He noted, for instance, earlier research evaluating secondary colleges in the ACT, which found that students favoured arrangements that would enable them to divide their week between school and work, or to combine academic and vocational training (Anderson et al., 1980). A national survey of the opinions of Year 12 school leavers who had not enrolled in higher education indicated that one quarter of the respondents wanted a greater emphasis on work experience during their schooling to help to ease the transition to employment (Department of Employment, Education and Training, 1991b). Sweet (1994) also cited the report prepared by Motive Market Research for the Finn committee of inquiry. That consultant's report, which canvassed students views of schools, concluded that *'young people clearly see the role of the education system as providing them with skills which will add to their "employability"'* (Sweet, 1994:7).

A vocational emphasis

There has been strong federal government support for vocational education and training during the 1990s, driven by the desire to produce a more highly skilled workforce to sustain economic growth and productivity. This has occurred at a time when school completion does not guarantee either entry to higher education or entry to the labour market (Peoples, 1998; Sweet, 1998). The push to increase the vocational orientation of the school curriculum in the post compulsory years is advocated because it is seen as being more suited to the needs of the large proportion of young people

who don't wish to go on to further study; it is argued that for those young people, extended time at school should provide the opportunity to acquire job skills and earn industry-recognised credits that will help to facilitate their entry to the post-school labour market (Teese et al., 1997).

But there are questions about the skills which will be of most benefit to students, especially considering the effects of technological change and globalisation on future employment prospects. The main issue concerns finding a balance between providing students with the specific vocational skills they need in the current labour market, and providing a strong general education as a sound foundation for further learning in order to maintain employability into the future (McKenzie, 1998a).

Criticisms of current education and training policy

During the 1990s successive federal governments have pursued essentially similar directions in relation to education and training policies, although some concerns have been expressed about the focus of those policies. Critics point to the inadequacies of the view that improving the skill levels of young people will necessarily produce the positive employment outcomes that are desired; they argue that there is a need not only for policies which are aimed at improving the job readiness of the young, but also for policies that address the problems of structural changes in the economy, and the lack of jobs (Jamrozik, 1998; Spierings, 1998). The same observation has been made about the situation across the OECD countries: that apart from education and training policies that impact on the supply side, there is also the need for other measures designed to stimulate the demand for young workers, such as policies aimed at creating new jobs, and at removing institutional barriers to the employment of young people (Bowers et al., 1999).

A consistent theme among many commentators is that current policies are basically manpower planning policies, focussed on a too narrow conception of the role of education. They disagree with this instrumentalist approach to education, in which schooling aims primarily to develop good workplace attitudes and workplace skills, arguing that such a restricted view of the goals of education may not be the most appropriate for the workplaces of the future. Instead, a strong general education is

preferable because it improves understanding of complexity and enhances the adaptability of workers in a changing job market (Wyn, 1998).

This is not a new idea. During the 1980s there was considerable debate among analysts about the nature of the effects of new technologies on job skill requirements, and hence on education policy, with many arguing that education should focus on teaching higher order thinking skills rather than specific vocational skills, in order to produce students who were flexible and adaptable to change (Burke & Rumberger, 1987). Such were also the views of Jones, in "Sleepers, Wake! Technology and the Future of Work", who concluded 'our primary emphasis in education ought still to be on the general rather than the specific and vocational'. Some empirical support for this position can be derived from World Bank research findings which show that, compared with academic education, vocational education and training may not confer advantages on graduates in terms of obtaining a job or in terms of wages (Thomas, 1993).

An integrated model of education

Recognition of the future demands on education, and of the need for lifelong learning, lend weight to attempts to reduce the dichotomy between general and vocational education - to provide greater breadth in general education, and more understanding of vocational skills. There is evidence from various OECD countries of a blurring between the two, so that 'general education (is) becoming increasingly vocational and vocational education increasingly general' (Caston, 1996:26).

Based on the assumption that all students need to be prepared for both work and further learning, there is increasing support in Australia for a convergence between general and vocational education, and the adoption of a model of schooling in which academic and applied learning is integrated (Smith, 1997). There is evidence too that this is a view shared not only by policy analysts but by education bureaucrats and teacher unions. Boston (1998) rejected, on economic, social and educational grounds, the idea of separate vocational and general education pathways for students, and claimed that the demands of the modern workplace are such that the distinction between 'doers' and 'thinkers' is no longer relevant -- and hence the distinction between academic and vocational skills is also irrelevant. Other stakeholders,

including organisations representing teachers, have also endorsed the principle that vocational education should be an integral part of a comprehensive program in the post compulsory years (Peoples, 1998).

This convergence of general and vocational education has implications for the teaching-learning process. While educational reformers have long supported teaching practice that emphasises active learning, in the past they have been motivated by humanistic and individualistic values; now such changes are advocated because they are seen to provide the skills needed in the economy. As one observer noted '*... in the light of the current needs of employers for an education that promotes problem-solving and creativity for all, and not just for an elite, it might be that at last there (is) emerging a convergence between the humanistic and the economic requirements from education*' (Caston, 1996:34).

Hence, in summary, the educational context in which the research findings about student-workers must be set is one where economic imperatives predominate; preparing young people for employment is generally regarded as a high priority.

IMPLICATIONS FOR SCHOOLS

The results of the analyses of the *Youth in Transition* data show unequivocally that 'learning and earning' among school students is becoming the norm. In public policy circles there is abundant rhetoric about the importance of strengthening the connections between education and employment, and during the 1990s increasing numbers of school based programs have been developed and implemented which attempt to do so (Ainley & Fleming, 1997; Malley et al., 1999; Malley et al., Forthcoming). However in practice the unplanned paid part-time work done by students is generally ignored. The obvious question is how can the connections between school and students' working lives be enhanced. Exhortations about the need to improve the integration of part-time work and education have been made frequently in the past, both in Australia (Ashenden, 1990; Coventry, et al., 1984; Wilson et al., 1987) and overseas (Barton, 1996), and a number of strategies have been reported in the literature that could overcome, or at least reduce, the separation between schooling and student's part-time work.

The knowledge and attitudes of teachers

Administrators and teachers should be aware of the extent of part-time work among the student population in their own schools. A decade ago, after consultations with several school system authorities, Ashenden (1990:29) concluded that '*most schools know and record little or nothing about their students' part-time work*', and more recently Hull (1999) confirmed that this was still the case. (Ashenden also pointedly observed '*If schools know little about their students' part-time work, researchers know even less about what schools know*'). Barton (1996) recommended that schools should maintain individual records of which students work, how much time they spend in their jobs, what kind of work they do, and who employs them. As an alternative, specific local information about student-workers could be collected via surveys conducted from time to time by schools. Some additional resources would be needed to pursue either of these information gathering strategies, although it could also be argued that such tasks may properly be included among the responsibilities of careers education staff.

However if any benefit is to be derived from the information that schools might be encouraged to collect about student-workers, that information would need to be used to develop an agreed school policy toward part-time work, setting out guidelines and expectations for students, parents and teachers (Ashenden, 1990). Because it has also been claimed that an awareness of students who work is not enough, and that a change of attitude on the part of teachers is equally as important.

There is only very limited evidence about how Australian teachers perceive student-workers although it can be assumed that, in the absence of any widespread public debate on the matter, the level of disquiet about the issue in this country is not matched by that which has occurred in the United States (Graves, 1992; Helms et al., 1994; McNeil, 1984). Hull (1999) found that teachers believed students were too willing to put their part-time work ahead of study, but it should be noted that only a very small number of teachers from one school was interviewed in that research. Nevertheless similar concerns have also been expressed by some other educators. One headmaster recently declared, in a newsletter to parents of students at his school, that '*I have seen students corrupted by other students through part-time work, and introduced to a lifestyle which grabs the easy money but does not encourage the kind of motivation needed for a successful VCE and university course*' (Hewison, 1998:10). While endorsing the

benefits of school holiday jobs, the headmaster was opposed to part-time work during the term. He argued that it was undesirable not only because students developed the wrong priorities, and became too materialistic, but because their jobs reduced their participation in the extra-curricular activities in the school, so that they missed out on the *'many challenging and rich experiences which can develop them as people'* (Hewison, 1998).

However this negative stance on student-work is not shared by other stakeholders, especially students themselves. A recent investigation of the issue (Victorian Industry Education Partnerships, 1999) found that, according to students, their teachers were either not aware of their part-time jobs, or if they were, did not acknowledge them in school, in either casual social exchanges or in class. At a personal level, these students were disappointed that teachers didn't acknowledge their work, or seem to care much about it. As that study concluded *'... what seems to be required most urgently is an appropriate attitude on the part of school staff towards students' engagement in part-time work'* (Victorian Industry Education Partnerships, 1999:29). The researchers suggested that a more positive response on the part of teachers would be for them to recognise students' part-time work as educationally useful; this could occur informally, facilitating social interaction with students and demonstrating respect for their maturity, and formally, by recognising the skills and attributes that student-workers brought to the classroom.

Integrating work into the school curriculum

The majority of student-workers see little connection between their part-time job and their school work (Hull, 1999; Wilson et al., 1987). Reinforcing this view, nearly three quarters of those surveyed in a recent study thought that their job had not helped with their work at school, and nor had their school work helped them in doing their part-time job (Victorian Industry Education Partnerships, 1999).

While commentators have noted the numerous possibilities for using students' workplace experiences as both the source of practical examples in the classroom, in subjects as diverse as mathematics, business studies and social science, and as a site in which to enhance students' communication, research, analytical and technical skills (Ashenden, 1990; Stern et al, 1997; Wilson et al., 1987), it seems that these strategies have not been as widely adopted as they might be. Nor has the potential offered by

students' part-time jobs for teaching about specific work-related matters - for instance, about issues like occupational health and safety, workplace regulations, and unions - been fully utilised, even though topics such as these now fall within the curriculum of VET in schools programs. Other suggestions that have been made to improve the quality of school based work experience programs could also be adapted for paid part-time workers. With the assistance of employers, there could be arrangements made for student-workers to learn about various aspects of their employers' business through job rotation and job shadowing for example (Barton, 1996). To implement these kinds of changes in their practice, teachers who have been trained to teach subject-specific school based curricula may need support - in the form of professional development programs designed to help them to make use of the workplace as a context for learning.

While changes in the attitudes and practices of teachers are matters that may be addressed within the school, other proposals by which the benefits of student-work could be optimised necessitate cooperation between schools, the curriculum and assessment authorities of education departments, and employers, either locally or at the system level, or both. Such proposals include provisions to facilitate communication about student-workers between schools and employers, as well as initiatives for the formal accreditation of part-time work.

Improved links between schools and employers of student-workers

Although not a proposition that has received much attention in the Australian context, there have been recommendations that schools should keep employers informed about the educational progress of student-workers, and that employers for their part should be more interested in the broader welfare of their student employees (Barton, 1996). It could be argued that the advantages that accrue to employers from a student workforce, by way of access to a cheap and flexible labour supply, should be reciprocated at least in part - for instance, employers should be more willing to accommodate students' school commitments when work rosters are drawn up, and be more prepared to take on greater responsibility for training.

Another possibility is that schools could act as employment agencies to help students get jobs, either while they are still at school or after they leave (Ashenden, 1990). This

has certainly occurred in the context of school-industry programs, sometimes formally, within the framework of a funded Jobs Pathways Program, or through informal personal contacts between school program coordinators and host employers (Malley et al., 1999). While some might question whether this kind of job placement function is a legitimate role for schools, there is a growing belief that in dealing with the range of issues affecting young people arbitrary divisions of responsibility should be abandoned. The value of a coordinated, holistic approach to those issues can be seen in experiments with full-service schools (Withers & Batten, 1995), and also in the interdependence found between successful school-industry programs and communities in which there is a collective responsibility for the education and training of young people that crosses sectoral boundaries (Malley et al., 1999).

The equity argument that schools should take on an active job placement role, even for students while they are still at school, is supported by the results of the analyses in this study. Students from lower socioeconomic status families were less likely to have a part-time job. Yet after controlling for social background, part-time work while at school was found to be associated with reduced unemployment in the first few years after leaving school. The implication is that those students who wish to work part-time but who lack access to such jobs are being disadvantaged. McGaw's (1997) comments on student work, although made in reference to the need for schools to provide vocational education, are equally pertinent to the argument of whether they should have a job placement role .. *'to the extent that (this) work does help with preparation for and access to later work opportunities, the benefits are unevenly distributed. Those from wealthier areas have greater access to both the opportunities and the benefits. This makes it all the more important, for reasons of equity, that serious and systematic preparation for work be provided in education.* (McGaw, 1997: 56)

Accreditation of part-time work

There have been recommendations that employers should help to assess and document student-workers' acquisition of skills – either 'soft' skills such as taking responsibility, working with others, and listening to instructions (Barton, 1996), or specific vocational competencies, as described in the various industry training packages that have been adopted within the national training system. This information could be included in students' exit references from school. However the

issue of school accreditation of students' part-time work is not straightforward, as pilot projects to address some of those issues that have been conducted recently in at least two Australian states have shown. In the first instance, opinion is not necessarily unanimous about the desirability of such an approach. Some student-workers may be reluctant for this to occur: for example, more than half of the student-workers in a recent survey did not want their part-time work to be accredited within their school program. Their reasons for this view differed; more academic students saw no connection between their present jobs and their future occupations, and less academic students wanted to preserve the separation between the job that they enjoyed and their less favourable experience at school (Victorian Industry Education Partnerships, 1999).

Secondly, the question of how and by whom part-time work might be accurately and reliably assessed, if it were to be formally recognised by schools, is not easily resolved. One model that could be adopted is that used to assess the workplace component of VET in schools programs; however, this process itself is still evolving, and there is discussion concerning the need for employers to be trained in assessing students' competencies, as well as questions about time demands and cost implications. A portfolio has been nominated as one of the most appropriate tools for assessment; this could include the log books commonly used in workplace learning programs, as well as references from employers and customers, products made by students, as well as their responses to tasks set by teachers (Victorian Industry Education Partnerships, 1999).

Another related initiative is the recent move to incorporate some enterprise-based training into VET in schools programs, thereby enabling students' part-time work to count toward their end of school accreditation (Malley et al., Forthcoming). McDonald's is a formally recognised private training provider, and student-workers who complete a McDonald's training program can acquire Certificate 11 in Food Retail, which in some states can be included in the VET in schools component of the senior school certificate. This decision has not been without controversy however; concerns have been expressed about the problems of reconciling commercial interests with the interests of young people who are at the same time both trainee and employee (Bessant, 1996), and about abrogating authority for school educational programs to others – as one headmaster argued, in rejecting the idea, *'(the) school will not take responsibility for a course entirely outside its control'* (Hewison, 1998:10).

A combination of school and work

In the past there have been calls advocating changes to school administrative structures that would enable students to combine part-time school attendance with part-time work (for example Ashenden, 1990). Suggestions to allow such a mix of school and work were generally made in the context of developing policies aimed at improving school retention; hence the attempts in a few schools, especially in the late 1980s and early 1990s, to modify timetables to better accommodate working students.

These localised efforts have been overtaken somewhat by the evolution of education and training policy since that time, which has seen the emergence of VET in schools and part-time school based New Apprenticeships, and their adoption by state education authorities as endorsed alternatives to mainstream curriculum offerings in the post compulsory years. While Year 12 retention rates declined from 1992, interest in such programs has grown; the opportunities they provide for students to gain workplace experience and vocational skills that are accredited within a national qualifications framework are also seen as ways of more adequately catering for a more diverse school population, especially students who do not aspire to higher education. As part of this policy development process, reviews of the post compulsory curriculum in a number of states have made recommendations to both improve provision and raise the status of vocational education within the senior school certificate through arrangements to ensure that assessment of VET contributes to tertiary entrance scores (Committee of Review on the Victorian Certificate of Education, 1997; McGaw, 1997).

Despite the availability of these now 'standardised' vocational programs, it may be that, in order to maximise school completion rates, other more flexible local arrangements, organised at a school level, are also required, to ensure that the needs of the widest possible range of students are met. For some young people, perhaps those who might be considered most at risk of not completing school, the idea of an individualised learning contract between the student, the school and an employer, incorporating the student's paid part-time job and requiring the identification of particular work as suitable for endorsement within the school program, may still have currency (Robinson, Fleming, & Withers, 1998; Wilson et al., 1987). In this respect, the fact that student-work is now regarded as a mainstream activity may perhaps be considered an advantage - students' jobs are not perceived as suffering from the status

problem that vocational programs often encounter when compared with the general education program offered by schools.

LIMITATIONS OF FINDINGS AND AREAS FOR FURTHER RESEARCH

One of the main advantages of the data which form the basis of this investigation is their national scope. Such macro-level statistical data can be used to identify patterns and provide a 'big picture' - in this instance, of Australian student-workers as a group. However a drawback of this broad brush approach is that it glosses over diversity, complexity, and contradictions, so that little is revealed about underlying personal factors to do with reasons for actions and for choices made (Looker & Dwyer, 1998). Alternative research techniques, generally in smaller-scale contexts, are necessary to illuminate the processes that produce the observed patterns.

Looker and Dwyer (1998) also argue that, in order to better reflect the experience of young people, researchers must accommodate diversity, and acknowledge a variety of life-patterns in addition to the standard trajectories. They refer to a number of methodological implications that flow from the adoption of such an extended framework of analysis. In terms of data gathering, it is desirable to directly involve participants if possible, to discover how they see the processes in their lives. To more precisely identify complexity, systematic information on multiple activities and the sequencing of events is needed, as well as information about the influences (both supports and constraints) which affect individual decisions, to try to distinguish between what may be superficially similar but actually quite different patterns (Looker & Dwyer, 1998:19).

When this kind of critique is applied to the present investigation of student-workers, it highlights some of the limitations of the data that were available and the ways in which this constrained the analyses that could be undertaken in the study. At the same time it points to various gaps in our understanding of the role of part-time work in the lives of school students, thereby suggesting a number of avenues for additional research.

The method used in the study to define student-workers, focussing on employment status in October of each year, provides a very basic illustration of the way in which complexity was overlooked; student movement into and out of the labour force

throughout the year was undetected by this measure. Hence, the figures used in the analyses were merely an approximation of the actual extent of student participation in the labour market.

The findings as to which students were most likely to be part-time workers raise more questions which should be explored. From an equity perspective, it is important to identify the barriers to part-time work for 'at risk' students - namely, those from lower socioeconomic status families, and those who were lower school achievers - students who were less likely to be employed, yet may have most to gain from such part-time work. Other information about the educational background of student-workers, particularly their attitudes toward school, and the way in which this varies with age of students, would also be valuable. The present analyses showed that, among younger students, attitude to school was more important than achievement as an influence on the likelihood of participation in part-time work; in Year 9, those who were less satisfied with school were more likely to be employed. However it was lower achievers who were less likely to be working as 17-year-olds. Thus, in terms of their general orientation to education, there appeared to be a contrast between older and younger student-workers. An absence of data about attitudes to school for these older students precluded an exploration of such an association; this would be a fruitful area for further research.

There are many other areas that warrant investigation. The question of how students obtain part-time jobs, although beyond the scope of the present data, is one which is also of relevance if equity considerations are important - especially if the aim is to help those students who seek work, and to improve their ability to compete for jobs. There are also general issues that should be examined concerned with students' experiences of working, such as how they travel to work (and the role of parents in providing transport), how they manage their time, and how working influences their social and personal lives. It may be important to investigate qualitative differences between students' part-time jobs, because it has been suggested that the impact of the latter on adolescent psychosocial development might vary as a consequence of the characteristics of the job (Mortimer et al., 1992a). An indication of whether different kinds of jobs have different effects on career aspirations, for instance, would provide some guidance for schools and parents when students were looking for part-time work.

While educational outcomes of part-time work appear to be benign, a closer investigation of the association between the number of hours spent in jobs and the transition to higher education would be of interest, especially as these analyses provided some indication that there were different patterns among males and females in this respect.

However perhaps the most significant question, from a policy development perspective, concerns the nature of the learning that occurs in the workplace. There is a need to gain a greater understanding of the particular knowledge, skills, attitudes and values that are developed by students while in their jobs, in order to more fully understand the role of part-time work in the personal and social growth of young people. Qualitative studies of what and how students learn from their part-time jobs are required - this is not a new suggestion, having been identified as a priority more than a decade ago (Wilson, 1989). However, it remains an important area for further research.

Research elsewhere has pointed to differences in outcomes from part-time work that may be related to the extent of school supervision of such jobs (Stern et al, 1997; Stone et al, 1990). The nature and quality of student learning in paid part-time work must be compared with that which occurs in school based programs involving work placements: this information is needed to assist in deciding on the most effective strategies for promoting the work preparedness of young people. Such is the aim of the study currently being conducted by researchers from the University of SA (at the Centre for Research in Education, Equity and Work) and from Charles Sturt University, NSW. Their project is investigating students' experiences of the workplace in each of three different modes - in paid part-time work, in work experience, and in structured work placements - focussing on the training and learning that occur in each (www.unisa.edu.au/creew/project5intro.htm, 2000). A related issue about workplace learning that also has relevance to both VET in schools and to student-workers is the question of the relative merit of on job and off job learning; research that analyses what can be learned best in which environment can be used to optimise learning in both situations.

Apart from the perceptions of the student participants, it would seem important to consider, in a more systematic way, the views of the other key stakeholders. To

ascertain, for instance, the level of interest of employers in their student employees' educational progress, and their opinions about training provision for those workers. To establish what, if anything, is done within the education system to accommodate the needs of student-workers? The attitudes and practices of teachers and schools toward student employment is an area that warrants further research, with the view to helping schools to establish policy guidelines about the issue. And it is assumed that parents are favourably disposed toward their children's part-time work, but there have been few large scale studies of their opinions about the matter.

A final point that can be raised about the analyses in the present study is that attention was focused on a fairly narrow range of economic outcome measures - namely, the effects of part-time work on post-school employment status and the amount of unemployment, without reference to other facets of labour market experience - the extent of under-employment, for instance, or, for those who were employed, qualitative aspects of their working lives, such as perceptions of job satisfaction or access to employer sponsored training. An exploration of those sorts of outcomes would add a valuable dimension to an assessment of the role of part-time work in contributing to the career development of young people.

This overview of the many possibilities for additional research into the student-worker issue is a measure of the importance of the phenomenon. Large numbers of young Australians enter the labour market for the first time not after leaving secondary school but while they are still full-time school students. This provides clear evidence of the need for a reconceptualisation of the school to work transition process, and challenges the linear developmental model that underpins it. The remark by a student that 'McDonald's is just a phase in life' (recorded in a study conducted almost two decades ago: Coventry et al., 1984:97) was both incisive and insightful; it is a phase which the majority of young people will go through, and learn from.

Student-workers display key vocational skills - the motivation to work, the ability to work collaboratively, and the capacity to continue learning - skills which current education and training policy seeks to promote. The inclination that many students have demonstrated to combine school and work augurs well for a model of schooling which integrates general and vocational education.

REFERENCES

- ACNeilsen. (1998). *Research on employer satisfaction with graduate skills: Interim report*. Canberra: Department of Employment, Education, Training and Youth Affairs.
- Ainley, J. (1998). School participation, retention and outcomes, *Australia's Youth: Reality and risk*. Sydney: Dusseldorp Skills Forum.
- Ainley, J., Batten, M., & Miller, H. (1984). *Patterns of retention in Australian government schools*. (Vol. 27). Melbourne: Australian Council for Educational Research.
- Ainley, J., & Fleming, M. (1995). *School-industry programs national survey 1995*. Sydney: Australian Student Traineeship Foundation.
- Ainley, J., & Fleming, M. (1997). *School-industry programs national survey 1996*. Sydney: Australian Student Traineeship Foundation.
- Ainley, J., & Sheret, M. (1992). *Progress through high school: A study of senior secondary schooling in New South Wales*. Melbourne: Australian Council for Educational Research.
- Anderson, D., Saltet, M., & Vervoorn, A. (1980). *Schools to grow in. An evaluation of secondary colleges*. Canberra: Australian National University Press.
- Anisef, P., & Johnson, L. (1993). *The young adult learner: Fifteen- to eighteen-year-old students in the Ontario English language school system*. (Vol. 1). Toronto: Ontario Ministry of Education and Training.
- ANOP. (1990). *Community attitudes to issues affecting young people and to DEET policies and programs*. Canberra: Department of Employment, Education and Training.
- Aronson, P. J., Mortimer, J. T., Zierman, C., & Hacker, M. (1996). Generational differences in early work experiences and evaluations. In J. T. Mortimer & M. D. Finch (Eds.), *Adolescents, work and family. An intergenerational developmental analysis* (Vol. 6, pp. 25-62). Thousand Oaks, London, New Delhi: Sage Publications.

- Ashenden, D. (1990). *The student-workers. The extent, character, consequences and possibilities of part-time work by secondary students*. Canberra: Australian Government Publishing Service.
- Athanasou, J. (1996). Some features of school industry programs in Australia: a study of co-operative vocational education projects. *Australian and New Zealand Journal of Vocational Education*, 4,(1), 1-13.
- Australian Education Council. (1993). *National report on schooling in Australia 1992. Statistical Annex*. Melbourne: Australian Education Council and Curriculum Corporation.
- Australian Education Council Review Committee. (1991). *Young people's participation in post-compulsory education and training* (Chair: B Finn) . Canberra: AGPS.
- Australian Education Council. (1992). *Putting general education to work: The key competencies report* (Chair: E Mayer). Melbourne: Australian Education Council, Ministers for Vocational Education, Employment and Training.
- Australian National Training Authority. (1994). *Towards a skilled Australia: A national strategy for vocational education and training*. Brisbane: ANTA.
- Bachman, J. G., & Schulenberg, J. (1993). How part-time work intensity relates to drug use, problem behaviour, time use, and satisfaction among high school seniors: are these consequences or merely correlates? *Developmental Psychology*, 29(2), 220-235.
- Barton, P. E. (1989). *Earning and learning. The academic achievement of high school juniors with jobs*. Princeton, New Jersey: Educational Testing Service.
- Barton, P. E. (1996). A perspective on student employment. Princeton, New Jersey: Policy Information Centre, ETS.
- Batten, M. (1989). *Year 12: Students' expectations and experiences*. Hawthorn: ACER.
- Beck, U. (1992). *Risk society: Towards a new modernity*. London: Sage.

- Bentley, P., & O'Neil, M. (1984). School participation and labour force participation of teenagers. In A. Kaspura (Ed.), *Labour force participation in Australia. Proceedings of a conference* (pp. 135-153). Canberra: Bureau of Labour Market Research.
- Bernier, S. (1995). Youth combining school and work. *Education Quarterly Review*, 2(4), 10-23.
- Berryman, C., & Schneider, D. O. (1982, November). *Patterns of work experience among high school students: Educational implications*. Paper presented at the Annual Meeting of the National Council for the Social Studies, Boston, MA.
- Bessant, J. (1996,). *An early survey of the Howard government's policies for young people*. Paper presented at the Youth Research Centre conference Revisiting: Pathways, personal issues and public participation, Melbourne. 31 May.
- Billett, S. (1998,). Aligning workplace and school-based experiences. *Vocal. Australian Journal of Vocational Education and Training in Schools*, 1, 41-43.
- Blackburn, J. C. (1985). *Ministerial review of postcompulsory schooling*. Melbourne.
- Boston, K. (1998,). Vocational education and training in schools. *Vocal*, 1, 32-35.
- Bourke, S. F., & Keeves, J. P. (1977). *Australian studies in school performance. Vol 3. The mastery of literacy and numeracy: Final report*. Canberra: AGPS.
- Bourke, S. F., Mills, J. M., Stanyon, J., & Holzer, F. (1981). *Performance in literacy and numeracy: 1980*. Canberra: AGPS.
- Bowers, N., Sonnet, A., & Bardone, L. (1999). *Background report. Giving young people a good start: The experiences of OECD countries*. Background paper for the conference Preparing youth for the 21st century: The policy lessons from the past two decades, Washington, DC. 23-24 February. Jointly organised by US Departments of Labour and Education and the OECD.
- Braithwaite, J. (1988). *Factors affecting the staying/leaving decisions of intending leavers and undecided students in the junior secondary school*. Sydney: Macquarie University.

- Braithwaite, J. (1989). Why stay? Why leave? - A comparison between school stayers and leavers. *Education Research and Perspectives*, 16(2), 44-56.
- Bureau of Labour Market Research. (1983). *Youth wages, employment and the labour force* (Research Report No 3). Canberra: Australian Government Publishing Service.
- Burke, G. (1997, 20-21 March). *Education and training in Australia: Reform and results*. Paper presented at the conference Different drums, one beat? Economic and social goals in education and training, Mt Evelyn, Victoria.
- Burke, G., & Rumberger, R. (Eds.). (1987). *The future impact of technology on work and education*. London, New York, Philadelphia: The Falmer Press.
- Carmichael Report: See Employment and Skills Formation Council (1992)
- Carr, R. V., Wright, J. D., & Brody, C. J. (1996). Effects of high school work experience a decade later: evidence from the national longitudinal survey. *Sociology of Education*, 69(1), 66-81.
- Caston, G. (1996). *Education and training: Learning and working in a society in flux* (Report of an international seminar on Education and Training for the Workforce: Linking Work and Learning in a Changing Society). Paris: OECD.
- Chapman, B. (1990,). *The labour market*. In Grenville, S (Ed) *The Australian macro-economy in the 1980s*. Proceedings of a conference, Research department, Reserve bank of Australia.
- Chapman, B., & Smith, P. N. (1992). Predicting the long-term unemployed: a primer for the Commonwealth Employment Service. In R. G. Gregory & T. Karmel (Eds.), *Youth in the Eighties. Papers from the Australian Longitudinal Survey Research Project* (pp. 263-281). Canberra: Centre for Economic Policy Research, ANU.
- Cole, P. (1987a). Alternative models of work experience. *Youth Studies*, 6(3), 17-21.
- Cole, P. (1987b). *Revealing work: Some program possibilities* (Monograph 5). Canberra: Curriculum Development Centre.

- Committee of Review on the Victorian Certificate of Education. (1997). *Enhancing their futures: Report of the committee of review on the Victorian Certificate of Education*. (Chair: K L Dow) Melbourne: State of Victoria.
- Commonwealth Schools Commission. (1984). *Participation and equity in Australian schools: The goal of full secondary education*. Canberra: Commonwealth Schools Commission.
- Connell, W. F., Stroobant, R. E., Sinclair, K. E., Connell, R. W., & Rogers, K. W. (1975). *12 to 20 Studies of city youth*. Sydney: Hicks Smith and Sons.
- Coventry, G., Cornish, G., Stricker, P., Cooke, R., & O'Brien, A.-M. (1984). *Part-time work and youth in transition*. Melbourne: Victorian Institute of Secondary Education.
- Cumming, J., & Carbines, B. (1997). *Reforming schools through workplace learning*. Sydney: National Schools Network.
- Curriculum Corporation. (1994). *Vocational education in Australian schools. Report on stage 1 of The vocational education in schools project*. Carlton: Curriculum Corporation.
- Dalziel, E. (1989). *Students at work. School students in part-time employment*. Canberra: Curriculum Development Centre and United Trades and Labour Council of South Australia.
- D'Amico, R. (1984). Does employment during high school impair academic progress? *Sociology of Education*, 57(3), 152-164.
- Dawkins, P., & Norris, K. (1990). Casual employment in Australia. *Australian Bulletin of Labour*, 16(3), 156-173.
- Department of Employment, Education and Training. (1989). *New brooms: Restructuring and training issues for young women in the service sector*. Canberra: Women's Bureau, DEET
- Department of Employment, Education and Training. (1991a). *Retention and participation in Australian schools 1967 to 1990*. Canberra: Australian Government Publishing Service.

- Department of Employment, Education and Training. (1991b). *The labour market relevance of senior secondary schooling*. Canberra: AGPS.
- du Bois-Reymond, M. (1998). I don't want to commit myself yet': Young people's life concepts. *Journal of Youth Studies*, 1(1).
- Dusseldorp Skills Forum. (1997). *School-industry programs. Some comparisons between the states and territories*. Sydney.
- Dustmann, C., Mickelwright, J., Rajah, N., & Smith, S. (1996). Earning and learning: Educational policy and the growth of part-time work by full-time pupils. *Fiscal Studies*, 17(1).
- Dwyer, P. (1991). *The transition factor: A survey of seventeen schools* (Research Report 6). Melbourne: Youth Research Centre, University of Melbourne.
- Dwyer, P., Harwood, A., & Tyler, D. (1998). *Life-patterns, choices, careers: 1991-1998* (Research Report 17): Youth Research Centre, University of Melbourne.
- Dwyer, P., Harwood, A., & Tyler, D. (1999). *Seeking the balance. Risk, choices and life priorities in the life-patterns project 1998-1999* (Working paper 19). Melbourne: Youth Research Centre, University of Melbourne.
- Educational Testing Service. (1990). *Beyond high school: The transition to work*. Princeton, NJ: Educational Testing Service,.
- Employment and Skills Formation Council. (1992). *The Australian vocational certificate training system*. (Chair: L Carmichael). Canberra: National Board of Employment, Education and Training.
- Finch, M. D., & Mortimer, J. T. (1985). Adolescent work hours and the process of achievement. *Research in Sociology of Education and Socialization*, 5, 171-196.
- Finch, M. D., Mortimer, J. T., & Ryu, S. (1997). Transition into part-time work: health risks and opportunities. In J. Schulenberg, J. Maggs, & K. Hurrelmann (Eds.), *Health risks and developmental transitions during adolescence* (pp. 321-344). Cambridge: Cambridge University Press.

Finn Report: See Australian Education Council Review Committee (1991)

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142.

Flatau, P., & Simpson, M. (1996). Part-time youth employment and training: Evidence from the Australian Youth Survey. *Labour Economics and Productivity*, 8(2), 131-162.

Fleming, N., & Marks, G. N. (1998). *Well-being among young Australians: Effects of work and home life for four Youth in Transition cohorts* (Longitudinal Surveys of Australian Youth Research Report 6). Melbourne: Australian Council for Educational Research.

Fullarton, S. (1999). *Work experience and work placements in secondary school education* (Longitudinal Surveys of Australian Youth Research Report 10). Melbourne: Australian Council for Educational Research.

Giddens, A. (1990). *The consequences of modernity*. Stanford: Stanford University Press.

Gilbert, S., Barr, L., Clark, W., Blue, M., & Sunter, D. (1993). *Leaving school. Results from a national survey comparing school leavers and high school graduates 18 to 20 years of age*. Statistics Canada.

Golding, F. (1994). *Compendium of good practice. The role of schools in the vocational preparation of Australia's senior secondary students*. Canberra: AGPS: Schools Council, National Board of Employment, Education and Training.

Gonczi, A. (1997). Future directions for vocational education in Australian secondary schools. *Australian and New Zealand Journal of Vocational Education Research*, 5(1), 77-108.

Gottfredson, D. C. (1985). Is work beneficial to teenagers? *NASSP Bulletin*(February), 66-72.

Graves, B. (1992). Crackdown on after-school jobs. *School Administrator*(March), 16-20.

- Green, G., & Jaquess, S. N. (1987). The effect of part-time employment on achievement. *The Journal of Educational Research*, 80(6), 325-329.
- Greenberger, E., & Steinberg, L. (1986). *When teenagers work. The psychological and social costs of adolescent employment*. New York: Basic Books.
- Gregory, R., & Duncan, R. (1980). High teenage unemployment: The role of atypical labour supply behaviour. *The Economic Record*, 56(155), 316-330.
- Grosse, J. (1993). *Learning at work - working at learning. A qualitative analysis of work-based educational initiatives*. Unpublished Master of Social Science (Social Research), University of Tasmania, Hobart.
- Hakim, C. (1998). *Social change and innovation in the labour market*. Oxford: Oxford University Press.
- Hannan, B., Ferguson, S., Pollock, J., & Reeders, E. (1995). *Charting a course. Students' views of their future*. Canberra: Schools Council, National Board of Employment, Education and Training.
- Harris, R., Willis, P., Simons, M., & Underwood, F. (1998). *Learning the job. Juggling the messages in on- and off-the-job training*. Leabrook, SA: National Centre for Vocational Education Research.
- Hartley, R. (1993, 14-16 April). *Future directions for youth policy: considering the role of families*. Paper presented at the conference Rethinking policies for young people. Towards a national perspective, Melbourne.
- Helms, L. B., Bills, D., & Ozcan, M. (1994). Educators' perspectives on student employment. *Educational Policy*, 8(3), 272-288.
- Hemmings, B., Hill, D., & Kay, R. (1994). Factors influencing the decision to stay on at or leave school. *Youth Studies Australia*, 13(2), 13-16.
- Hewison, A. R. (1998, Feb). Dangers in new VET for schools. *Training Agenda*, 6, 10-11.

- Hobbs, E., & Grant, H. (1991). *Working students. The nature and effects of participation in the workforce by senior secondary students*. Brisbane: Queensland Department of Education.
- Hobbs, S., Lindsay, S., & McKechnie, J. (1996). The extent of child employment in Britain. *British Journal of Education and Work*, 9(1), 5-18.
- Hopkins, C. R. (1993). *Secondary student employment in office and marketing occupations: some job quality considerations* (Occasional Paper 93.3). Brisbane: Queensland University of Technology, Centre for Applied Environmental and Social Education Research.
- Hotchkiss, L. (1986). Work and schools - complements or competitors. In B. K. M. & J. Reisman (Eds.), *Becoming a worker* (pp. 90-115). Norwood, New Jersey: Ablex Publishing Corporation.
- House of Representatives Standing Committee on Employment Education and Training. (1997). *Youth employment: A working solution*. Canberra: The Parliament of the Commonwealth of Australia.
- Howieson, C. (1990). Beyond the gate: work experience and part-time work among secondary-school pupils in Scotland. *British Journal of Education and Work*, 3(3), 49-61.
- Hughes, P. (1987). *The curriculum and work. An overview of the Australian situation* (Monograph 2). Canberra: Curriculum Development Centre.
- Hull, E. (1999). *Student workers: Earning and learning*. Perth: Centre for Curriculum and Professional Development, Murdoch University.
- Jamrozik, A. (1998). Transformation of the youth labour market: An empirical examination 1945-1996. In J. Bessant & S. Cook (Eds.), *Against the odds. Young people and work* (pp. 229-236). Hobart: Australian Clearinghouse for Youth Studies.
- Kablaoui, B. N., & Pautler, A. J. (1991). The effects of part-time work experience on high school students. *Journal of Career Development*, 17(3), 195-211.

- Kalisch, D., & Stretton, A. (1984). *Teenage employment in the public sector: Where have all the jobs gone?* (Working Paper No 44). Canberra: Bureau of Labour Market Research.
- Karmel, P. (1985). *Quality of education in Australia* . Canberra: Quality of Education Review Committee.
- Keating, J. (1995a). *Australian training reform. Implications for schools*. Carlton, Vic: Curriculum Corporation.
- Keating, J. (1995b). *Schools and the labour market: Challenging some assumptions* (Occasional paper 43). Melbourne: Incorporated Association of Registered Teachers of Victoria.
- Keeves, J. P., & Bourke, S. F. (1976). *Australian studies in school performance. Vol 1. Literacy and numeracy in Australian schools: A first report* (ERDC Report 8). Canberra: AGPS.
- Kemp, D. (1996, 2 May). *A modern apprenticeship and traineeship system*. Address to the MTIA National Personnel and Industrial Relations Conference, Canberra.
- Lamb, S. (1996). *Completing school in Australia: Trends in the 1990s* (Longitudinal Surveys of Australian Youth Research Report 1). Melbourne: Australian Council for Educational Research.
- Lamb, S. (1997). *School achievement and initial education and labour market outcomes* (Longitudinal Surveys of Australian Youth Research Report 4). Melbourne: Australian Council for Educational Research.
- Larum, J., & Beggs, J. J. (1989). What drives Australian teenage labour force participation? *Australian Journal of Statistics*, 31A, 125-142.
- Latty, K. R. (1989). *Labour force participation patterns of secondary school students: results of a survey*. Unpublished Master of Economics, University of Sydney, Sydney.
- Lawton, S. B. (1994). *Part-time work and the high school student: costs, benefits and future. A review of the literature and research needs* . Toronto: Ontario Institute for Studies in Education (OISE). Department of Educational Administration.

- Lepani, B., & Currie, J. (1993). *Workplace learning in NSW senior secondary courses*. Sydney: Australian Centre for Innovation and International Competitiveness, University of Sydney.
- Lewin-Epstein, N. (1981). *Employment and attitudes toward working among high school youth*. Chicago: University of Chicago and National Opinion Research Centre.
- Lewis, H. (1990). *Part-time work: Trends and issues*. Canberra: Department of Employment, Education and Training, Women's Research and Employment Initiatives Programs.
- Lewis, P., & Koshy, P. (1998). *Youth employment, unemployment and school participation* (Discussion Paper). Perth: Centre for Labour Market Research, Curtin University of Technology.
- Light, A. (1999) High school employment, high school curriculum, and post-school wages. *Economics of Education Review*, 18 (3) 291-309
- Lillydahl, J. (1990). Academic achievement and part-time employment of high school students. *Journal of Economic Education*, 21(3), 307-316.
- Long, M., Carpenter, P., & Hayden, M. (1999). *Participation in education and training 1980-1994* (Longitudinal Surveys of Australian Youth Research Report 13). Melbourne: Australian Council for Educational Research.
- Looker, E. D. (1993). Inter-connected transitions and their costs: Gender and urban/rural differences in the transitions to work. In P. Anisef & P. Axelrod (Eds.), *Transitions: Schooling and employment in Canada* (pp. 43-64). Toronto: Thompson.
- Looker, E. D., & Dwyer, P. (1998). Rethinking research on the education transitions of youth in the 1990s. *Research in post-compulsory education*, 3(1), 5-23.
- Lowe, G. S., & Krahn, H. (1992). Do part-time jobs improve the labour market chances of high school graduates? In B. D. Warne, K. L. P. Lundy, & L. A. Lundy (Eds.), *Working part-time. Risks and opportunities* (pp. 131-148). New York: Praeger.

- Lucas, R., & Lammont, N. (1998). Combining work and study: An empirical study of full-time students in school, college and university. *Journal of Education and Work, 11*(1), 41-56.
- Lundberg, D. (1997). *Entry-level training*. Leabrook, SA: National Centre for Vocational Education Research.
- Maas, F. (1990). Becoming adult. The effects of prolonged dependence on young people. *Youth Studies, 9*(1), 24-29.
- Main, B. G. M., & Raffe, D. (1983). Determinants of employment and unemployment among school leavers: evidence from the 1979 survey of Scottish school leavers. *Scottish Journal of Political Economy, 30*(1), 1-17.
- Malley, J., Frigo, T., & Robinson, L. (1999). *Case studies of Australian school-industry programs. Volume 1: Summary Report*. Sydney: Australian Student Traineeship Foundation.
- Malley, J., Keating, J., & Robinson, L. (Forthcoming). *An analysis of the implementation of VET in Australian secondary schools*. Melbourne: ACER.
- Marks, G. N. (1998). *Attitudes to school life: Their influences and their effects on achievement and leaving school* (Longitudinal Surveys of Australian Youth Research Report 5). Melbourne: Australian Council for Educational Research.
- Marks, G. N., & Fleming, N. (1998a). *Factors influencing youth unemployment in Australia: 1980-1994* (Longitudinal Surveys of Australian Youth Research Report 7). Melbourne: Australian Council for Educational Research.
- Marks, G. N., & Fleming, N. (1998b). *Youth earnings in Australia 1980-1994: A comparison of three youth cohorts* (Longitudinal Surveys of Australian Youth Research Report 8). Melbourne: Australian Council for Educational Research.
- Marsh, H. W. (1991). Employment during high school: character building or a subversion of academic goals? *Sociology of Education, 64*(July), 172-189.
- Mayer Report: See Australian Education Council (1992)

- McGaw, B. (1997). *Shaping their future. Recommendations for reform of the Higher School Certificate*. Sydney: Department of Training and Education Coordination.
- McKenzie, P. (1998a, 3 November). *International developments in vocational pathways: Lessons for Australia*. Paper presented at the Conference of the South Australian Secondary Principals' Association, Adelaide.
- McKenzie, P. (1998b, 2 December). *The transition from education to work in Australia compared to selected OECD countries*. Paper presented at the Sixth international conference on post-compulsory education and training, organised by the Centre for Learning and Work Research, Griffith University, Gold coast, Queensland.
- McKenzie, P. (1999, 16-18 May). *How to stimulate investment by individuals and enterprises in lifelong learning*. Paper presented at the National Annual Conference of the Victorian Institute of TAFE Administration, Lorne, Victoria.
- McNeal, R. B. (1995). Extracurricular activities and high school dropouts. *Sociology of Education*, 68(January), 62-81.
- McNeal, R. B. J. (1997). Are students being pulled out of high school? The effects of adolescent employment on dropping out. *Sociology of Education*, 70(July), 206-220.
- McNeil, L. M. (1984). *Lowering expectations: The impact of student employment on classroom knowledge* (Program report). Madison: Wisconsin Center for Educational Research.
- McRae, I. (1992). School students in part time work. In R. G. Gregory & T. Karmel (Eds.), *Youth in the Eighties: Papers from the Australian Longitudinal Survey Research Project* (pp. 204-223). Canberra: Centre for Economic Policy Research, Australian National University.
- Merrilees, W. J. (1981). The effect of labour market conditions on school enrolment rates. *Australian Economic Review*, Third quarter, 56-60.
- Meyer, R. H., & Wise, D. A. (1982). High school preparation and early labour force experience. In R. B. Freeman & D. A. Wise (Eds.), *The youth labour problem: its*

- nature, causes and consequences* (pp. 277-347). Chicago: University of Chicago Press.
- Micklewright, J., Rajah, N., & Smith, S. (1994). Labouring and learning: Part-time work and full-time education. *National Institute Economic Review*, 2(May), 73-85.
- Mihalic, S. W., & Elliott, D. (1997). Short- and long-term consequences of adolescent work. *Youth and Society*, 28(June), 464-498.
- Misko, J. (1998). *School students in workplaces: what are the benefits?*. Leabrook, SA: NCVET.
- Mizen, P., Bolton, A., & Pole, C. (1999). School age workers: The paid employment of children in Britain. *Work, Employment and Society*, 13(3), 423-438.
- Mortimer, J., Pimental, E., Ryu, S., Nash, K., & Lee, C. (1996). Part-time work and occupational value formation in adolescence. *Social Forces*, 74(4), 1405-.
- Mortimer, J. T., Finch, M., Shanahan, M., & Ryu, S. (1992a). Work experience, mental health, and behavioural adjustment in adolescence. *Journal of Research on Adolescence*, 2(1), 25-57.
- Mortimer, J. T., Finch, M., Shanahan, M., & Ryu, S. (1992b). Adolescent work history and behavioural adjustment. *Journal of Research on Adolescence*, 2(1), 59-80.
- Mortimer, J. T., & Finch, M. D. (1986). The effects of part-time work on adolescent self-concept and achievement. In K. M. Borman & J. Reisman (Eds.), *Becoming a worker* (pp. 66-89). Norwood, New Jersey: Ablex Publishing Corporation.
- Mortimer, J. T., & Finch, M. D. (Eds.). (1996). *Adolescents, work and family. An intergenerational developmental analysis*. (Vol. 6). Thousand Oaks, London, New Delhi: Sage Publications.
- Mortimer, J. T., Finch, M. D., Dennehy, K., Lee, C., & Beebe, T. (1994). Work experience in adolescence. *Journal of Vocational Education Research*, 19(1), 39-70.
- Mortimer, J. T., Finch, M. D., Ryu, S., Shanahan, M. J., & Call, K. T. (1996). The effects of work intensity on adolescent mental health, achievement, and behavioral

- adjustment: new evidence from a prospective study. *Child Development*, 67(3), 1243-1261.
- Mortimer, J. T., Shanahan, M., & Ryu, S. (1993). The effects of adolescent employment on school-related orientation and behaviour. In R. K. Silbereisen & E. Todt (Eds.), *Adolescence in context: The interplay of family, school, peers and work in adjustment* (pp. 304-326). New York: Springer-Verlag.
- Mortimer, J. T., & Shanahan, M. J. (1994). Adolescent work experience and family relationships. *Work and Occupations*, 21, 369-84.
- Munro, L. (1989). *When teenagers work. Part-time jobs, work experience placements and school work*. Canberra: ACT Minsitry for Health, Education and the Arts.
- Munro, L. P. (1983). *Schooling, part-time work and the occupational destinations of senior secondary students in Canberra*. Unpublished Litt B, Australian National University, Canberra.
- Murphy, G. (1986a). *The nature and incidence of part-time work among Australian secondary school students* (Information Paper No 19). Melbourne: Phillip Institute of Technology.
- Murphy, G. (1986b). *The part-time paid work of secondary school students*. Sydney: NSW Department of Industrial Relations and Employment.
- National Board of Employment, Education and Training. (1992). *Disadvantaged job-seekers: casual, part-time and temporary work*. Canberra: AGPS.
- National Board of Employment, Education and Training. (1994). *The role of schools in the vocational preparation of Australia's senior secondary students: final report*. Canberra: AGPS.
- National Institute of Labour Studies. (1999). *Work experience and the consequences for future career development: An analysis of youth employment in the fast food and supermarket industries* (Unpublished report commissioned by the Women's Research and Employment Initiatives Program (WREIP), in the Department of Employment, Workplace Relations and Small Business.). Adelaide: NILS.

- Nolan, K., & Hagen, R. (1989). *School and work. A report into the employment experiences of school students at two Melbourne high schools*. Melbourne: Job Watch.
- Norris, K., & Simpson, M. (1995). Explaining the growth of part-time and casual employment. In M. Wooden (Ed.), *The growth of part-time and casual work in the youth labour market and the implications for training arrangements*. Adelaide: National Institute of Labour Studies Inc.
- OECD. (1996). *Employment outlook* . Paris: OECD.
- OECD. (1998). *Employment outlook* . Paris: OECD.
- OECD. (2000). *Thematic review of the transition from initial education to working life* . Paris: OECD.
- Owings, J. (1995). *A profile of the American high school senior in 1992* (Statistical analysis report) Washington, DC: National Centre for Education Statistics.
- Peoples, K. (1998). *Who will stand with the young? The place of vocational education and training in post compulsory education* (A discussion paper prepared for the Australian Education Union). Southbank, Vic: Australian Education Union.
- Phillips, S., & Sandstrom, K. L. (1990). Parental attitudes toward youth work. *Youth and Society*, 22(2), 160-183.
- Polesel, J., Teese, R., O'Brien, K., & Unger, S. (1998). *Report on 1998 destinations of 1996 VET in schools students*. Melbourne: University of Melbourne.
- Polk, K., & Tait, D. (1990). Changing youth labour markets and youth lifestyles. *Youth Studies*, 9(1), 17-23.
- Poole, M. E. (1983). *Youth: Expectations and transitions*. Melbourne: Routledge & Kegan Paul.
- President's Science Advisory Committee. (1973). *Youth: Transition to adulthood*. Washington, DC: Government Printing Office.

- Prior, H., & Beggs, J. (1989). Influence of family background on the educational and labour-force outcomes of year 12 school leavers. *Australian Journal of Statistics, 31a*, 99-124.
- Rance, C. (1997, 7 January). Part-time work an asset for students. *The Age*.
- Rance, C. (1998, 27 June). Why it pays to work part-time. *The Age*.
- Resnick, L. (1987). Learning in school and out. *Educational Researcher, 16*(9), 13-20.
- Rich, L. M. (1996). The long-run impact of teenage work experience: a reexamination. *The Review of Black Political Economy, 25*(2), 11-36.
- Robinson, L., Fleming, M., & Withers, G. (1998). *Evaluating the educational progress of young people returning to education and training*. Melbourne: Department of Education Victoria.
- Robinson, L., & Long, M. (1992). Student-workers: New evidence on gender and education differences. *Youth Studies, 11*(3), 14-24.
- Rosenbaum, J. E., & Binder, A. (1997). Do employers really need more educated youth? *Sociology of Education, 70*(1), 68-85.
- Ross, R. (1988). *Teenagers in the labour market 1983-1988* (Discussion paper No 8). Kensington, NSW: Social Welfare Research Centre, University of New South Wales.
- Rudd, P., & Evans, K. (1998). Structure and agency in youth transitions: student experiences of vocational further education. *Journal of Youth Studies, 1*(1), 39-62.
- Ruhm, C. (1997). Is high school employment consumption or investment? *Journal of Labour Economics, 15*(4), 735-776.
- Rumberger, R. (1997, 20-21 March). *Economic and social goals in education and training: Is reconciliation possible? Necessary?* Paper presented at the conference Different drums, one beat? Economic and social goals in education and training, Mt Evelyn, Victoria

- Ruscoe, G., Morgan, J. C., & Peebles, C. (1996). Students who work. *Adolescence*, 31(123), 625-632.
- Ryan, R. (1997). *Vocational education in schools. Review of reseach* . Adelaide: National Centre for Vocational Education Research.
- Safyer, A. W., Leahy, B. H., & Colan, N. B. (1995). The impact of work on adolescent development. *Families in Society*, 76(1), 38-.
- Scharaschkin, R. (1995). *Learning from TRAC. A study of learning practices in three programs providing training in retailing for Tasmanian senior secondary students during 1994* . Hobart: Educational Programs Branch, Department of Education and the Arts, Tasmania.
- Schill, W. J., McCartin, R., & Meyer, K. (1985). Youth employment: its relationship to academic and family variables. *Journal of Vocational Behaviour*, 26, 155-163.
- Schoenhals, M., Tienda, M., & Schneider, B. (1998). The educational and personal consequences of adolescent employment. *Social Forces*, 77(2), 723-761.
- Singh, K. (1998). Part-time employment in high school and its effect on academic achievement. *The Journal of Educational Research*, 91(3), 131-
- Skorikov, V., & Vondracek, F. (1997). Longitudinal relationships between part-time work and career development. *The Career Development Quarterly*, 45(3), 221-235.
- Sloan, J., & Wooden, M. (1984). *Part-time work, school retention and unionization: aspects of the youth labour market* (Working paper series 72). Adelaide: National Institute of Labour Studies.
- Smith, L. (1997). The convergence model for postcompulsory schooling: it's simply not that simple! *Curriculum Perspectives*, 17(3), 1-7.
- Spark, C. (1998). *Vocational education and training in senior secondary schools*. Sydney: Vocational Education and Assessment Centre.

- Spierings, J. (1998). Promises, promises: young Australians and the labour market. In J. Bessant & S. Cook (Eds.), *Against the odds. Young people and work* (pp. 229-236). Hobart: Australian Clearinghouse for Youth Studies
- Steel, L. (1991). Early work experience among white and non-white youth. *Youth and Society*, 22(4), 419-447.
- Steinberg, L., & Dornbusch, S. M. (1991). Negative correlates of part-time employment during adolescence: replication and elaboration. *Developmental Psychology*, 27(2), 304-313.
- Steinberg, L., Fegley, S., & Dornbusch, S. M. (1993). Negative impact of part-time work on adolescent adjustment: evidence from a longitudinal study. *Developmental Psychology*, 29(2), 171-180.
- Steinberg, L. D., Greenberger, E., Garduque, L., & McAuliffe, S. (1982a). High school students in the labour force: some costs and benefits to schooling and learning. *Educational Evaluation and Policy Analysis*, 4(3), 363-372.
- Steinberg, L. D., Greenberger, E., Garduque, L., Ruggiero, M., & Vaux, A. (1982b). Effects of working on adolescent development. *Developmental Psychology*, 18(3), 385-395.
- Stephenson, S. P. J. (1981). In-school labour force status and post-school wage rates of young men. *Applied Economics*, 13, 279-302.
- Stern, D., Finkelstein, N., Urquiola, M., & Cagampang, H. (1997) What difference does it make if school and work are connected? Evidence on co-operative education in the United States. *Economics of Education Review* 16(3), 213-228
- Stern, D., McMillion, M., Hopkins, C., & Stone, J. (1990). Work experience for students in high school and college. *Youth and Society*, 21(3), 355-389.
- Stern, D., & Nakata, Y. (1989). Characteristics of high school students' paid jobs, and employment experience after graduation. In D. Stern & D. Eichhorn (Eds.), *Adolescence and work: influences of social structure, labour markets and culture* (pp. 189-233).

- Stone, J. R., Stern, D., Hopkins, C., & McMillion, M. (1990). Adolescents' perceptions of their work: school supervised and non-school supervised. *Journal of Vocational Education Research*, 15(2), 31-53.
- Sunter, D. (1992). Juggling school and work. *Perspectives on labour and income*. Statistics Canada (Spring), 15-21.
- Sweet, R. (1987). *The youth labour market: A twenty year perspective*. Canberra: Curriculum Development Centre.
- Sweet, R. (1990). *A brief look at some empirical issues associated with the youth labour market* (Discussion paper 243). Canberra: Centre for Economic Policy Analysis, Australian National University.
- Sweet, R. (1991, July). *The youth labour market: The current recession in the context of longer term trends and future options*. Paper presented at the Youth Affairs Congress, Melbourne.
- Sweet, R. (1993). Learning in the workplace: A policy perspective. *Australian TAFE Teacher*, 27(2), 42-50.
- Sweet, R. (1994, 29 October). *Vocational education in upper secondary schools: why? how?* Paper presented at the Mid-year conference of the Federation of Parents and Citizens Associations of New South Wales, Sydney.
- Sweet, R. (1995). Linking schools and workplaces: lessons from Australia and overseas. *The Australian TAFE Teacher*, 29(4), 19-27.
- Teese, R., Davies, M., & Ryan, C. (1997). *Work placement experience: the student perspective*. Melbourne: Educational Outcomes Research Unit, University of Melbourne.
- Thomas, D. J. (1993). Education and economic development: The fundamentals revisited. *Australian Educational Researcher*, 20(2), 95-111.
- Thornton, K. (1998, 5 June). Warning: Jobs can damage A-levels. *The Times Educational Supplement*, pp. 11.

- Tymns, P. B., & Fitz-Gibbon, C. T. (1992). The relationship between part-time employment and A-level results. *Educational Research, 34*(3), 193-199.
- Victorian Industry Education Partnerships. (1999). *Full-time school students part-time workers. A report on the part-time paid and unpaid work of rural and remote secondary school students*. Melbourne: VIEP.
- Watson, I. (1994). 'Music while you work': Teenage women in the Australian labour market, 1947 to 1992. *Australian Journal of Social Issues, 29*(4), 377-406.
- Williams, T. (1988, August). *Education, employment and quality of life*. Paper presented at the XXIV International Congress of Psychology, Sydney.
- Williams, T., & Batten, M. (1981). *The quality of school life*. Hawthorn: ACER.
- Williams, T., Long, M., Carpenter, P., & Hayden, M. (1993). *Year 12 in the 1980s*. Canberra: Department of Employment, Education and Training.
- Wilson, B. (1989). *Early labour market experience of young people. An overview, and proposals for further research* (Working Paper 2). Melbourne: Youth Research Centre, University of Melbourne.
- Wilson, B., Wyn, J., Reeders, E., & Woock, R. (1987). *Education, work and youth policy* (Monograph 10). Canberra: Curriculum Development Centre.
- Wirtz, W. P., Rohbeck, A. C., Charner, I., & Frazer, S. B. (1987). *Intense employment while in high school: Are teachers, guidance counselors, and parents misguiding academically-oriented adolescents?*. Washington, DC: Graduate Institute for Policy Education and Research, George Washington University.
- Withers, G., & Batten, M. (1995). *Programs for at-risk youth: A review of the American, Canadian and British literature*. Melbourne: ACER.
- Wooden, M. (Ed.). (1995). *The growth of part-time and casual work in the youth labour market and the implications for training arrangements*. Adelaide: National Institute of Labour Studies.

Wooden, M. (1996). The youth labour market: characteristics and trends. *Australian Bulletin of Labour*, 22(2), 137-160.

Wooden, M. (1998). The labour market for young Australians, *Australia's Youth: Reality and risk*. Sydney: Dusseldorp Skills Forum.

- Wooden, M., Robertson, F., & Dawkins, P. (1992). Part-time employment and participation and retention in higher education. In R. G. Gregory & T. Karmel (Eds.), *Youth in the Eighties. Papers from the Australian Longitudinal Survey Research Project* (pp. 179-199). Canberra: Centre for Economic Policy Research, ANU.
- Woolmer, B., & Hill, D. (1990). Part time work and future employment. *Youth Studies*, 9(3), 30-35.
- Wright, J. P., Cullen, F. T., & Williams, N. (1997). Working while in school and delinquent involvement: Implications for social policy. *Crime and Delinquency*, 43(2), 203-221.
- www.unisa.edu.au/creew/project5intro.htm. (2000). School students learning from their paid and unpaid work.
- Wyn, J. (1998). Young people and the transition from school to work: New agendas in post-compulsory education and training. In J. Bessant & S. Cook (Eds.), *Against the odds. Young people and work* (pp. 111-118). Hobart: Australian Clearinghouse for Youth Studies.
- Wyn, J., & Dwyer, P. (2000). New patterns of youth transition in education. *International Social Science Journal*(164), 147-159.
- Wyn, J., & White, R. (1997). *Rethinking youth*. Sydney: Allen and Unwin.
- Yap, K.(1991). The student worker.A new adolescent lifestyle. *Youth Studies*, 10(3), 34-38.
- Yap, K. (1998). Learning and earning: Full-time student, part-time worker. In J. Bessant & S. Cook (Eds.), *Against the odds. Young people and work* (pp. 143-150). Hobart: Australian Clearinghouse for Youth Studies.
- Young, A. M. (1979). The difference a year makes in the nation's youth work force. *Monthly Labour Review*, 102, 34-38.

APPENDIX 1: ADDITIONAL TABLES

Table A3.1 Percentages of Year 9 students in part-time work, and hours worked per week, 1995, LSAY

	Per cent		
	Males	Females	Persons
Per cent employed	27.7	23.8	25.7
<i>Sample size</i>	6255	6476	12731
Hours worked per week			
1-5 hours	42.7	39.0	40.9
6-10 hours	32.8	37.2	34.9
11-15 hours	14.4	15.7	15.0
Over 15 hours	10.1	8.2	9.2
Mean hours per week	8.0	8.0	8.0
<i>Sample size</i>	1477	1282	2759

Table A3.2 Percentages of 18-year-olds in both education and employment, selected OECD countries, 1997

	Males	Females	Persons
Australia ^a	23.6	26.4	25.0
Austria	33.1	22.6	27.5
Belgium	1.7	1.2	1.4
Canada ^b	27.6	29.6	28.6
Denmark ^b	57.8	44.5	50.6
Finland ^b	14.2	13.2	13.7
France	11.0	3.8	7.5
Germany ^b	46.0	33.9	40.2
Greece ^b	1.5	0.9	1.2
Ireland ^b	4.8	5.1	4.9
Italy	1.3	0.9	1.1
Luxembourg ^b	4.2	2.6	3.4
Netherlands	45.5	44.6	45.1
Portugal	2.1	2.4	2.3
Spain	2.9	1.8	2.3
United Kingdom	29.8	29.3	29.6
United States	26.4	30.4	28.4
OECD average	19.6	17.3	18.4

a 1994

b 1996

Source: OECD School-to-work database, cited in Bowers, N., Sonnet, A., & Bardone, L. (1999) Giving young people a good start: The experiences of OECD countries. Background report prepared for the conference Preparing youth for the 21st century: The policy lessons from the past two decades, Washington, DC. 23-24 February. Jointly organised by US Departments of Labour and Education and the OECD.

Table A5.1 Types of part-time jobs held by 14 year old school students, and mean hours worked per week by job type, 1989, *Youth in Transition* 1975 cohort

Type of job	Per cent employed			Mean hours worked per week		
	Males	Females	Persons	Males	Females	Persons
Professionals & para-professionals	2	2	2	5.3	4.0	4.5
Clerks	1	1	1	6.4	6.3	6.3
Salespersons	22	51	34	9.3	8.3	8.7
Personal service workers	1	16	7	5.0	6.0	5.9
Tradespersons, plant & machine operators	1	-	1	10.9	5.5	10.6
Labourers and related workers	74	30	56	8.3	6.9	8.0
<i>Trades assistants, factory hands</i>	14	5	10	11.0	7.2	10.2
<i>Cleaners</i>	8	4	6	8.0	6.2	7.5
<i>Storepersons</i>	4	1	2	12.1	9.1	11.9
<i>Kitchenhands</i>	7	7	7	10.9	8.4	9.8
<i>Delivery persons, attendants</i>	21	6	15	5.1	4.5	5.0
<i>Farmhands</i>	7	3	5	13.4	9.1	12.3
<i>Nursery workers and gardeners</i>	9	1	6	6.2	3.1	6.0
<i>Other labourers</i>	6	4	5	7.2	6.9	7.1
Total per cent	100	100	100			
Mean hours worked per week				8.5	7.4	8.0
<i>Sample size</i>	794	556	1350	641	533	1174

Table A7.1 Major activities of sample members in October, 1984, by previous employment status during secondary school., 1965 *Youth in Transition* cohort

Activity at age 19 in 1984	Employment status during secondary school	
	Non-workers	Workers
<i>Full-time student</i>		
Employed	9.6	15.9
Not employed	21.8	10.3
<i>Non full-time student</i>		
Employed full-time	53.0	60.5
Employed part-time	4.9	6.1
Unemployed	6.5	5.3
Not in labour force	4.3	2.0
<i>Total per cent</i>	<i>100.0</i>	<i>100.0</i>
<i>Sample size</i>	<i>1222</i>	<i>646</i>

Table A7.2 Logistic regression analysis of effects of working during secondary school on likelihood of unemployment, labour force participants at age 19 in 1984, 1965 *Youth in Transition* cohort

Independent variables		Model 1	Model 2
Gender			
(<i>cf</i> Females)	Males	- 0.06	0.18
Ethnic background			
(<i>cf</i> English-speaking)	Non-English speaking	0.21	0.20
Parental education			
(<i>cf</i> Primary & some secondary)	Completed secondary	- 0.22	- 0.41
	Postsecondary	0.22	- 0.02
Family wealth			
(<i>cf</i> Poorest quartile)	Middle 50%	- 0.40	- 0.74 *
	Wealthiest quartile	- 0.45	- 0.05
School type in post-compulsory years			
(<i>cf</i> Government)	Catholic	- 0.22	- 0.38
	Independent	- 1.35	- 1.92
Early school achievement (at age 14)			
(<i>cf</i> Lowest quartile)	Middle 50%	- 0.49 *	0.02
	Highest quartile	- 0.48	0.06
School completion			
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	- 0.80 **	- 0.84 **
Post school education			
(<i>cf</i> No post school education)	Post school education	- 1.03 ****	- 1.02 **
Employment in secondary school			
(<i>cf</i> Non-workers)	Part-time worker in Yr 10-12	0.04 ns	-
	Part-time worker in Yr 11	-	- 0.69 *
<i>N</i>		<i>1084</i>	<i>803</i>

+ p < .1, * p < .05, ** p < .01, *** p < .001, **** p < .0001

Table A7.3 Percentage of time spent unemployed since leaving school, by previous employment status during secondary school, labour force participants at age 19 in 1984, 1965 *Youth in Transition* cohort

Per cent of time unemployed since leaving school	Employment during secondary school	
	Non-workers	Workers
No time unemployed	48.9	68.4
Less than 10 per cent	16.6	15.3
11-20 per cent	13.1	6.1
21-30 per cent	8.1	3.5
31-40 per cent	5.0	2.1
41-50 per cent	3.2	2.3
More than 50 per cent	5.3	2.4
<i>Total per cent</i>	<i>100.0</i>	<i>100.0</i>
<i>Sample size</i>	<i>657</i>	<i>379</i>

Table A7.4 Multiple regression analysis of effects of working during secondary school on percent of time spent unemployed since leaving school, labour force participants at age 19 in 1984, 1965 *Youth in Transition* cohort

Independent variables		Model 1	Model 2
Gender			
(<i>cf</i> Females)	Males	- 0.23	0.21
Ethnic background			
(<i>cf</i> English-speaking)	Non-English speaking	0.44	2.47
Parental education			
(<i>cf</i> Primary & some secondary)	Completed secondary	- 2.12 +	- 2.78 +
	Postsecondary	- 1.01	0.48
Family wealth			
(<i>cf</i> Poorest quartile)	Middle 50%	- 5.49 ****	- 5.04 **
	Wealthiest quartile	- 6.23 ***	- 5.43 *
School type in post-compulsory years			
(<i>cf</i> Government)	Catholic	0.06	- 1.47
	Independent	- 1.67	- 1.40
Early school achievement (at age 14)			
(<i>cf</i> Lowest quartile)	Middle 50%	- 0.37	3.38 +
	Highest quartile	- 2.89	0.88
School completion			
(<i>cf</i> Didn't complete Year 12)	Completed Year 12	- 3.14 *	- 4.45 **
Post school education			
(<i>cf</i> No post school education)	Post school education	- 7.50 ****	- 7.06 ****
Employment in secondary school			
(<i>cf</i> Non-workers)	Part-time worker in Yr10-12	- 4.10 ***	-
	Part-time worker in Yr 11	-	- 7.45 ****
R^2		.1005	.1156
N		985	739

+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

Notes

- 1 *Achievement measured at age 10, rather than age 14*
- 2 *Range of control variables do not include location and parental occupation, because of very high incidence of missing data.*

**APPENDIX 2: VARIABLES USED IN REGRESSION ANALYSES,
1975 YOUTH IN TRANSITION COHORT**

Student background variables:

<i>Ethnic background</i>	refers to father's country of birth, reported in two categories - born either in Australia or overseas in an English speaking country (coded 0), compared with born overseas in a non-English speaking country (coded 1).
<i>Location.....</i>	of school attended at age 14. The population density of the local government area in which the school was located was used to divide schools into quartiles, with the quartile having the lowest population density considered to be 'rural'. Non-rural was coded 0, rural as 1.
<i>Parental occupation.....</i>	is based on father's occupation, but if information on father's occupation was missing, then mother's occupation was used. The occupational status of the respondent's parents was coded using the ANU2 occupational prestige scale, and condensed to three categories - professional and managerial; white collar and skilled; and semi-skilled and unskilled. The lowest status category (semi-skilled and unskilled) was the excluded category.
<i>Parental education.....</i>	is based on respondent's report of mother's highest level of education. If information for mother's education was missing, father's education was used. This is reported in three categories, with the lowest category (primary or some secondary education) the excluded category.
<i>Family wealth.....</i>	is based on a factor scale derived from respondents' reports on aspects of the family home - the nature of their accommodation and on the possession of certain consumer durables - referenced to the time that sample members were at secondary school. Scores on this index were divided into quartiles, and the middle two quartiles combined. Lowest wealth quartile the excluded category
<i>School type</i>	refers to the last year of secondary school. Students who attended a Government school were the excluded category.
<i>Early school achievement</i>	was measured by standardised tests in literacy and numeracy administered in school at age 14, and reported in quartiles, with the middle two achievement quartiles combined. Lowest quartile the excluded category.
<i>Educational aspirations.....</i>	is based on the year level at school which sample members intended to complete, when asked at age 14. Students intending to complete Year 12 were the excluded category.

INDEPENDENT VARIABLES

Part-time work at school

- Work status**.....
- Students who were employed in a part-time job in October of any one particular school year – in Year 9, Year 10, Year 11 or Year 12 – compared with non-workers in those Years
 - Students who had a part-time job in October throughout any of their school years, compared with students who did not have such a job in any school year.
 - Number of years that a student had a part-time job in October while at school.
- Work intensity**.....
- Hours worked per week in October job, with students classified as
- non-workers;
 - moderately involved (working 1-10 hours per week); or
 - highly involved workers (working more than ten hours per week).
-

DEPENDENT VARIABLES

Educational outcomes

- School completion**.....
- Sample members were categorised according to whether or not, by the age of 19 in 1994, they had completed Year 12. When students who comprised the 1975 birth cohort of *Youth in Transition* were first surveyed in their schools at age 14 in 1989, the majority were in Year 9, although, because of state differences in the age of school commencement, a substantial number was also doing Year 8 and a few were in Year 10. The modal year of school completion was 1992, with a smaller number of students doing so in 1993, while a few had been in Year 12 in 1991.
- Year 12 achievement**.....
- Students' self-reported tertiary entry scores were used to allocate a percentile ranking, providing an approximate overall measure of Year 12 results.
- Post-school study**.....
- Two mutually exclusive categories of post-school study were established: higher education, and further education and training (that is, university and TAFE). The small number of students who had participated in study both at university and at TAFE were included in the first category.
- Post-school study was also used as a control variable in analyses of labour market outcomes.
-

Labour market outcomes

<i>Unemployment.....</i>	Employment status in October 1994 and October 1996. Full-time students were not counted as labour force participants.
<i>Extent of unemployment</i>	<p>The <i>Youth in Transition</i> questionnaire, mailed out at the end of the year, contained a calendar in which respondents indicated their activity for each month of that year; the response categories, which are not mutually exclusive, were <i>working full-time, working part-time, home duties, not working but looking for work, not working, a full-time student, a part-time student, and other</i>. Data on the activities of respondents on a month by month basis over a number of years was used to calculate the amount of time they had been unemployed, from the time of leaving school up to the end of 1994 – the total number of months that had been spent <i>not working but looking for work</i> was expressed as a proportion of the time since finishing school.</p> <p>This was done for a subset of sample members only - those who were labour force participants in October 1994, and for whom these activity data were available for the three years 1992, 1993 and 1994. Full-time students were not counted as labour force participants in October 1994. Sample members who were at school in October of any year were considered to be full-time school students for the whole of the year, and so were not counted as unemployed for any part of that year. Nor were other, post-school full-time students considered as unemployed in any month that they indicated their full-time student status.</p>



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