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ABSTRACT

The extent and nature of Australia's school-industry programs in 1996 were examined through a survey of 1,868 government and nongovernment schools and programs. It was conducted using a questionnaire similar to that which had been used in 1995. According to the 1,453 completed questionnaires (response rate 78%) by 11th and 12th grade students, 62% of schools provided school-industry programs in 1996 (16% more than in 1995). Programs with fewer than 10 days in the workplace were increasing fastest. Of the programs with more than 20 days in the workplace, 29% were in schools located in low or very low socioeconomic areas and 17% were in very high socioeconomic areas. No relationship between distribution of programs across industry groups and duration of work placements was detected. Rates of participation in school-industry programs by business size were as follows: microbusiness, 30%; small business, 31%; medium business, 22%; and large business, 17%. As in 1995, nearly all programs involved work placements during normal school days or a mixture of school days and time outside of school. In 77% of programs, supervisors trained students during their work placements. Fourteen percent of programs had formal arrangements for helping graduating students find jobs or places in further education, and 48% had informal arrangements. (Contains forty tables/figures and 32 references. The questionnaires are appended.) (MN)

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1996

SCHOOL-INDUSTRY PROGRAMS

NATIONAL SURVEY

John Ainley and Marianne Fleming
Australian Council for Educational Research

Commissioned by

Australian **S**tudent **T**raineeship **F**oundation

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The Australian Student Traineeship Foundation was established in 1994 to promote quality workplace learning programs for senior secondary school students. Its role, as a catalyst in the development of these programs, is to support local and regional industry-school partnerships as they build bridges between the classroom and the workplace. This report is published with a view to disseminating research and information that will inform industry, schools and others interested in the development of these partnerships.

The views expressed in this report represent those of the authors, and do not necessarily represent the views of the Australian Student Traineeship Foundation.

Contents

Tables

Figures

1

Introduction

In the present Australian context, school-industry programs are educational courses for Year 11 and/or Year 12 students that require students to spend time in the workplace as part of a structured experience that is recognised as part of their formal studies. These programs constitute an important area of development in Australian schools in recent years: in terms of numbers and in terms of what might be learned about senior secondary schooling. School-industry programs aim to provide for "learning about the world of work" and to provide for "learning employment-related skills". Structured learning in the workplace, that is assessed and accredited as part of school work, is the central means by which these objectives are pursued. The programs also aim to nurture links to the world of work and provide a basis for entry into programs of further education and training.

This report is based on the second national survey of the extent and characteristics of those programs. It has as its principal aim the monitoring of the scale and characteristics of school-industry programs and is based on information from schools which enrolled students in Years 11 and 12 during 1996. The information encompasses the extent to which school-industry programs are provided, the level of participation by students in these programs, the nature of the workplace learning incorporated in the programs, the ways in which the programs are organised within schools and the linkages between school-industry programs and work or further education and training. As this is the second national survey on this topic, information is compared with corresponding data from the 1995 survey wherever possible. As for 1995, school-industry programs were defined as programs which involved students from Years 11 and/or 12, and in which students spend time in the workplace as part of the program. In addition, to be considered a school-industry program, students had to be "currently involved in the program". The survey was commissioned by the *Australian Student Traineeship Foundation.*

Context

The emergence of school-industry programs has taken place in a context of historically high levels of participation in the upper secondary years; changes in the opportunities for full-time work by young people; a recognition of the consequences of deferred entry to work for individual development; and new considerations of student learning which emphasise the importance of the context in which learning takes place.

Staying on at school

Through the 1980s there was a growth in participation rates in the upper secondary school years: from 1983 to 1992, apparent retention rates to Year 12 rose from 35 per cent to 77 per cent, although it has since declined to 71 per cent in 1996. Although participation in extended formal schooling confers a number of benefits on individuals, a major concomitant consequence has been a deferral of entry to the workforce for many young people. For a proportion of those people this has resulted in a restriction on the opportunities to learn about the world of work and to learn employment-related skills through working in a job.

Entry to the world of work

Concurrent with a rise in the holding power of secondary schools there has been a change in the nature of opportunities for full-time work by young people. During the late 1970s rising levels of unemployment impacted most dramatically on the youth labour market: the number of full-time jobs held by young people fell significantly over the past 20 years even at a time when the number of full-time jobs held by those over the age of 20 years has grown (Sweet, 1993). In staying longer at secondary school, young people were not just responding to a decline in the availability of jobs but to a view that their long term employment prospects would be shaped by the level of education and skills which they attained in their youth. Studies of young people remaining at school, and public opinion polls, consistently show that young people remain at school in the expectation that it will help them get a job or provide the basis for a career (Ainley & Sheret, 1992).

Being full-time school students for a longer time has meant that young people experience a longer period of economic dependence and fewer opportunities to interact with a range of adults as work colleagues. Some time ago Coleman et al. (1974) contended that, in order to be able to develop, young people needed to be given responsibility for making decisions. He argued that an important part of the maturation of youth involved working with people of different ages in responsible interdependent activity. Along similar lines, Erikson (1968) argued that the experience of work during adolescence provided a valuable contribution to identity formation through which individuals come to know themselves in relation to their own capacities.

Learning work-related skills

There has also been some concern with the effects of having a larger percentage of youth in school rather than work on the quality of skills that are developed. A lack of participation in work-like environments may be detrimental in terms of the cognitive development of many young people. One writer suggested that school learning differs from other learning by

being based around: individual rather than shared understanding; thinking about abstract issues rather than using available tools to solve problems; the manipulation of symbols rather than the application of contextualised reasoning; and generalised rather than situation-specific competencies (Resnick, 1987). Most importantly, Resnick (1987:18) argued that "educating people to be good learners in school settings alone may not be sufficient to help them become strong out-of-school learners" and that "modifying schooling to better enable it to promote skills for learning outside school may simultaneously renew its academic value". She observed that successful programs designed to teach thinking skills, learning skills and higher-order cognitive skills incorporated three key features: characteristics of out-of-school learning (shared intellectual work, joint accomplishment of tasks, the elements of a skill acquiring meaning in the context of the task); aspects of apprenticeships (student observation and commentary and allowing skills to build in an incremental way as a result of sharing tasks); and having a basis in particular bodies of knowledge.

A perspective from overseas

In many western countries interest in the transition from school to work was quickened over the past two decades by the advent of high levels of youth unemployment. Although youth unemployment remains an important issue in these countries there is now an even wider concern with the transition from school to work. One specific issue has been concerned with the extent to which schools provide opportunities for students to learn about work. School-industry programs have parallels in other countries such as the United States and Scandinavia.

In the United States, cooperative vocational education has been part of secondary education for many years. It is a program which combines academic study with monitored and credit-bearing (often paid) work. The sequencing may either be in the form of alternating terms (of 10 to 13 weeks) in school and work or parallel arrangements, where students attend school in the morning and work in the afternoon (Ascher, 1996; Athanasou, 1996). In 1990 it involved approximately 8 per cent of juniors and seniors in high school [down from 11 per cent in 1981-82] (US General Accounting Office, 1991) and is provided in nearly half of all high schools (Athanasou, 1996). Evidence on the outcomes of cooperative education at high school level is mixed but there appear to be gains in some areas of social development (Ascher, 1996) and the programs are favourably regarded by the participants (Athanasou, 1996). It has been argued (Taylor, 1995), that cooperative education has greater potential than any other delivery system for developing the high performance competencies and work-related skills identified in the United States Department of Labour report: *Learning a Living: A Blueprint for High Performance* (1992).

Recent initiatives in upper secondary education in Sweden have provided a range of three-year vocationally-oriented national programs (which also confer eligibility for entry to higher education); with the possibility of individual variations to match local industry profiles (Sweet, 1995). Core studies (e.g. Swedish, English, Mathematics, Science, Arts, etc.) form approximately one-third of all programs and approximately one-half of the time is spent on vocational subjects specific to an industry group (organised around a set of modules). There is a further requirement that 15 per cent of the learning time in these programs must be spent in structured learning in the workplace, where the young people are to be regarded as students rather than employees (Sweet, 1995). Sweet observes that this means that the workplace is to be seen as part of the learning process and not simply a place where students practice. It requires the school to guarantee access to workplace learning for a majority of its upper secondary students and to define a more formal role for the workplace as a classroom (Sweet, 1995). A similar reform of upper secondary education has been implemented in Norway (Briseid, 1995).

Learning about work: other channels

Young people learn about the world of work through various channels. Two that have been important are the experience of a part-time job and participation in a program of work experience.

Part-time work

Part-time work by school students is significant in a small group of western countries: the United States (44 per cent), Canada (41 per cent), the United Kingdom (45 per cent), Denmark (52 per cent) and Australia (37 per cent) (OECD, 1990). These official figures contrast with countries such as France where the corresponding figure is less than 5 per cent or Germany where the figure is between 5 and 10 per cent.

In Australia in 1989 nearly one-quarter (24 per cent) of Australian 14-year-old students were engaged in part-time paid employment (Robinson & Long, 1992: 15). Participation in part-time employment was slightly higher for males (28 per cent) than females (21 per cent) at the age of 14 years. More recent analyses, as this cohort has moved through school, show that overall participation in part-time work had risen to 35 per cent of 17 year-olds and the relative position of males and females had reversed (31 per cent of males compared to 41 per cent of females) (Robinson, 1996). On average, students who were engaged in part-time work worked for eight to nine hours per week. These data are broadly consistent with those compiled by the Australian Bureau of Statistics (ABS, 1990). The ABS data also indicated that participation in part-time work increases from 23 per cent at the age of 15 years, through 31 per cent at 16 years to 32 per cent at age 17.

The jobs most commonly held by school students in 1989 included sales (34 per cent), delivery people and attendants (15 per cent), factory and trade work (10 per cent) and cleaning (6 per cent) (Robinson & Long, 1992: 19). Analyses of the *Youth in Transition* data also indicated that students with part-time jobs had average (in reading) or slightly above average (mathematics) levels of school achievement. However, the pattern was different for girls than for boys. Whereas girls with part-time jobs had higher than average levels of achievement, boys with part-time jobs tended to have lower levels of achievement.

Studies of the effects of participation in part-time work among students in the United States have suggested mixed, even contradictory, results in terms of short-term outcomes such as school performance and school completion (e.g. Steinberg & Dornbusch, 1991), although D'Amico (1984) suggested that detrimental effects were associated only with students who worked very long hours in their part-time jobs. However, it does appear that there are positive outcomes in terms of early career attainment (income and employment) (Marsh, 1991) and a variety of labour force outcomes (labour force participation, employment status) (Carr, Wright & Brody, 1996). The positive effects of part-time work on subsequent labour market outcomes might suggest that students do learn something about the world of work through part-time employment. This suggests a need to identify what is learned in those jobs and to take this into account when developing school programs concerned with learning about work.

Work experience programs

One of the ways in which general secondary schools provide for students to learn about work is through work experience programs. Work experience programs have been defined as "schemes in which people experience work tasks in work environments but without taking the full identity of the worker" (Watts, 1983). Typically these refer to programs in which school students spend a limited time in a workplace with the intention of providing an orientation to the world of work in a general field but without a planned program of skill development.

Eggleston (1982) notes that these programs take many forms and describes programs in the United Kingdom through which arrangements are made with local industry to provide for students to spend time out of school in a workplace learning about the nature of the work and arrangements for work in that industry. Most schools report favourable outcomes from these projects in terms of links between schools and industries and the opening of previously unknown employment opportunities. There is evidence of favourable reactions from participants with attendance levels being higher than in regular school activities. Eggleston also describes the three stage program of work experience in Switzerland based on short visits to enterprises, extended conversations in the workplace and experiences of three to six days in the workshop (called a schnupperlehre or "sniff of

learning"). Similar strategies are reported for Austria through one week ("give it a try") apprenticeships and work in simulated youth towns in Denmark. These programs are primarily concerned with providing an orientation to the world of work and tend to be located in the early or middle years of secondary school.

In Australia work experience programs began in the late 1960s and early 1970s in schools (Cole, 1979: 31-42). By the early 1980s, work experience programs were established features of school programs and functioned under guidelines often with the support of advisers or kits of materials. Data gathered as part of the ACER *Youth in Transition* surveys of a national sample of 16-year-olds in 1986 indicated that some 89 per cent of young people had participated (84 per cent), or expected to participate (5 per cent), in work experience programs during secondary school (93 per cent in government schools, 91 per cent in Catholic schools and 77 per cent in independent schools); and that on average, the programs were of eight days' duration. These data are consistent with those published by the *Ministerial Review of Work Experience* in Victoria (Victoria, 1988) and the evaluation of work experience programs conducted in Queensland (Hobbs, 1982).

Evans and Poole (1992) characterise work-experience programs as being partly concerned with vocational education (especially in relation to the character of workplaces, knowledge about particular jobs and related skills, and the formulation of vocational goals) and partly concerned with the social and life skills in the adult world generally (especially in relating to management and other workers). Evans and Poole found that students who participated in work experience rated those programs highly in terms of value for future employment and enjoyment. Students also reported a sense of satisfaction with work experience in terms of gains in information, experience in and knowledge of specific job-related skills, and perceptions of their own competence in these skills: findings were consistent with other research. However, the authors concluded that:

> *As a vehicle for helping students to develop other life skills or greater awareness of the nature of work, it would appear that there needs to be much more reflective activity in the school or college to make these programs more successful. In terms of the development of cognitive skills, they may be far too short to have a useful contribution.*
>
> (Evans and Poole, 1992: 122)

Summary

School-industry programs represent a response to issues involved in the transition from school to work that was adopted rapidly over 1994 and 1995. The programs are intended to provide for the development of skills and orientations in a more intensive way than work-experience programs

and in a more structured way than the part-time jobs that some students have. School-industry programs in Australia have a number of features similar to programs overseas but they have been developed in response to Australian conditions largely independently of these overseas programs. Moreover most have been developed at local level and there are variations between schools, sectors and States in what is done and how it is done. This variation means that there is much to be learned from the practice of others, provided it is documented systematically.

2

The 1996 survey

The interpretation of the results of any survey depends on a knowledge of its methodology. It is important to know how data were gathered, how the survey instruments were structured, the design of the sample and the response rate achieved. The present survey was conducted among all schools with students in Years 11 and 12 using a mailed questionnaire to be completed by the principal or coordinator of school-industry programs.

The questionnaire

The questionnaire used for the 1996 survey of school-industry programs was based on the experience of the 1995 survey. It was revised on the basis of that experience and a series of extensive consultations with ASTF State Coordinators and staff in education authorities throughout Australia. The 1995 questionnaire had resulted from a period of fieldwork in schools (including that conducted by James Athanasou) through which the questionnaire was developed and refined so as to ensure that the data obtained would be a valid reflection of policy and practice in the area (Ainley & Fleming, 1995).

As for the 1995 survey there were two components in the questionnaire. The first component was called the *School Questionnaire* and was a brief instrument which asked about the type of school and its region, enrolment levels in Years 11 and 12, and whether, and how many, school-industry programs were provided or planned. Schools which did not provide any school-industry programs could complete this component in just a few minutes. The second component was the *Program Questionnaire*. It sought details about all the programs provided through the school. Copies of the questionnaires are attached as Appendix A.

The *School Questionnaire* defined the characteristics of school-industry programs as follows:

- the program involves Year 11 and/or Year 12 students;
- students spend time in the workplace as part of the program; and
- students are currently enrolled in the program.

Table 1 Response statistics for survey of school-industry programs

State and System	Number Despatched	Number Returned	Percentage Return
New South Wales	632	459	73
Government	424	299	71
Non-government	208	160	77
Victoria	467	385	82
Government	295	238	81
Non-government	172	147	85
Queensland	331	264	80
Government	201	153	76
Non-government	130	111	85
South Australia	180	153	85
Government	125	107	86
Non-government	55	46	84
Western Australia	188	137	73
Government	119	84	71
Non-government	69	53	77
Tasmania	30	26	87
Government	14	12	86
Non-government	16	14	88
Northern Territory	19	15	79
Government	12	11	92
Non-government	7	4	57
ACT	21	14	67
Government	12	7	58
Non-government	9	7	78
TOTAL	**1868**	**1453**	**78**

Procedures

The first questionnaires (with a reply-paid envelope) were mailed to schools in mid-September 1996. There was a systematic process of follow-up of non-respondents. Reminders (with replacement questionnaires) were sent to those schools that had not replied near the end of October. A second reminder was sent in mid-November and facsimile messages were sent in early December.

Response rates

The overall response rate to the survey was 78 per cent (not quite as high as the 83 per cent response obtained in 1995). In total, 1 453 of the 1 868 schools contacted returned completed questionnaires. Consequently, some confidence can be placed in the results that are reported.

Table 1 records the percentage returns from each State separately for government and non-government schools. The highest level of response for a State or Territory was 87 per cent from schools in Tasmania and the lowest was 67 per cent from schools in the Australian Capital Territory.

Summary

The 1996 survey was conducted so as to establish information about the extent and nature of school-industry programs throughout Australia. It was conducted using a questionnaire similar to that which had been used in 1995. All Australian schools with students in Years 11 and 12 were invited to participate and 78 per cent of those schools responded to the invitation. By any survey standards, this constitutes a high response rate and provides a basis for confidence that the data validly reflect the state of school-industry programs in Australia.

3

School provision of programs

The national survey of school-industry programs for 1995 indicated that some 46 per cent of schools throughout Australia provided school-industry programs as part of the curriculum for students in Years 11 and 12. The 1996 survey indicated that 62 per cent of schools provided school-industry programs. In other words, the growth in the provision of school-industry programs that was noted in 1995 continued into 1996. In terms of an estimated number of schools, this represented approximately 300 more schools providing school-industry programs: from 862 schools in 1995 to 1158 schools in 1996.

Any interpretation of these data should recognise the breadth of programs included. For a program to qualify under the definition, there was no minimum time required in the workplace and there was no specification of the nature of the learning provided in the workplace. A school could register as providing a school-industry program with quite a modest amount of workplace time. The definition provided for the 1996 survey was the same as in 1995: the program needed to involve Year 11 and/or Year 12 students; students needed to spend time in the workplace as part of the program; and students needed to be currently enrolled in the program. Since the overall figure for provision is made up of a diverse compilation of programs, it is important to delve behind the overall pattern.

This section of the report maps the extent of school-industry programs by considering information at school level. It uses two types of index. The first is the percentage of schools in a given State or sector that provide school-industry programs. This provides a comparative indication of the scale of provision between States and sectors of different size. The second is the estimated number of schools providing school-industry programs. This provides an absolute indication of the scale of provision. For each of these indexes it is possible to investigate programs involving different amounts of time in the workplace.

Percentages of schools with programs

It has been noted above that 62 per cent of schools provided school-industry programs during 1996; a growth of 16 percentage points (or approximately a one-third increase) since 1995.

Table 2 Percentage of schools providing school-industry programs by State and sector: 1995 and 1996

State	All Schools		School Sector					
			Government		Catholic		Independent	
	1995	1996	1995	1996	1995	1996	1995	1996
New South Wales	60	70	74	85	62	68	19	19
Victoria	33	52	45	65	16	49	8	15
Queensland	45	62	55	69	41	69	23	36
South Australia	32	61	38	65	14	70	17	35
Western Australia	52	64	61	71	73	70	6	35
Tasmania	30	61	46	92	29	80	0	11
Northern Territory	41	73	58	82	0	50	0	50
ACT	67	79	90	86	0	100	50	33
Australia	**46**	**62**	**58**	**74**	**38**	**64**	**16**	**25**

Table 2 contains details of the provision of school-industry programs by State and sector.

Differences among States

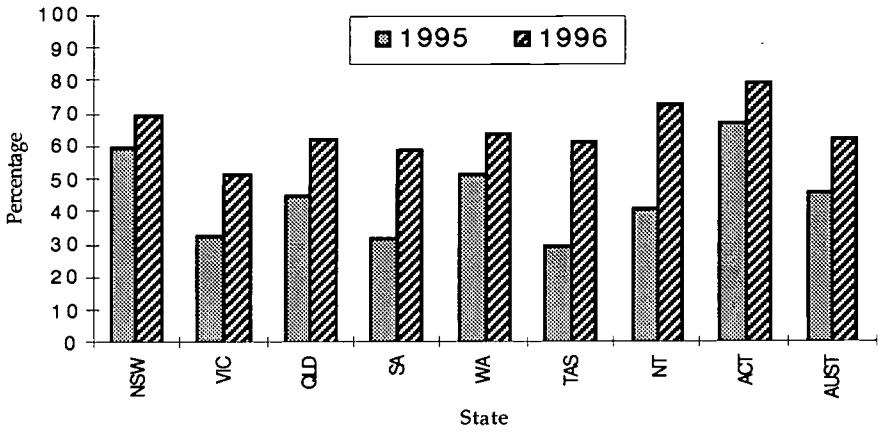
In 1996 there was no State or Territory in which fewer than half the schools provided some form of school-industry program. Provision of school-industry programs grew in all States and Territories between 1995 and 1996. Figure 1 indicates provision levels for each State in 1995 and 1996.

Schools in the Australian Capital Territory, the Northern Territory (although both of these Territories contain only a small number of schools) and New South Wales had the highest levels of provision of school-industry programs in 1996. In Tasmania the provision level is probably higher than that shown, since 100 per cent of senior secondary colleges (which contain the overwhelming majority of government school students at this level) provided school-industry programs. Substantial increases in provision between 1995 and 1996 were recorded in Tasmania (from 30 to 61 per cent) and South Australia (from 32 to 61 per cent).

Differences among school sectors

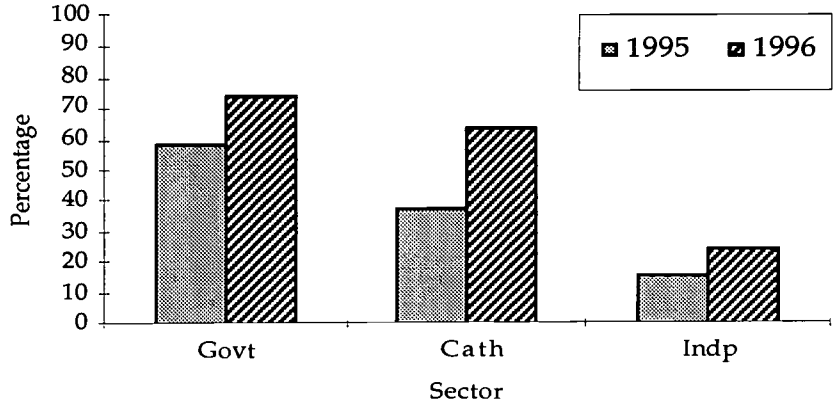
As noted in 1995, there were substantial differences among school sectors in the provision of school-industry programs. In 1996 school-industry programs were provided in 74 per cent of government schools, 64 per cent of Catholic schools and 25 per cent of independent schools.

Figure 1 Percentage of schools providing school-industry programs by State



Growth in provision between 1995 and 1996 was observed in all sectors but was most noticeable in the Catholic sector. In the Catholic sector provision grew from 38 to 64 per cent of schools. In the government sector growth was from 58 to 74 per cent and among independent schools provision grew from 16 to 25 per cent. These data have been represented in Figure 2.

Figure 2 Percentage of schools providing school-industry programs by sector



Other characteristics of schools

The provision of school-industry programs varied according to some other characteristics of schools: location and size, as well as socioeconomic and coeducational status. Data relating to some of these factors are shown in Table 3.

Socioeconomic status

There was a slight association between the provision of school-industry programs and the socioeconomic status of the area in which the school was located. The postcode of the school was used to identify the socioeconomic status of the area using the Australian Bureau of Statistics Index of Relative Socioeconomic Disadvantage (IRSED). Schools were divided into five equal-sized groups based on this index.

- The two lowest ranked areas on socioeconomic status had the most frequent provision of school-industry programs (69 and 72 per cent of schools);
- The middle group had a provision level (64 per cent) about average; and
- The two highest groups had provision levels below average (60 and 47 per cent).

Table 3 Percentage of schools providing school-industry programs by various school characteristics

Variable	Category	Percentage of Schools providing Programs
Location	Capital city	56
	Country city (> 25 000)	67
	Country town (1 000-25 000)	67
	Rural area	45
Gender composition	Coeducational	63
	All girls	53
	All boys	43
Yr 11 + 12 cohort size	Smallest quarter (≤ 98)	49
	Second quarter (99-183)	60
	Third quarter (184-270)	67
	Largest quarter (≥ 270)	67

Location

School-industry programs were more extensively provided by schools in country cities (with a population more than 25 000) and country towns (with populations between 1 000 and 25 000) than in either capital cities or rural areas; possibly because of strong links between schools and industry in regional locations.

A more detailed analysis by region was undertaken. In this analysis the provision of school-industry programs in each of the 93 labour market regions was undertaken, and those in which three-quarters of schools provided school-industry programs were identified. The locations where there was a strong presence of these programs were:

- Parts of the Sydney metropolitan area (the St George-Sutherland, Canterbury-Bankstown, Fairfield-Liverpool, Central West and Outer South West regions);
- Areas of New South Wales in and adjacent to the Hunter Valley (the Hunter, Gosford-Wyong, and mid-North Coast regions);
- Other rural locations in New South Wales (South-East, Murrumbidgee and Richmond-Tweed regions);
- Some sections of non-metropolitan Victoria (the Western District and Gippsland regions);
- Outer urban areas near Brisbane (Caboolture, Pine Rivers and Albert Shire) as well as North-West Queensland;
- The South-Eastern region of South Australia;
- Several regions in Western Australia (Central Metropolitan, Lower Great Southern, Midlands and the Pilbara); and
- Several regions in Tasmania (Southern, Northern, Mersey-Lyell); and
- The Northern Territory.

Coeducational status

In general school-industry programs were more extensively provided among coeducational schools than among girls' schools or boys' schools. This is partly associated with the fact that these types of schools are differently distributed across school sectors. However the difference between all girls' schools and all boys' schools was evident within each sector, so the observation is not simply a consequence of sectoral differences.

Size

The 1996 survey data indicated that provision of school-industry programs was less extensive in small schools than large schools. In the smallest

quarter of schools (those with a senior school population of 98 or fewer) some 49 per cent of schools provided school-industry programs. Among schools in the next quarter of the size distribution (99 to 183 in years 11 and 12) the provision rate was 60 per cent. Among schools in the two largest quarters (i.e. those with a senior school population of 184 or more) the provision rate was approximately 67 per cent. The effect of size was similar for all three sectors. In summary, very small schools in the bottom quarter of the size distribution were less likely than other schools to provide school-industry programs.

Schools with extended programs

"Provision" refers to the extent to which school-industry programs appear in school curricula, having been offered and then taken up by sufficient students to be viable. A school could be recorded as providing a school-industry program if just one program with a limited amount of workplace learning was provided. A school that provided a range of programs with substantial workplace learning would also be recorded as providing school-industry programs.

In order to investigate the extent of provision of programs with substantial workplace learning a more detailed analysis was conducted. In this analysis schools were classified according to the extent of workplace learning included in their school-industry program. Where more than one program was provided by a school, the program with the maximum amount of workplace learning was used as the basis for the classification. Table 4 records these data.

In Table 4 provision is classified according to the number of days in the workplace: 10 days or fewer, 11 to 20 days and more than 20 days in the workplace. There were a few schools that provided school-industry programs but which did not indicate the duration of work placements.

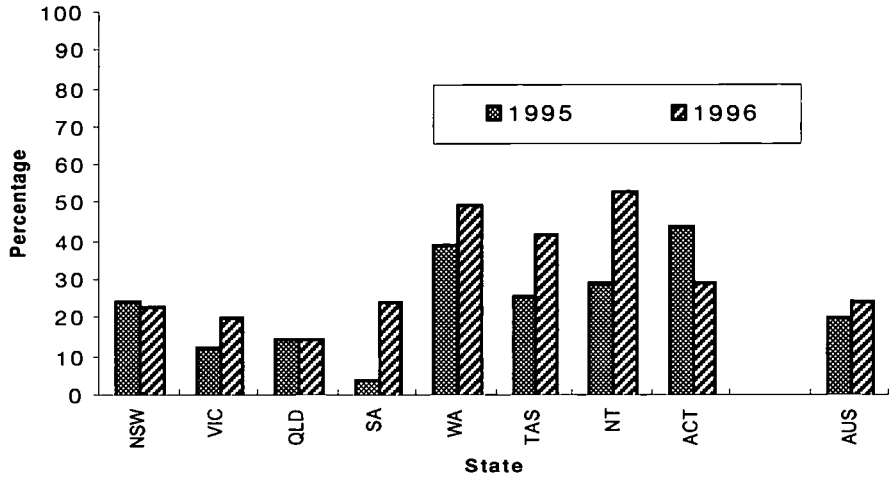
The data in Table 4 indicate that, in 1996, 24 per cent of schools provided programs involving 10 or fewer days in the workplace, 11 per cent provided programs with between 11 and 20 days in the workplace and 24 per cent provided programs with more than 20 days in the workplace.

Although the distribution was similar to that of the 1995 survey, the greatest growth had been in the provision of programs with the least amount of time in the workplace. The percentage of schools with programs involving 10 days or fewer in the workplace had expanded from 15 to 24 per cent compared to a growth from 8 to 11 per cent for programs involving between 11 and 20 days and from 20 to 24 per cent for programs with more than 20 days in the workplace.

Table 4 Percentage of schools providing school-industry programs with various levels of workplace time by State: 1995 and 1996

State/Sector	Workplace Time (days)									
	None		Not Spec		1-10		11-20		>20	
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
New South Wales	40	30	5	2	20	34	11	11	24	23
Government	26	15	7	3	24	40	13	12	30	30
Catholic	38	33	3	1	22	36	9	13	28	17
Independent	81	81	1	1	8	8	5	5	5	5
Victoria	68	47	2	6	8	17	9	10	13	20
Government	55	35	2	7	12	16	10	13	21	29
Catholic	84	51	1	5	1	27	9	7	4	10
Independent	92	85	1	0	2	8	4	6	1	1
Queensland	55	38	3	2	20	31	7	14	15	15
Government	45	31	3	3	26	33	8	16	18	17
Catholic	59	31	4	4	14	36	6	12	16	17
Independent	77	64	1	0	10	20	6	9	6	7
South Australia	68	39	2	3	22	22	4	12	4	24
Government	62	35	2	4	28	21	4	16	4	24
Catholic	86	30	0	0	5	20	0	5	10	45
Independent	83	65	4	0	4	23	4	4	4	8
Western Australia	48	36	2	2	5	4	6	7	39	50
Government	39	29	2	4	6	4	8	7	45	57
Catholic	27	30	4	0	4	4	4	4	62	63
Independent	94	65	0	0	0	8	3	12	3	15
Tasmania	70	39	4	4	0	4	0	12	26	42
Government	54	8	8	8	0	8	0	8	39	67
Senior Coll		0		0		0		0		100
Other		20		0		20		20		40
Catholic	71	20	0	0	0	0	0	20	29	60
Independent	100	89	0	0	0	0	0	11	0	0
NT	59	27	6	13	0	0	6	7	29	53
Government	42	18	8	9	0	0	8	9	42	64
Catholic	100	50	0	0	0	0	0	0	0	50
Independent	100	50	0	50	0	0	0	0	0	0
ACT	33	21	6	0	6	21	11	29	44	29
Government	10	14	10	0	0	29	10	29	70	29
Catholic	100	0	0	0	0	25	0	25	0	50
Independent	50	67	0	0	17	0	17	33	17	0
Australia	**54**	**38**	**3**	**3**	**15**	**24**	**8**	**11**	**20**	**24**
Government	42	26	4	4	19	26	10	13	25	30
Catholic	62	36	2	3	10	28	7	10	20	23
Independent	84	75	1	1	6	12	5	7	4	5

Figure 3 Provision of extended school-industry programs (more than 20 days in the workplace) by State: 1995 and 1996



State and sector differences

Figure 3 represents the provision of extended school-industry programs (those involving more than 20 days in the workplace) by State for 1995 and 1996. Table 4 provides greater detail in terms of State and sector differences.

In terms of these extended programs there has been significant growth in Tasmania (entirely through growth in government and Catholic schools), South Australia, the Northern Territory, Western Australia and Victoria. The provision of extended programs in New South Wales and Queensland remained constant and there was a decline in the Australian Capital Territory. In terms of sector differences, growth in the provision of extended programs was greatest in government schools (by 5 percentage points) and Catholic schools (by 3 percentage points).

Other sources of variation

Socioeconomic status

Variation in the provision of extended school-industry programs followed similar patterns to those for school-industry programs in general. Extended programs were more frequently provided in schools located in low or very low socioeconomic areas (29 per cent) than in schools in very high socioeconomic areas (17 per cent).

Coeducational status

Extended school-industry programs were much more frequently provided in coeducational schools (26 per cent) than single-sex schools (17 per cent).

Location

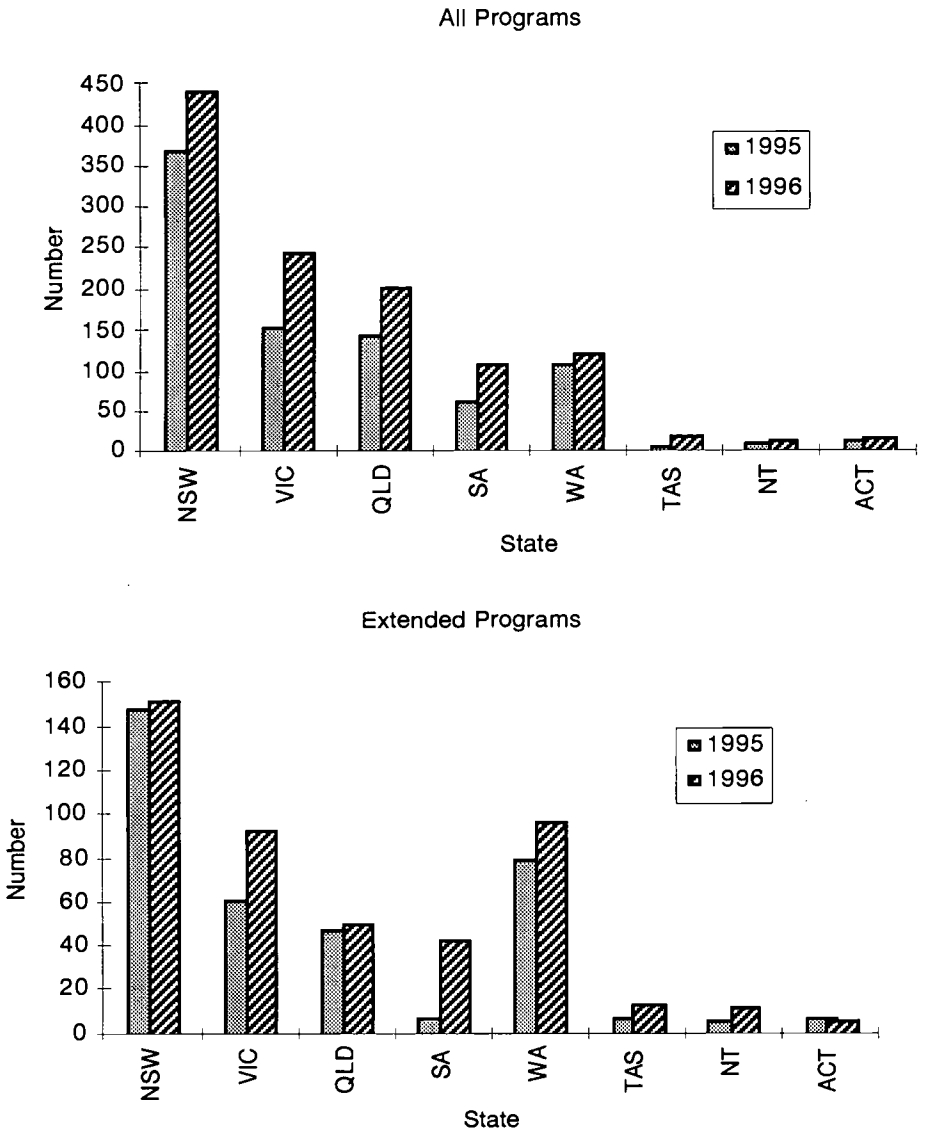
Extended school-industry programs were more often provided in regional cities or country towns (26 per cent) than in capital cities or rural areas (22 per cent). As for the more widely defined school-industry programs, there were some regions (defined in terms of labour market regions) where the provision of extended programs was much higher than the average. Regions where the provision of extended school-industry programs was reported by more than half of the schools were as follows:

- The Hunter, Gosford-Wyong and mid-North Coast regions in New South Wales;
- The Mallee region in Victoria;
- The Pine Rivers region in Queensland;
- The West Adelaide region in South Australia;
- The Central-, East-, North- and South-West Perth regions in Western Australia;
- The Lower Great Southern and the Pilbara regions in Western Australia;
- Northern and Southern Tasmania; and
- The Northern Territory (outside Darwin).

Table 5 Estimated number of schools providing school-industry programs by State: 1995 and 1996

	All			Extended (> 20 days in workplace)		
	1995	1996	Change	1995	1996	Change
New South Wales	369	442	73	148	152	4
Victoria	155	243	88	61	93	32
Queensland	145	202	57	48	50	2
South Australia	61	108	47	8	43	35
Western Australia	107	120	13	80	96	16
Tasmania	8	18	10	8	13	5
Northern Territory	9	13	4	6	12	6
ACT	8	12	4	10	8	-2
Total	**862**	**1158**	**296**	**369**	**467**	**98**

Figure 4 Numbers of schools providing school-industry programs by State: 1995 and 1996



Numbers of schools with programs

Preceding parts of this chapter have focused on the percentage of schools in a State or sector that provide school-industry programs of various types. This section provides estimates of the actual numbers of schools that provide these programs. Estimates of the numbers of schools were derived from the percentage distribution of programs among responding schools applied to the numbers of schools in each State that enrolled students in Years 11 and 12. This latter information was obtained from the ACER

sampling frame because it is not published as part of the annual ABS publication, *Schools Australia*.

Number of schools by State

Table 5 provides details of the numbers of schools providing school-industry programs in 1995 and 1996. The same data are represented in Figure 4. These data show the contribution from each State in terms of the growth in absolute numbers of schools providing programs. In terms of numbers of schools with programs of more than 20 days in the workplace, the contribution of South Australia and Victoria is notable. The data also show the importance of New South Wales in terms of the numbers of schools providing school-industry programs.

It is also apparent that the greatest growth was in the numbers of schools providing relatively short programs and not in programs that involved extended periods in the workplace.

Number of schools by sector

Data presented in an earlier part of this chapter indicated that a higher percentage of government, compared to Catholic and independent secondary schools provided school-industry programs. In combination with the different size of each sector this means that by far the largest number of schools providing school-industry programs are government schools. In addition those data showed that the largest growth in program provision had been in the Catholic sector.

The information for 1996 indicates that school-industry programs (in the broadest sense) were provided in:

- 872 government schools (an increase of 182 from the 690 in 1995);
- 201 Catholic schools (an increase of 83 from 118 in 1995); and
- 85 independent schools (an increase of 31 from 54 in 1995).

School-industry programs with more than 20 days in the workplace were provided in:

- 373 government schools (an increase of 79 from 294 in 1995);
- 77 Catholic schools (an increase of 16 from 61 in 1995); and
- 17 independent schools (an increase of 3 from 14 in 1995).

Table 6 Percentage of schools with various numbers of programs

Year	Number of Programs				
	None	One	Two	Three	Four or more
1995	54	25	11	6	4
1996	38	28	15	10	9

Programs within schools

Although, among schools with an involvement in school-industry programs it was most common to operate just one program (48 per cent of these schools provided one school-industry program) a number provided more than one program. Details are recorded in Table 6 for 1995 and 1996. The slight increase observed in the number of programs per school could be an artefact of more detailed reporting in 1996 compared to 1995, or it could reflect a growth in diversity within schools. On average there were 2.1 programs per school in 1996.

Since a number of schools provided more than one school-industry program, information is lost when analyses are conducted at school level. For example, when the percentage of schools providing programs of various levels of workplace duration is considered, it probably overstates the representation of programs with placements of longer duration. This occurs because the value recorded for each school is that of the longest program. Whatever aggregation method is used, such analyses inevitably require the aggregation of data from different sorts of programs over the school as a whole. For this reason, most of the analyses of what happens in programs that are reported in later chapters are based on program level data.

Summary

The data from the 1996 survey indicate continued growth in the number of schools throughout Australia providing school-industry programs. There was also an indication of prospects for continued growth. Some 44 per cent of schools not currently providing a program indicated that they planned to do so in the future. The growth was greatest in programs of shorter duration (although this could have been a result of the way schools reported programs), and the challenge for the provision of school-industry programs is to ensure that substantial high quality work placements continue to be provided and that these provisions are regarded as attractive by students.

4

Student participation in programs

The previous section of the report focused on the provision of programs by schools. Provision refers to the extent to which these programs appear in school curricula, having been offered and then taken up by sufficient students to be viable. This section is concerned with participation. Participation refers to the percentage of students who enrolled in school-industry programs. Data that simply reports the provision of programs can suggest an inflated impact of school-industry programs, since not all Year 11 and Year 12 students in the 62 per cent of schools with these programs in 1996 participated in them.

Approximately 7 per cent of senior secondary students participated in a school-industry program in 1995 (this is a revised estimate from that previously reported). Participation rates were higher among Year 11 students than among Year 12 students. Participation levels varied among States and sectors and did not always follow the same pattern as for the provision of programs. It appeared that, in some States and sectors, schools which provided programs did so for a minority of students but in others the reach among students within a limited number of schools was wider.

The survey data for 1996 indicate an increase in overall participation in school-industry programs over that reported for 1995. In 1996 it appeared that approximately 12 per cent of students in Years 11 and 12 participated in these programs. The survey forms indicated that a total of 35 261 students in the respondent schools were involved in these programs. If it is assumed that schools which did not respond to the survey were similar to those that did, this could be projected to between 45 200 and 46 500 students (the precise figure depends on the projection method that is used) from the population of senior secondary school students. This is a substantial increase from the 26 300 estimated in 1995.

Participation by workplace time

School-industry programs vary in the extent of workplace learning involved. Some involve a minimal amount of time in the workplace while

others incorporate extended periods of workplace learning. In this context it is of interest to know about student participation in programs of various levels of work placements. For this purpose participation is considered in relation to the number of days spent in the workplace: classified as 10 or fewer days, 11 to 20 days, and more than 20 days. In the 1995 survey report, programs of more than 20 days were called "extended programs".

Participation in extended programs

In the 1996 national survey there were 6 700 students actually identified in extended programs in schools that replied to the questionnaires. To project an estimation to the population requires an allowance for non-responding schools on the assumption that those schools are similar to responding schools. This method of projection results in an estimate of 8 600 Year 11 and 12 students across Australia. This estimation does not take account of students in programs for which the duration of work placements was not specified and those for which no program enrolments were given. This estimate covers some programs in addition to those funded by the Australian Student Traineeship Foundation that could involve more than 20 days in the workplace.

Participation in extended school-industry programs in 1996 appeared to involve 2.3 per cent of the Year 11 and 12 population. The participation rate could be a little higher if a proportion of those where workplace duration was not specified were included (it would increase to 2.5 per cent) or rather higher if all those cases of unspecified work placement were assumed to be in extended programs.

Distribution by duration of placements

In general the total student participation in school-industry programs is partitioned among programs of varying workplace duration as follows:

- 20 per cent in programs that involved more than 20 days in the workplace;
- 13 per cent in programs that involved between 11 and 20 days in the workplace; and
- 66 per cent in programs that involved 10 or fewer days in the workplace.

These data show the predominance of short-duration work placements in school-industry programs. Indeed, more than one-quarter (27 per cent) of students in school-industry programs were in programs where the duration of their work placement was five days or fewer. In terms of programs (rather than students), 54 per cent involved 10 days or fewer, 16 per cent involved between 11 and 20 days and 30 per cent required more than 20 days in the workplace. This difference in distribution between students and programs reflects the fact that short-workplace school-industry programs enrol more students than extended school-industry programs.

Comparison with 1995

The 6 700 students actually identified in extended programs in the 1996 national survey cannot be simply compared with the 7 240 students identified in 1995, because the response rate in the two surveys was different. A better comparison is between estimated numbers based on the same projection method (simply using the response rate for schools). On this basis the 1996 projected estimate of 8 600 is just a little less than the 8 700 that resulted from the same projection method in 1995. This suggests that the number of students in extended programs was similar to 1995.

There appears to have been considerable growth between 1995 and 1996 in programs with short-duration work placements. In 1996 the number of students in these programs was estimated as about 28 000. In 1995 there were approximately 12 800 students in programs with short-duration work placements. Participation in programs with mid-duration work placements also grew from 3 800 students to 5 600. In addition to these there was a number of students (approximately 3 000) in programs for which the duration of the work placement was not specified.

In summary, there was considerable growth in participation in programs of short-duration work placements (more than double), some growth in participation in programs of mid-duration work placements (up by approximately 50 per cent), and little growth in participation in programs of extended duration work placements.

Caveats

Some caveats concerning comparative data from the 1995 and 1996 surveys are warranted in view of the expectation that there might have been a higher level of growth in programs of extended duration than reported above. Growth would be underestimated if either 1996 estimates were less than the true value or if 1995 estimates had been higher.

The questionnaire asked for the numbers of students *currently enrolled* in each program. This was intended to ensure that only enrolments for the current semester were included but it is possible that respondents might not have included students who had obtained jobs and left the course prior to the end. The wording was the same for both years but the 1996 survey was conducted a little later in the year than the 1995 survey. This could have resulted in some underestimation of 1996 numbers if this had a stronger effect on extended programs.

It is also possible the greater level of interest and public discussion of school-industry programs may have prompted respondents to include some programs with very short duration work placements in the category and this may have inflated participation figures for programs with short duration work placements in 1996.

Participation in 1995 may have been overestimated when school-industry programs were relatively new. In 1996, with programs more soundly established, school data may be more accurate. However, it seems unlikely that this would apply only to programs incorporating extended duration work placements.

These are potential sources of bias in participation data. The effects of bias will always appear greater when examining change (as the relatively small difference between two large numbers) than when examining the figures for one year.

When considering changes in participation it should be noted that the size of the combined Year 11 and 12 cohort has not changed markedly being 371 613 in 1995 and 371 322 in 1996 (ABS, 1996a; 1997). Within that level there was a slight increase in the Year 11 cohort (from 199 256 to 200 953) and a slight drop in the Year 12 cohort (from 172 357 to 170 729).

Student characteristics

The students who participated in school-industry programs tended to be from Year 11 rather than Year 12 and were almost evenly divided between males and females.

The data in Table 7 indicate that 70 per cent of participants in school-industry programs were from Year 11. This pattern was evident for extended programs as well as for other programs. This pattern mirrors that found in 1995. School-industry programs appear to be taken in greater numbers by Year 11 students than by Year 12 students.

Table 7 also indicates that just over half of the participants in school-industry programs were female. However, in programs with extended work placements females were slightly under-represented. This is also consistent with the pattern reported from 1995 and suggests a stable pattern of participation in these programs is emerging.

Table 7 Distribution of students in school-industry programs

	All Programs			Extended Programs		
	Male	Female	Total	Male	Female	Total
Year 11	33%	37%	70%	36%	30%	66%
Year 12	13%	17%	30%	16%	18%	34%
Total	47%	53%	100%	52%	48%	100%

Participation by State and sector

A useful indicator of the participation of students in school-industry programs is the participation rate: the percentage of Year 11 and 12 students who participate in school-industry programs. Table 8 records participation rates for Year 11 and 12 students by State and sector for programs of different work placement duration.

In this table short-duration programs involve 10 days or fewer in the workplace, mid-duration programs involve between 11 and 20 days in the workplace and extended programs involve more than 20 days in the workplace. There was a number of programs for which the extent of time in the workplace was not specified and these have been shown separately in the table. In several school systems, participation in programs for which the duration of the work placements was not specified was significant and introduces a degree of uncertainty into the inferences that can be drawn from the data.

Key features of the participation rates shown in Table 8 are as follows:

- For school-industry programs overall, and for programs incorporating extended duration work placements, participation rates were highest in government schools (15 and 3 per cent), and higher in Catholic (10 and 2 per cent) than independent schools (5 and less than one-half of 1 per cent).
- Participation in school-industry programs with short-duration work placements was high in the government school sectors of Queensland, New South Wales, and the Australian Capital Territory (more than 10 per cent), as well as in all school sectors in South Australia (around 14 per cent).
- Participation in school-industry programs with extended-duration work placements was high in the government school sectors of Tasmania (7 per cent), Western Australia (6 per cent) and the Northern Territory (nearly 7 per cent), as well as the Catholic sectors of Western Australia (5 per cent) and Queensland (4 per cent).
- Although programs with mid-duration work placements were not common they were used most by Queensland government schools (3 per cent).
- A significant percentage of students in Queensland government and Catholic schools, Catholic schools in the Australian Capital Territory, as well as in government schools in Victoria and Tasmania were in programs for which the duration of the work placement was not specified. This could indicate that the duration varies between students in the programs and that some of these students should be considered to be in programs with work placements of extended duration.

Table 8 Participation rates for school-industry programs of various duration of work placements by State and sector: 1996

State	Sector	All	Duration of Work Placements			
			Short	Mid	Extend	Unspec.
New South Wales	All	15.7	11.0	1.9	2.5	0.4
	Govt.	19.4	13.4	2.2	3.4	0.4
	Cath.	14.0	10.3	1.9	1.4	0.4
	Indp.	2.4	1.7	0.4	0.1	0.2
Victoria	All	5.2	2.1	1.0	1.3	0.8
	Govt.	7.1	2.4	1.4	2.0	1.2
	Cath.	3.4	2.5	0.3	0.3	0.3
	Indp.	0.9	0.7	0.1	0.0	0.0
Queensland	All	17.5	11.9	2.2	1.7	1.7
	Govt.	21.2	14.8	2.7	1.3	2.4
	Cath.	14.4	7.7	1.7	3.8	1.2
	Indp.	8.7	6.7	1.3	0.8	0.0
South Australia	All	17.2	13.6	1.4	1.4	0.8
	Govt.	17.7	13.3	1.8	1.4	1.1
	Cath.	17.0	14.7	0.4	1.8	0.1
	Indp.	14.7	13.9	0.1	0.5	0.2
Western Australia	All	7.9	1.5	0.9	5.1	0.4
	Govt.	8.5	1.1	1.0	5.8	0.5
	Cath.	5.8	0.2	0.2	5.4	0.0
	Indp.	7.8	4.6	1.6	1.6	0.0
Tasmania	All	9.8	1.8	1.3	5.4	1.2
	Govt.	12.1	1.6	1.6	7.2	1.7
	Cath.	6.6	2.8	1.3	2.4	0.0
	Indp.	1.9	1.6	0.1	0.0	0.2
Northern Terr.	All	7.0	1.0	0.2	5.7	0.0
	Govt.	8.4	1.2	0.3	6.9	0.0
	Cath.	0.4	0.0	0.0	0.4	0.0
	Indp.	0.0	0.0	0.0	0.0	0.0
ACT	All	11.0	8.3	1.3	1.1	0.3
	Govt.	12.1	10.2	1.5	0.5	0.0
	Cath.	12.1	6.6	0.4	3.5	1.6
	Indp.	3.6	1.7	1.8	0.0	0.0
Australia	**All**	**12.1**	**7.5**	**1.5**	**2.3**	**0.8**
	Govt.	14.5	8.7	1.8	2.9	1.1
	Cath.	10.0	6.5	1.1	1.9	0.5
	Indp.	4.8	3.7	0.6	0.4	0.1

The presence of some students in programs where the duration of the work placement is not specified needs to be taken into account when considering participation rates. If all of these students could be considered to be in extended duration programs the participation rate for extended programs would be 3.1 per cent rather than 2.3 per cent. However, if they are allocated proportionately among the other three categories the figure would become 2.5 per cent.

In the case of Queensland government schools the maximum possible effect would be to increase the participation rate for extended programs from 1.3 to 3.7 per cent and the most probable effect (based on a proportionate distribution) would be to increase the rate to 1.5 per cent. For Catholic schools in Queensland the corresponding effects would be to raise participation rates for extended programs from 3.8 to 5.0 per cent (maximum) or 4.1 per cent (proportionate distribution).

Comparison with 1995

Comparisons of participation rates for school-industry programs are not straightforward, because of differences in school response rates, difficulties in assumptions about programs for which the duration of work placements were not specified and aspects of measurement error. The report of the 1995 survey recorded mean participation rates for Australia and for each State and sector (Ainley & Fleming, 1995: 19-21). This statistic is the mean of the participation rates calculated for each school within the State and sector being considered. When the distributions of participation rates are skewed this can give (and appears to actually have given) an inaccurate estimation of the rates for each school system and for Australia as a whole.

In order to provide a more sound basis for comparison between 1995 and 1996 participation rates were recalculated using aggregate numbers for each group being considered. The effect of this is to revise downwards the estimated overall participation rates for 1995 and to change the estimates for States and sectors. The participation rate for all school-industry programs in 1995 thus becomes 7.0 per cent rather than 8.8 per cent and the rate for extended programs becomes 2.3 per cent rather than 3.0 per cent.

Table 9 compares 1995 and 1996 participation rates for all school-industry programs and programs with extended work placements. It also records for 1996 the participation rate for programs where the workplace duration was not specified. Given that the national participation rate for this category was 0.8, figures higher than 1.0 have been underlined. This directs attention to systems where participation in school-industry programs could be higher than that estimated (possibly up to the sum of the participation rates for programs of unspecified work placements and those for extended programs).

Table 9 Participation rates for school-industry programs of various duration: 1995 and 1996

State	Sector	All Programs		Extend Programs		Unspec.
		1995	1996	1995	1996	1996
New South Wales	All	8.6	15.7	2.6	2.5	0.4
	Govt.	10.6	19.4	3.4	3.4	0.4
	Cath.	8.9	14.0	2.6	1.4	0.4
	Indp.	2.0	2.4	0.1	0.1	0.2
Victoria	All	3.2	5.2	1.4	1.3	0.8
	Govt.	4.8	7.1	2.2	2.0	1.2
	Cath.	0.9	3.4	0.3	0.3	0.3
	Indp.	0.3	0.9	0.0	0.0	0.0
Queensland	All	10.3	17.5	2.5	1.7	1.7
	Govt.	13.7	21.2	3.0	1.3	2.4
	Cath.	6.2	14.4	3.6	3.8	1.2
	Indp.	4.6	8.7	0.5	0.8	0.0
South Australia	All	8.5	17.2	0.1	1.4	0.8
	Govt.	10.8	17.7	0.1	1.4	1.1
	Cath.	0.2	17.0	0.2	1.8	0.1
	Indp.	7.6	14.7	0.1	0.5	0.2
Western Australia	All	8.1	7.9	5.0	5.1	0.4
	Govt.	11.0	8.5	6.6	5.8	0.5
	Cath.	3.9	5.8	3.2	5.4	0.0
	Indp.	1.1	7.8	0.4	1.6	0.0
Tasmania	All	2.4	9.8	2.2	5.4	1.2
	Govt.	2.3	12.1	2.1	7.2	1.7
	Cath.	4.5	6.6	4.5	2.4	0.0
	Indp.	0.0	1.9	0.0	0.0	0.2
Northern Territory	All	5.0	7.0	3.3	5.7	0.0
	Govt.	6.1	8.4	4.1	6.9	0.0
	Cath.	0.0	0.4	0.0	0.4	0.0
	Indp.	0.0	0.0	0.0	0.0	0.0
ACT	All	3.7	11.0	2.0	1.1	0.3
	Govt.	4.2	12.1	2.6	0.5	0.0
	Cath.	0.0	12.1	0.0	3.5	1.6
	Indp.	2.7	3.6	0.7	0.0	0.0
Australia	**All**	**7.0**	**12.1**	**2.3**	**2.3**	**0.8**
	Govt.	9.1	14.5	3.1	2.9	1.1
	Cath.	4.4	10.0	1.9	1.9	0.5
	Indp.	2.4	4.8	0.2	0.4	0.1

All school-industry programs

In terms of all school-industry programs, the data indicate a general increase in participation from 7.0 to 12.1 per cent. Participation increased in all school systems except for Western Australian government schools. A greater level of growth was recorded for Catholic schools than for other schools and this growth was especially high among Catholic schools in Queensland, South Australian and the Australian Capital Territory. There was also substantial growth in participation in the government schools of Tasmania, Queensland, New South Wales, South Australia and the Australian Capital Territory.

Extended duration programs

Participation rates in programs with extended duration work placements did not change appreciably between 1995 and 1996. Within this general pattern there were some areas of growth, however. There was a substantial increase in participation rates in extended programs for Tasmanian schools. In government schools in Tasmania, in particular, the 1996 participation rate for extended school-industry programs grew to be just over 7 per cent of the Year 11 and 12 cohort. There were also smaller increases overall in South Australia and the Northern Territory, the Catholic schools of South Australia, the Australian Capital Territory and Western Australia, the independent schools of Western Australia, and in the government schools of South Australia.

In addition to these areas of growth it is possible that there may have been growth in other systems depending upon the nature of programs for which the duration of the work placement was not specified. This could be the case for government schools in Victoria and Queensland. There was no growth in participation in extended programs in New South Wales where the greatest numbers of participants are located.

Estimated numbers of participants

Even though the participation rate provides a suitable index for estimating the relative extent of participation in school-industry programs there is sometimes a need for an index of the absolute extent of participation in school-industry programs. Estimates for 1996 are shown in Table 10.

The basis of the estimation is the actual recorded enrolments for each system with an allowance for the school-level response rate. It does not include allowance for missing enrolment data or for the distribution of enrolments in programs for which a duration was not specified over the three categories of program.

Table 10 Estimated numbers of participants in school-industry programs by State and sector: 1996

State	Sector	Duration of Work Placement				Total
		Short Duration	Mid Duration	Extended Duration	Not Specified	
New South Wales	All	12 290	2 080	2 790	450	17 610
	Govt.	9 590	1 560	2 450	330	13 920
	Cath.	2 440	460	320	100	3 330
	Indp.	260	60	20	20	360
Victoria	All	2 040	940	1 290	840	5 110
	Govt.	1 430	860	1 230	760	4 280
	Cath.	500	50	50	70	670
	Indp.	110	20	<15	0	140
Queensland	All	8 300	1 550	1 140	1 220	12 210
	Govt.	6 560	1 200	600	1 080	9 440
	Cath.	910	200	450	140	1 700
	Indp.	830	160	100	0	1 090
South Australia	All	3 620	360	360	220	4 560
	Govt.	2 450	340	270	210	3 270
	Cath.	610	20	70	<15	710
	Indp.	560	<15	20	<15	600
Western Australia	All	630	410	2 270	170	3 480
	Govt.	350	300	1 780	170	2 600
	Cath.	<15	<15	390	0	420
	Indp.	270	90	90	0	450
Tasmania	All	170	120	500	120	900
	Govt.	100	100	460	110	780
	Cath.	40	20	40	0	100
	Indp.	20	<15	0	<15	20
Northern Territory	All	30	<15	160	0	190
	Govt.	30	<15	150	0	190
	Cath.	0	0	<15	0	<15
	Indp.	0	0	0	0	0
ACT	All	900	140	100	30	1 160
	Govt.	760	110	30	0	900
	Cath.	120	<15	60	30	220
	Indp.	20	20	0	0	40
Australia	**All**	**27 970**	**5 600**	**8 600**	**3 050**	**45 200**
	Govt	21 270	4 440	6 970	2 650	35 370
	Cath	4 600	800	1 370	370	7 140
	Indp	2 070	380	260	30	2 720

Note: Figures have been rounded to the nearest 10 and this may affect additions. Figures that are non-zero but less than 15 have been designated as <15. Estimates are based on projections that allow for non-response but do not distribute enrolments in programs for which the duration of work placements are not specified.

The estimates for each State and system are based on a total estimate of just over 45 200 students in these programs. These estimates have been rounded to the nearest 10 students and where the estimate is fewer than 15 students that has been shown rather than the actual estimate. The data in Table 10 show the magnitude of the school-industry enterprise in each State and sector.

Enrolments per program

One of the paradoxes in the 1996 survey concerns the growth in the number of schools providing programs with extended work placements but no growth in student participation in those programs. One explanation for such a paradox is that there could have been a decline in the number of students in each school involved in these types of program. Information about enrolment distributions by programs for 1995 and 1996 is shown in Table 11.

Those data show that there was a significant percentage of programs (just over 40 per cent) that enrolled 10 or fewer students. There was also a trend between 1995 and 1996 for a greater percentage of the extended programs to enrol smaller numbers of students (e.g. the percentage of extended programs with 10 or fewer students rose from 46 to 50 per cent). In terms of mean enrolments per program there were increases in student numbers for short (10 or fewer days in the workplace) and mid (11 to 20 days in the workplace) duration programs but a decline for extended (more than 20 days in the workplace) programs.

Table 11 Program enrolment within school by time in the workplace: 1995 and 1996

Enrolment Range	Percentage of Programs							
	All		≤ 10 days		11 - 20 days		>20 days	
	1995	1996	1995	1996	1995	1996	1995	1996
Percentage of programs with this enrolment								
1-10 students	43.5	41.5	37.9	35.4	51.0	44.5	45.8	50.3
11-20 students	30.6	29.6	31.3	28.9	26.3	30.4	31.9	31.1
21-30 students	10.9	12.1	13.1	14.0	9.1	13.0	9.2	9.2
31-40 students	5.1	5.3	4.7	6.9	8.1	1.6	4.2	4.5
>40 students	10.1	11.5	13.1	14.8	5.6	10.5	8.9	4.9
Mean Enrolment	20.6	21.8	23.7	26.4	16.5	17.7	19.1	14.3

Summary

Between 1995 and 1996 there was considerable growth in student participation in school-industry programs from just over 26 000 to over 45 000 students. This means that just under one in eight senior secondary students has some involvement in a school-industry program. For most of these students that involvement is in a program with just a short period of time in the workplace. Indeed most of the growth in student participation in school-industry programs was in those with short-duration work placements.

It appeared that between 1995 and 1996 there was little real growth in participation in programs with extended duration work placements. Even though there were more schools providing programs of this type each program appeared to have fewer students in it. A major challenge is to involve more senior secondary students in school-industry programs with substantial and high quality provision for learning in the workplace.

The information on student participation indicates that there are locations that have achieved high levels of participation in programs with extended periods of workplace learning (e.g. Tasmanian government schools). It should be possible to learn from those experiences.

5

Programs in the workplace

Structured learning in the workplace is a central feature of the rationale for school-industry programs. The charter of the Australian Student Traineeship Foundation stresses this as one of the distinguishing characteristics of the programs that it supports. More generally, providing opportunities for high quality learning in workplaces is a major thrust of the new generation of school-industry programs. It is often seen as a determining criterion for the success of these programs in terms of the outcomes for participants. In other countries critics of analogous programs have held the availability of quality workplace learning to be a limiting condition for their implementation (Grubb, 1996).

This chapter provides information about the workplaces involved in school-industry programs. It surveys the nature of the industries and the worksites involved, the ways in which learning is provided at those sites and how activities in the workplace are coordinated with overall programs.

Industries and enterprises

Employer participation is a crucial component of school-industry programs. This section reports on the industries covered by these programs, the size of enterprises involved and the number of work sites typically involved in programs.

Industry coverage

The workplace component of school-industry programs appears to represent a comprehensive range of the industries available in Australia. Table 12 records the distribution of industries involved in school-industry programs. Schools could nominate involvement in more than one industry for any given program. Hence the data recorded are percentages of all nominations.

Table 12 Percentage representation of industries in school-industry programs

Group	Code	Industry Division	Percentage of Programs		ABS Reference[a]	
			1995	1996	20-24 yr-olds	labour force
Group 1	A	Agriculture, forestry & fishing	2.3	3.8	3.0	5.0
	A	Mining	0.6	1.2	0.7	1.1
Group 2	A	Building & Construction	5.0	6.3	6.8	7.0
Group 3	A	Manufacturing	9.7	4.5	13.7	13.6
	N	Metals & Engineering	3.4	5.8		
	N	Electronics		3.3		
	N	Trade	1.2			
	N	Mechanical	0.6			
Group 4	A	Transport & storage	2.1	2.2	3.4	4.7
	A	Utilities (electricity & gas)	2.3	2.0	0.3	0.8
Group 5	A	Retail &	13.8	8.6	21.3	15.0
		wholesale trade			5.3	5.7
	N	Automotive (retail motor)	3.9	6.7		
	N	Office/clerical	9.0	9.6		
	N	Broad-based commercial	1.3			
	A	Finance and insurance	0.3	3.5	4.5	3.8
	A	Property and business services	2.3	2.6	10.7	9.9
	A	Government administration	0.9	3.5	2.7	4.4
Group 6	A	Hospitality	18.9	11.8	7.8	4.7
	N	Tourism		5.3		
Group 7	A	Education	2.1	4.8	4.4	7.1
	A	Health & community services	5.4	5.2	6.4	9.4
	A	Arts, entertainment, recreation	1.8	3.7	2.9	2.1
	A	Personal & other services	1.6	0.1	4.1	3.7
	N	Service Sector	0.9			
	A	Communication (inc info. tech.)	0.1	4.3	1.8	2.0
General	N	Cross-industry general	10.5	1.3		
		TOTAL	100	100	100	100

a The reference points are taken from the Australian Bureau of Statistics publication Labour Force Australia for November 1996 (Catalogue No. 6203.0): Table 43 (ABS, 1996b). The data are for 20 to 24 year-old persons in the labour force and for employed persons in total.

There was a difference in procedure between 1995 and 1996. In 1995 through the *Program Questionnaire* schools listed the industries covered by the program using an open-ended question format. In 1996 a list of 21 (plus "other") industries were provided and schools were asked to tick the appropriate box(es). The list was compiled in consultation with the Australian Student Traineeship Foundation and was based, as for 1995, on a modified version of the *Australian and New Zealand Standard Industry Classification* (ANZSIC) (ABS, 1993).

The groupings for related areas are those used in 1995. Those areas which are part of the ANZSIC classification are designated with an "A" and additional classifications are designated "N".

Table 12 also includes for comparison information about the distribution of employment over industry divisions. This has been shown for the labour force as a whole and for 20 to 24 year-old employed persons. It was considered that the 20 to 24 year-old group provided a more appropriate comparison than the 15 to 19 year-old group, because of the incidence of part-time and casual work in the younger age group.

From Table 12 it can be seen that the industries in which programs were located matched reasonably well the pattern for employed persons. The retail trade/office/clerical areas (Group 5) featured strongly but to a similar extent to which they are represented in the workforce. The hospitality area (Group 6) was also strongly represented, and possibly to a greater extent than it is represented in the general work force.

Table 12 provides data on the coverage of industries. On an individual industry basis (i.e. the percentage of programs reporting involvement in a particular industry), it was evident that in 1996 work in the office/clerical area was part of one-third (35 per cent) of programs and just under one-third (31 per cent) of programs involved the retail and wholesale trade industry. More than two-fifths (43 per cent) of the programs involved the hospitality industry.

No relationship was detected between the distribution of programs across industry groups and the duration of work placements.

Size of enterprise

The workplace component of school-industry programs covered enterprises over a wide range of size. Program coordinators were asked to indicate whether enterprises of different size were involved in the program. Four size categories were used: micro (i.e. five or fewer employees), small (i.e. six to 20 employees), medium (i.e. 21 to 100 employees) and large (i.e. more than 100 employees).

Even though a given program could involve enterprises of more than one size category, it was possible to estimate a distribution of involvement across these size categories:

- 30 per cent of programs involved micro businesses;
- 31 per cent involved small businesses;
- 22 per cent involved medium businesses; and
- 17 per cent involved large businesses.

There appeared to be little difference in the distribution of business size across programs with different duration work placements.

Numbers of worksites and employers

In relation to the students' experience when participating in school-industry programs, it was possible for students to remain at the same site for the whole of the work placement or to spend time in several sites. The ASTF states that it is preferable that students have experience of more than one worksite. The purpose of this is to provide some breadth of experience through the school-industry programs.

More than half (61 per cent) the programs involved students' work placements in more than one site. The corresponding figure for 1995 was 65 per cent. As for 1995 the most common number of sites was two (both the median and the mode were two), but quite a few (38 per cent) involved more than two sites.

There was a relationship between the number of work sites involved and the duration of students' work placements:

- For programs of 10 days or less duration in the workplace, half (51 per cent) of the programs involved students undertaking their work placements at just one site.
- Two-fifths (40 per cent) of the programs that were between 11 and 20 days involved work placements at one site.
- Fewer than one-fifth (17 per cent) of the programs which were of more than 20 days duration involved just one site. It would appear that most of the extended programs involved students rotating among several work sites.

When considering breadth from a program perspective it is important to distinguish between the number of employers and the number of work sites. In the 1996 survey, as in 1995, schools were asked how many different employers were involved in their program. As the data for the number of employers involved were skewed, the median provided the most appropriate measure of the central tendency. In 1996, as for 1995, the median number of employers involved was 10 (but the most common response was one). According to the 1996 survey the median number of employers varied according to the size of the enterprise: typically five for micro or small businesses, three for medium businesses and two for large businesses.

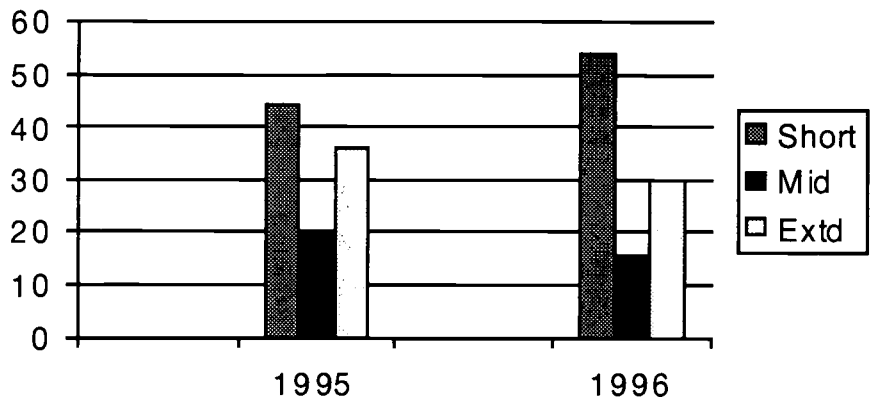


Figure 5 Percentage of school-industry programs by length of time in the workplace for 1995 and 1996

The workplace component of programs

The quality of the experience of the workplace learning component of school-industry programs is dependent on features such as how the work placements fit into students' timetables, the use of the workplace time, whether supervisors are available in work sites to train students, and whether assessment of the learning in the workplace takes place.

Duration of work placements

Previous chapters have used the notion of short, mid and extended duration in relation to the length of work placements. Figure 5 provides a comparison for the distribution of the duration of work placements for 1995 and 1996. It indicates a growth in the percentage of programs with 10 days or fewer in the workplace (from 44 to 54 per cent), and a decline in the percentage of programs involving more than 20 days in the workplace (from 36 to 30 per cent). Programs involving between 11 and 20 days in the workplace also declined from 20 per cent in 1995 to 16 per cent in 1996. Within an overall pattern of growth, there appears to have been a shift towards programs that involve less time in the workplace (a trend that was observed in a previous chapter concerning school data).

Workplace time and attendance

Although almost all (89 per cent) programs involved students attending their work placements for the full day which applies in the workplace, there were some variations among the three categories of length of time in the

workplace. Extended programs were the most likely to involve the full day (96 per cent) and programs of 11 to 20 days the least likely (83 per cent). Almost nine-tenths (88 per cent) of programs of 10 or fewer days involved the full day which applies in the workplace.

Table 13 indicates the change in the proportion of program time allocated to workplace learning between 1995 and 1996 as well as the relationship between the time allocated to workplace learning and the proportion of the total program that it represents. It is apparent that the number of programs which allocated more than 20 per cent of program time to workplace learning had increased just a little from 50 per cent in 1995 to 55 per cent in 1996. Almost three-quarters (72 per cent) of the extended programs had more than 20 per cent of program time allocated to work placements.

It must be noted, however, that the data in Table 13 may not be reliable. It was apparent that many responses to this question were not consistent with questions in other parts of the questionnaire. One reason for this inconsistency maybe that there are considerable differences between States in what constitutes a school-industry program. The program may be a separate subject or be considered a part of a "package" of subjects. The data in Table 13 must therefore be viewed with caution.

Coordination of work placements

Organisational issues such as when work placements are to take place and whether students will miss classes when attending their work placements are important aspects to consider.

As for 1995 almost all of the programs involved work placements which were held on normal school days or a mixture of school days and outside school time. From Table 14 it is evident that work placements in extended programs in 1996 were more likely to be held on normal school days only (53 per cent), and very few of these programs involved students attending work placements only outside of school time (3 per cent).

Table 13 Work placement as a proportion of total program time by length of time in the workplace

Proportion of Program Time	Percentage of Programs				
	1995 All	1996 All	1996 Short	1996 Mid	1996 Extd.
10 per cent or less	23	23	34	20	4
11 to 20 per cent	27	22	20	21	24
21 to 50 per cent	32	32	30	46	30
More than 50 per cent	18	23	16	13	42

Table 14 Timing of work placements by length of time in the workplace

When Work Placements Take Place	Percentage of Programs				
	1995 All	1996 All	1996 Short	1996 Mid	1996 Extd.
Only on normal school days	44	46	43	43	53
School days & outside school	46	45	47	46	44
Only outside school time	10	9	10	11	3

In 1995 it was noted that an area involving the organisation of school-industry programs which could be improved was the extent to which students missed normal classes to attend work placements. It would appear that this is still an issue that needs to be resolved. Relevant data from the survey are recorded in Table 15. The proportion of programs for which students had to miss classes to attend work placements had increased slightly from a little more than a third (36 per cent) in 1995 to two-fifths in 1996. There was a corresponding decrease in the proportion of programs where students missed some classes but arrangements were made to minimise the number missed, whilst the proportion of programs where no classes were missed remained the same.

Short duration programs were more likely to require students to miss normal classes (53 per cent) to attend their work placements. In contrast students in extended programs were less likely to miss normal classes (24 per cent), and more likely to not miss any of their usual classes or miss some classes with arrangements made to ensure that missed classes were kept to a minimum (both 38 per cent).

Coordination of work placements in terms of when they take place and the number of days involved impact on schools, local employers and students.

Table 15 Coordination of work placements with other classes by length of time in the workplace

Organisation of Work Placements	Percentage of Programs				
	1995 All	1996 All	1996 Short	1996 Mid	1996 Extd.
Miss normal classes	36	40	53	34	24
Miss some classes	33	29	21	33	38
Miss no other classes	31	31	26	33	38

Table 16 Involvement in negotiating timing and length of work placements by length of time in the workplace

Group(s) Involved in Negotiating Timing and Length of Work Placements	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
School and local employer	59	57	60	64
School only	20	24	19	14
Local employer only	2	2	1	2
School, local employer and "other"	6	5	8	7
School and "other"	3	3	5	3
Local employer and "other"	2	1	1	3
"Other" only	8	8	7	7

The 1996 *Program Questionnaire* asked whether local employers, schools or other groups were involved in negotiating these issues. Both the school and the employer were involved in these negotiations in three-fifths (59 per cent) of programs, with a further 6 per cent also involving a third party. The school determined the time and length of work placements in one-fifth of programs. Table 16 documents the group or groups which took part in decisions concerning how long and when students undertook their work placements.

Negotiations between school and local employer concerning these issues were more likely to occur in extended programs, and less likely to be a decision made by the school, than for short and mid-duration programs. A wide range of groups other than schools and local employers were sometimes involved in these negotiations. Groups included TAFE colleges, educational authorities, TRAC, external business partnership groups, students, training providers, skill centres and workplace coordinators.

Use of workplace time

Learning in the workplace which is structured and which involves students receiving training from nominated supervisors is considered an essential component of school-industry programs. More than two-thirds (71 per cent) of programs used the time in the workplace for structured learning, with the remainder of programs using this time for observation and experience only. In 1995 the proportion of programs using workplace time for structured learning was a little less (68 per cent). Extended programs were more likely to use the time in the workplace for structured learning. Thus, structured learning was part of:

- three-fifths (61 per cent) of the short-duration programs,
- three-quarters (76 per cent) of the mid-duration programs, and
- four-fifths (85 per cent) of extended programs.

Table 17 Groups identifying skills by length of time in the workplace

Group	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Industry only	17	18	15	18
Education only	10	14	10	5
Industry & education	73	68	75	78

The 1996 *Program Questionnaire* probed the issue of learning in the workplace further. If learning in the workplace was structured, respondents were asked whether the skills were identified by industry and/or education, and whether the structured learning involved national industry specific competencies and/or generic Key Competencies.

In almost three-quarters (73 per cent) of the programs in which the workplace time was used for structured learning, the skills were identified by both industry and education. The skills were identified by industry only in 17 per cent of programs and in the remaining 10 per cent skills were identified solely by education. Table 17 shows that both industry and education were more likely to be involved in identifying the skills to be learned in the workplace for extended programs.

Structured learning was as likely to involve national industry specific competencies as generic Key Competencies. Almost nine-tenths of programs involved these types of learning (88.5 and 87.4 per cent respectively). Programs of various workplace duration did not differ in the extent to which national industry specific competencies were taught. There were some differences, however, between these types of programs concerning the teaching of generic Key Competencies. These types of competencies were part of the structured learning in:

- four-fifths (81 per cent) of the short-duration programs;
- 85 per cent of the mid-duration program; and
- almost all (96 per cent) of the extended programs.

Supervision in the workplace

In three-quarters (77 per cent) of the school-industry programs there were supervisors to train students during their work placements. This is a little lower than for 1995 when 84 per cent of programs were reported as having nominated "mentors". It is possible that the different terminology has had some effect. Table 18 shows that extended programs were the most likely to have nominated supervisors present in the work sites.

Table 18 Availability of supervisors in work sites and proportion of trained supervisors by length of time in the workplace

Number of Days in the Workplace	Supervisors in Work Sites %	Supervisors Trained for Role %
10 or less days	70	58
11 to 20 days	80	64
More than 20 days	88	77
ALL PROGRAMS	77	65

In 1996 almost two-thirds (65 per cent) of supervisors in programs had received training for their role. However comments indicated that not all supervisors in the various worksites for a program had received training. Further comments indicated that training had been "available" or "offered", implying that supervisors had not always taken the opportunity to undertake training. Supervisors in extended programs were more likely to have received some training, as shown by the data in Table 18.

The 1996 *Program Questionnaire* also asked about the type of training which supervisors had undertaken. Types of training included informal induction or orientation briefing, Workplace Trainer Category 1 and Workplace Assessor training. Table 19 documents the types of training received by supervisors. Supervisors in some programs had received more than one type of training.

Table 19 Type of training undertaken by supervisors by length of workplace time

Type of Training	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Informal induction/orientation briefing	60	53	63	69
Workplace Trainer Category 1 training	31	35	21	32
Workplace Assessor training	17	15	20	17

Note: "Other" training (6 per cent) received included: TAFE teaching qualifications (8 mentions), teacher qualifications (5 mentions), YAA and E-team training (5 mentions), TRAC and trade qualifications (4 mentions each).

Assessment of workplace learning

Just as structured learning is deemed an essential part of the work placement experience, assessment of this learning is also considered a critical aspect. Formal assessment of the workplace-based learning was evident in 70 per cent of programs. In 1995 the responses indicated that 85 per cent of programs involved assessment of workplace learning. An explanation for the seemingly much lower incidence of assessment in 1996 could be that in 1995 the *Program Questionnaire* did not ask about the use of log books to record aspects of the workplace learning such as skills and learning outcomes which individual students achieved. Log books may, however, have been regarded as a mode of formal assessment. Only fifteen per cent of respondents reported that programs used neither log books nor formal assessment. The proportion of programs in 1996 which involved some sort of assessment would then be similar to 1995.

In 1996 competency log books formed a part of workplace-based learning for more than three-quarters (78 per cent) of school-industry programs. Almost all (91 per cent) of the extended programs used log books for recording skills or learning outcomes. The use of log books by short and mid-duration programs was much lower (71 and 78 per cent respectively).

Assessment was based on comparisons with agreed learning outcomes contained in the curriculum for almost three-quarters (72 per cent) of the programs where formal assessment occurred. Assessment of the remaining programs was based on a generalised oral or written report on the students' performance. In 1995 the figures were 70 and 30 per cent respectively. As shown in Table 20, extended programs were more likely to include assessment of the workplace component, and the assessments in these programs were more likely to involve comparisons with agreed learning outcomes.

Table 20 Aspects of assessment by length of time in the workplace

Aspects of Assessment	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Learning in the workplace was assessed formally	70	63	70	82
Assessments consisted of comparisons with agreed learning outcomes	72	68	71	78
Assessments counted towards students' school course	83	81	83	86
Assessments counted towards vocational certificates	74	74	78	70

It appeared that in 83 per cent of programs the assessments counted towards the students' school course, and in 74 per cent of programs the assessments counted towards certificates awarded by TAFE or State Training Authorities. In 1995 these figures were somewhat higher at 90 and 80 per cent respectively. Table 20 shows that assessments of workplace learning in extended programs were a little more likely to count towards a student's school course, and assessments counting towards vocational certificates were somewhat more likely to occur for the mid-duration programs.

Place of assessment

Assessment of workplace learning may take place at the workplace, at school or in both locations. Table 21 indicates the place where assessment of workplace learning occurred. There appears to have been a small increase in the number of programs which were assessed in the workplace only. Almost all of the assessments for extended programs occurred in the workplace or in both the workplace and at school.

Table 21 Place of assessment of workplace learning by length of time in the workplace

Place of Assessment	Percentage of Programs				
	1995 All	1996 All	≤ 10 days	11-20 days	> 20 days
Workplace	32	37	30	36	49
School	9	7	10	8	1
Both	59	56	60	56	50

Personnel involved in assessment

School teachers were less likely, and workplace supervisors more likely, to be involved in the assessment of workplace-based learning in 1996 compared with 1995. This trend was also apparent when comparing programs involving more than 20 days in the workplace with programs of shorter duration. Almost all of the extended programs for which assessment of workplace learning was a feature reported that a workplace supervisor was involved with the assessments. Relevant data from the survey have been recorded in Table 22.

Table 22 Personnel involved in assessment of workplace learning by length of time in the workplace

Personnel	Percentage of Programs				
	1995 All	1996 All	≤ 10 days	11-20 days	> 20 days
School teacher	72	59	70	60	44
Workplace supervisor	74	82	73	79	96
TAFE teacher	11	8	6	14	11
Other	10	8	3	4	11

Note: "Other" included program/course coordinators (3 per cent), TRAC personnel (1 per cent) and training providers (1 per cent).

Program management and coordination

The organisation of school-industry programs requires cooperation between schools and the enterprises/employers which are involved. Thus, issues of management and coordination are relevant.

Management of programs

The 1996 *Program Questionnaire* probed a number of management issues, including shared management of school-industry programs, employer involvement in identification of suitable students and contributions towards the cost of programs.

Almost half (48.6 per cent) of the programs in 1996 were reported as having a joint management group which consisted of people from education and local employers. In comparison, joint management groups existed for less than two-fifths (38.4 per cent) of the programs in 1995.

Extended programs were more likely to have a joint management group consisting of people from education and local employers than those involving less than 20 days in the workplace. There were joint management groups for:

- less than two-fifths (38 per cent) of short-duration programs;
- half (51 per cent) of the mid-duration programs; and
- almost two-thirds (65 per cent) of extended programs.

Employers were involved in *helping to identify students best suited to the program* in a little more than one-quarter (27.5 per cent) of the programs in 1995. The figure for 1996 was marginally higher at 28.7 per cent. More than half (53 per cent) of the extended programs reported that employers

were involved in identifying suitable students and 30 per cent of mid-duration programs did so. Only a few (14 per cent) of the short-duration programs had this type of involvement by employers.

In 1995 it was reported that more than half (58 per cent) of the programs had not received any contribution in cash and/or kind from employers. However, many respondents commented that employers had contributed to the program by providing students with placements and training. The ability to acknowledge this contribution was allowed for in the 1996 questionnaire. More than four-fifths (82 per cent) of programs reported that employers provided positions and training for students without any further contribution. The distribution of contributions by employers is documented in Table 23. It is apparent that extended programs were more likely to receive a contribution in cash and/or kind.

Table 23 Contribution by employers by length of workplace time

Contribution	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
In cash	5	2	3	9
In kind	3	4	6	2
In cash and kind	10	6	4	19
Placements only	82	88	87	70

Coordination of Programs

Almost all (95 per cent) of the programs in 1996 had a program coordinator. In 1995 less than three-quarters (71 per cent) of programs were reported as having a "local area" program coordinator. This difference could reflect a different nomenclature, but it could also represent the effect of an emphasis by the ASTF on supporting the training of coordinators. Very little difference was evident between the programs of various lengths of time in the workplace. Nine-tenths of the programs had a coordinator who was a teacher and four-fifths (81 per cent) of the coordinators were based in a school. Some responses indicated that programs had more than one coordinator.

Table 24 documents the place where coordinators were based. It was possible to nominate more than one place.

Table 24 Place where program coordinator is based by length of time in the workplace

Place where Coordinator is Based	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
In a school	81	87	84	72
In an education office	7	5	5	12
In a group training company	4	1	6	6
In a TAFE college	4	3	7	4

Note: Five per cent of all coordinators were reported as being based "elsewhere". This included industry/business/company (14 mentions), own office (13 mentions), TRAC centre and AQC office (12 mentions each).

Training and support of coordinators to carry out their role has been an ASTF priority. It appeared that more than three-fifths (63 per cent) of the program coordinators had been trained for their role. This was similar to the proportion of coordinators reported as having received training in 1995.

Coordinators of extended programs were a little more likely to have received training for the role (69 per cent) than coordinators of short and mid-duration programs (62 and 58 per cent respectively).

Summary

Quality work placements are a central feature of school-industry programs. In 1996, as in 1995, work placements covered a wide range of industries with the retail, office/clerical and hospitality fields being dominant. The majority of the programs involved enterprises/ businesses of 100 or fewer employees, and in three-fifths (61 per cent) of the programs students experienced workplace learning in more than one work site.

Organisation of the work placements is still an issue. Most (91 per cent) of the work placements took place on normal school days or a combination of school days and outside school time. However, in two-fifths of the programs students had to miss classes to attend their work placements. Decisions about the length of the work placements and when they should take place most often involved both the school and the local employer (59 per cent). In 1996 almost half (49 per cent) of the programs had a joint management group and almost all (95 per cent) of the programs had coordinators.

The time in the workplace was used for structured learning in more than two-thirds (71 per cent) of the programs. Structured learning was as likely to involve national industry specific competencies (88 per cent) as generic Key Competencies (87 per cent), and the skills were identified by both industry and education in almost three-quarters (73 per cent) of the programs. Supervisors were present in work sites in 77 per cent of programs and two-thirds (65 per cent) of these supervisors had received some training. Recording of the skills learnt in the workplace occurred in almost four-fifths (78 per cent) of programs, whilst formal assessment of the workplace learning was part of 70 per cent of programs.

Programs which involved more than 20 days in the workplace tended to be better integrated into the school curriculum and involve work placements with characteristics more in line with Australian Student Traineeship Foundation thinking on "best practice" programs. These programs were more likely to involve work placements involving more than one work site, and less likely to require students to miss classes to attend work placements. Structured learning in the workplace was more likely to feature in these programs (85 per cent), and supervisors were more likely to be present at work sites (88 per cent). Almost all of the extended programs used log books (91 per cent) and formal assessment of the workplace learning was more likely to occur (82 per cent). In addition, these programs were more likely to have a joint management group (65 per cent).

It is apparent that school-industry programs are still in a process of evolving. As for 1995, comments on the questionnaires indicated that schools were "moving to" or "addressing" various aspects of these programs. Areas of the workplace learning where changes were mooted included using the time in the workplace for structured learning, assessing workplace learning formally and using log books for recording skills. Nominating supervisors to train students, providing training for supervisors and organising a joint management group are other aspects which were mentioned.

There are some areas of concern. It is apparent that schools are still having some difficulty integrating work placements into school timetables. A large proportion of students are missing classes to attend work placements. The fact that supervisors are not always taking up the offer of training could perhaps be a problem of lack of time. These areas may warrant further investigation.

6

Linkages to education, training and work

The previous chapter focussed on the characteristics of school-industry programs as they relate to the workplace learning component of these programs. This chapter is also concerned with characteristics of school-industry programs and how these characteristics have changed from 1995 to 1996. The focus in this chapter, however, centres on the place of school-industry programs in the school curriculum and the links that these programs provide to further education, training and work.

The Australian Student Traineeship Foundation identified a number of features which they considered contributed to "best practice" programs from a school and school experience perspective. They were concerned that school-industry programs be part of the school curriculum of the senior secondary years, that they combine off-the-job training in addition to time in the workplace, and that they receive school and industry recognition. This chapter provides information concerning these issues and also looks at how these programs may benefit students who participate in them in terms of the links they provide to further education, training and work.

From a school or system perspective

Characteristics of school-industry programs which have an impact on the quality of the experience which students receive when participating in these programs include their place in the school curriculum, the recognition and accreditation these programs receive, and the organisation of the off-the-job training which complements the workplace learning component.

Year of commencement

In 1995 it was found that many of the programs were of recent origin. Earlier chapters have documented the increase in 1996 in the number of schools offering school-industry programs at the senior secondary level. Table 25 shows that two-thirds (66 per cent) of the programs identified in this survey had commenced in 1995 or 1996. Two-fifths had commenced in 1996 indicating a continuing growth in the provision of school-industry programs.

Table 25 Year of commencement by length of time in the workplace: programs operating in 1996

Year of Commencement	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Pre-1993	10	12	7	8
1993	8	7	9	12
1994	16	14	15	21
1995	27	30	25	22
1996	39	37	44	37

Type of program

In the 1996 *Program Questionnaire* a question was asked about the type of program. Respondents were asked if the program fitted into any of the nine categories provided and space was provided for respondents to write in a description if they felt that their programs did not belong in any of the categories mentioned. Table 26 indicates that more than a quarter (26 per cent) of the 1660 programs in the 1996 survey were classified as "other" programs. It was not possible to carry out a content analysis of this category. It is recognised, however, that there were significant numbers of programs which are unique. In addition, four per cent of the responses involved more than one program per returned questionnaire.

More than 18 per cent of programs were identified as programs which would not be regarded by the Australian Student Traineeship Foundation as fitting their classification of a "school-industry program". These programs included work experience, externally initiated business partnerships such as Young Achievement Australia and E Team, and the Work Studies program in New South Wales. The majority of work experience and externally-initiated business partnership programs involved 10 or fewer days in the workplace.

Length of program

In both the 1995 and 1996 *Program Questionnaire* a question was asked concerning the length of the program (i.e. the number of years that students spend in the program). Table 27 indicates that there was little change between 1995 and 1996 in the proportion of programs which were "either one or two years" or two years in length.

Table 26 Types of program by length of time in the workplace

Type of Program	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Work experience	7.1	10.9	2.0	2.9
Ext. initiated business partnership (E team, YAA)	4.7	6.9	1.6	0.2
Mixed (work experience, YAA, etc.)	1.1	1.5	0.4	0.8
Work Studies (NSW)	5.4	3.1	5.6	9.9
Transition Education	1.4	0.2	2.0	3.1
Industry Studies, CEC (NSW)	25.2	40.0	18.4	4.4
Mixed (Work Studies, CEC - NSW)	0.4	0.4	0.4	0.4
Dual Recognition/ Certification (Vic)	14.9	14.7	23.6	10.1
TRAC	8.2	0.1	1.6	26.6
INSTEP (WA)	2.5	0.0	2.0	7.5
"Other" (includes Work Education - Queensland and Tasmania)	26.3	20.8	39.2	34.2
Mixed (uncodeable)	2.8	1.4	3.2	3.8
Total number	1660	851	250	477

Note: The discrepancy in the numbers of programs is due to missing responses for the extent of time in the workplace.

Overall, a little more than half the programs in both 1995 and 1996 were two year programs, with a further one-fifth being of one or two years' duration. There was a small increase, however, in the proportion of programs involving one semester or less, which may be due to an increase in reporting of work experience and externally initiated business partnership type programs.

Table 27 Usual length of program by length of time in the workplace

Length of Program	Percentage of Programs				
	1995 All	1996 All	1996 Short	1996 Mid	1996 Extd.
One semester or less	10	13	20	8	2
One year only	18	15	9	17	25
Either one or two years	19	20	14	14	34
Two years (or more)	53	52	57	61	39

Note: In 1996, 1 per cent of the 2-year programs were identified as "more than 2 years".

As shown in Table 27, almost all (98 per cent) of the extended programs in 1996 were of one year or more duration. In comparison four-fifths (80 per cent) of the short duration programs were one or more years in length. An interesting observation is that extended programs were more evenly spread across the one year or more categories, whereas more than half (57 and 61 per cent respectively) of the short and mid duration programs involved participation of at least two years. It is possible that for many of the two year programs the work placements were divided between the two years.

Organisation of programs

The *Program Questionnaire* asked whether the program was organised as a separately accredited subject, as a program which was embedded in other accredited subjects or as a program which was additional to the students' normal subjects. Table 28 shows that three-fifths (59 per cent) of the programs in 1996 were separately accredited subjects with a further one fifth being embedded in an accredited subject. The remaining one-fifth of programs were additional to the students' complement of subjects.

If the program had been organised as a separately accredited subject, schools were asked to indicate whether the program was accredited at the State or local/school level. Most of the programs of this type were accredited at the State level (87 per cent) or both State and local level (5 per cent). The remainder were accredited at the local level only.

Recognition given to school-industry programs

The recognition given to school-industry programs by such bodies as the secondary and vocational education authorities, and certificates received on completion of a program are an important consideration for students in terms of their future plans. The survey asked whether the results of the program were recorded on their Year 12 (or equivalent) certificate, whether the program was accredited by the State or Territory vocational training authority and which certificates students received after successfully completing the program.

Table 28 Organisation of program by length of time in the workplace

Program Organisation	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Separately accredited subject	59	61	52	62
Embedded in other accredited subjects	21	17	30	23
Additional to students' normal subjects	20	22	18	15

Table 29 Certificates issued on completion of program by length of time in the workplace

Certificates Issued on Completion	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Certificate awarded by the State vocational training authority	34	35	34	34
TAFE certificate	28	25	34	31
Certificate from a national or State industry body	15	14	13	19
Certificate from a local or regional body	11	4	6	26

Students' results were recorded on their Year 12 (or equivalent) certificate in four-fifths (78 per cent) of programs. This was similar to 1995, when for 80 per cent of programs students' results were recorded on their Senior Secondary Certificate. Programs involving a longer duration in the workplace were somewhat more likely to have the students' results recorded on their Year 12 certificate than those of shorter duration. Students' results were recorded on their Year 12 certificate as follows:

- three-quarters (75 per cent) of the short-duration programs;
- three-quarters (77 per cent) of mid-duration programs; and
- 84 per cent of programs involving more than 20 days in the workplace.

Slightly more of the programs in 1996 were accredited by the State or Territory vocational training authority than in 1995 (77 per cent in 1996 compared to 73 per cent). Programs of various time lengths in the workplace did not vary in the proportion that were accredited by the State or Territory vocational training authority.

On completion of the program students received one or more certificates as shown in Table 29. In addition, one quarter of the programs indicated that certificates other than those mentioned above were issued to students on completion of the program. One-third (36 per cent) of these "other" certificates were issued by a secondary education authority and a further third (32 per cent) were school-based certificates.

Whilst programs of short, mid and extended duration were equally likely to issue certificates awarded by the State or Territory vocational training authority, there were some differences in terms of certificates issued by TAFE colleges, national or State industry bodies and from local or regional bodies. These differences are documented in Table 29, and indicate that students in extended programs were much more likely to receive a certificate from a local or regional body and somewhat more likely to

receive a certificate from a national or State industry body than programs of a shorter duration. Students completing mid-duration and extended programs were more likely to receive a certificate from a TAFE college than those completing a short-duration program.

Role of classroom or off-the-job training time

As for 1995, it was evident that a combination of workplace learning and classroom or off-the-job training time was a feature of school-industry programs. Some 88 per cent of programs in 1996 indicated that the program involved some classroom or off-the job training time (87 per cent in 1995). Programs involving longer periods of time in the workplace were more likely to also involve off-the-job training time. The proportions of programs including off-the-job training or classroom time were as follows:

- 86 per cent of programs which were of a short duration;
- 90 per cent of the mid-duration programs; and
- 93 per cent of extended programs.

Delivery of off-the-job training

Further questions concerning the off-the-job component involved the delivery of this type of training and who participated in decisions concerning the sections of the program which should be taught off the job. These questions were not asked in 1995. Tables 30 and 31 document the responses to these questions.

School personnel were involved in off-the-job training in four-fifths of the programs. Both TAFE staff and personnel from private training providers were involved in delivering training in one-fifth of programs respectively, indicating that more than one source of training was provided in some programs. Extended programs were more likely to also involve personnel other than those from the school.

Table 30 Personnel delivering off-the-job training by length of time in the workplace

Personnel Delivering Off-the-job Training	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
School personnel	80	81	81	78
TAFE	21	15	26	28
Other private training provider	18	16	12	26
Group training company	5	3	4	9

Table 31 Groups negotiating the use of workplace and off-the-job training time by length of time in the workplace

Group Involved in Negotiations	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
School	72	72	80	69
Local employer	31	25	35	39
Off-the-job trainer	23	17	27	30
Industry body	23	20	24	30

Schools were the most likely group to have a say in *which parts of the program should be taught in the workplace and which in the classroom or off-the-job*, with almost three-quarters (72 per cent) of the programs with an off-the-job training component mentioning this group. Local employers, off-the-job trainers and/or industry bodies were more likely to be involved in the negotiations when the program involved an extended time in the workplace than for programs of a shorter duration.

Table 32 Use of off-the-job training time by length of time in the workplace

Use of Off-the-job Training Time	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
...provide students with the theoretical knowledge on which to build the practical experience	93	94	94	91
...help students understand what they have learned in the workplace	75	71	83	81
...fill in gaps in students' knowledge and understanding not covered in the workplace	74	68	79	81
...other	15	15	15	15
develop practical skills /experience	*7 (45)*			
complete school subject/course/module	*3 (23)*			
teach vocational aspects e.g. interviews job search	*2 (12)*			
teach work-related issues, e.g. OH&S	*1 (5)*			

Note: The figures in brackets indicate the percentage of the "other" responses.

Use of off-the-job training time

Classroom or off-the-job training time may be used for a variety of purposes. Table 32 indicates that providing *students with the theoretical knowledge on which to build the practical experience* was almost universally considered a part of the off-the-job training component. Helping students to understand what was learned in the workplace and providing further knowledge and understanding not covered during a student's time in the workplace were also considered important uses for classroom time.

Content of programs

Table 33 indicates that just under three-quarters of the programs were based on TAFE or vocational modules and one-fifth involved local content. Extended programs were more likely to involve local content than programs of a shorter duration.

Table 33 Content of program by length of time in the workplace

Bases of Program	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
National TAFE or vocational modules	72	72	75	70
Locally developed content	21	15	20	33
Other	19	18	17	22

Note: 50 per cent of the "other" category involved content developed/ accredited by the secondary education authority; a further 20 per cent involved content for externally initiated business partnerships or work experience.

Post-school linkages

A most important consideration in relation to school-industry programs is the future outcomes for students who participate in these programs. An earlier section described the extent of recognition received by students on their senior secondary certificates and the types of certificates issued on completion of a program. Whether students have greater access to jobs or further education and training on completion of a program, however, warrants further investigation.

In 1995, the *Program Questionnaire* asked questions concerning advanced standing or credit transfer into TAFE courses, advanced standing or credit into apprenticeships or traineeships and whether students completing the program received help in obtaining a job. The questions asked in 1996 were more detailed reflecting the importance of this aspect of school-industry programs.

It must be noted that the 1996 *Program Questionnaire* allowed respondents to indicate that they were "uncertain" about aspects of the post-school linkages provided by the program. Results indicated that there was a lot of uncertainty concerning the possible outcomes for students completing school-industry programs. This is an area of some concern as students may not be receiving adequate support and information about the post-school possibilities on completing these programs. In addition, students considering participating in school-industry programs may not be receiving sufficient information to make informed decisions about the benefits of participation in terms of their future. The high rates of uncertainty are also likely to affect the survey results. It is reasonable to expect that where these rates are high, the figures provided may be underestimates of the true value.

Apprenticeships and traineeships

The survey in 1995 indicated that one-third (35 per cent) of programs led to advanced standing or credit into an apprenticeship or traineeship. The survey in 1996 asked this question separately for apprenticeships and traineeships. The data in Table 34 show that a slightly greater proportion of programs led to advanced standing or credit into both apprenticeships and traineeships in 1996.

Table 34 Aspects of links to further education, training and work by length of time in the workplace

Program Feature	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Program leads to advanced standing/credit into an apprenticeship	39 (19)	41 (16)	46 (22)	33 (22)
Program leads to advanced standing/credit into a traineeship	36 (32)	35 (31)	33 (38)	41 (29)
Program has access to priority entry/ selection to apprentice/ traineeships	17 (43)	15 (40)	17 (47)	21 (46)
Program results in credit towards a TAFE or other VET course	73 (5)	73 (3)	76 (7)	71 (7)
Program contributes to the student's Tertiary Entrance Rank	27 (3)	31 (2)	37 (3)	15 (4)
Program conducts a survey on the destinations of graduates	28 (17)	17 (16)	29 (20)	46 (19)

Note: Figures in brackets indicate the percentage of programs for which the response was "uncertain".

Two-fifths (39.4 per cent) of the programs in 1996 led to advanced standing/credit into an apprenticeship. However, almost one-fifth (19 per cent) of respondents reported being uncertain of the answer to this question. Of those programs that led to advanced standing/credit:

- 61 per cent reduced the period of the indenture; and
- 94 per cent reduced the off-the-job training component.

In the case of traineeships, advanced standing/credit was available in over one-third (35.8 per cent) of programs. The proportion of respondents who reported being uncertain of this aspect was high (almost one-third or 32 per cent). Programs leading to advanced standing or credit did so by:

- reducing the period of the indenture (71 per cent); and
- reducing the off-the-job training component (94 per cent).

The data in Table 34 indicate that programs of short or mid duration in the workplace were somewhat more likely to lead to advanced standing/credit into an apprenticeship than extended programs, whereas extended programs were somewhat more likely to lead to traineeships than those programs which spent less time in the workplace.

In 1996 it was asked whether the program had *access to priority entry/selection to apprenticeships or traineeships for students who complete the program.* Less than one-fifth (17.4 per cent) of programs appeared to do so, however the number of respondents reporting that they were uncertain was very high (43 per cent). Comments on some questionnaires (such as *...but TRAC students appear to have an advantage when applying,* and *...no, but it certainly helps*) indicate that participation in a school-industry program is likely to be of greater benefit in applying for apprenticeships or traineeships than indicated by the data.

Further education and training

Table 34 also documents other findings in relation to outcomes for students in school-industry programs. Almost three-quarters (73 per cent) of the programs in 1996 resulted in *credit towards a TAFE or other VET course.* In 1995 it was found that three-quarters of *all programs led to advanced standing or credit transfer into TAFE courses.* For one quarter (27 per cent) of the programs in 1996 the assessments obtained from participation in a school-industry program contributed to the Tertiary Education Rank (or its equivalent) score that students received. This was most likely to happen in programs of mid-duration in the workplace (37 per cent) and least likely to occur in extended programs (15 per cent).

Table 35 Arrangements for helping graduating students find a job or place in further education by length of workplace time

Type of Local Arrangements	Percentage of Programs			
	All	≤ 10 days	11-20 days	> 20 days
Formal arrangements	14	9	16	22
Informal arrangements	48	47	45	52
No arrangements	33	40	31	20
Uncertain	5	4	8	6

Facilitating job or further education placement

In addition to seeking information about the links to further education and training, questions were asked about the help students received in the program to find work or a place in further education on completing the program, and whether a survey was conducted to follow students' destinations. Tables 34 and 35 contain data based on responses to these questions.

In 1995 it was reported that a little over one-third of programs made local arrangements to help the graduates of the program to find a job or a place in further education and training, and that this according to comments made on the questionnaires also happened on an informal basis. In the 1996 questionnaire respondents could indicate that help was given informally. From Table 35 it appears that almost half (48 per cent) of the programs made local arrangements to help the graduates on an informal basis. Only 14 per cent of programs reported that local arrangements were more formal. Formal arrangements were more common for extended programs (22 per cent), and almost three-quarters (74 per cent) of these programs involved either formal or informal arrangements.

A survey which followed the destinations of graduates from the program was conducted by 28 per cent of programs. From Table 34 it is evident that extended programs were the most likely to conduct a survey with almost half (46 per cent) of these programs doing so, compared with less than one-fifth (17 per cent) of the short-duration programs. Comments on some questionnaires indicated that surveys may be carried out at the school level, and that conducting a survey is planned for the future.

Issues from a school perspective

The growth in school-industry programs seems likely to continue. Almost half (44 per cent) of the schools without school-industry programs in 1996 indicated that they were planning to introduce programs in the future. For some schools this is only in the "thinking of'" stage. Thus:

- *We are just starting to think re voc ed and how we should introduce some form of this.*
- *We are just in the first stages of looking at this.*
- *There is considerable interest but no time to establish the courses.*

Responses, to a request for information concerning the program(s) planned for the future indicated that many were set to operate in 1997 or 1998. In Victoria, for instance, a new Year 12 subject (VCE study) called *Industry and Enterprise Studies* is being introduced in 1997. Quite a number of Victorian schools mentioned an intention to offer this subject to their senior secondary students. This subject will involve work placements, classroom time, structured learning and assessment of workplace learning, and results will be recognised on the Year 12 certificate and contribute to the students' Tertiary Entrance Rank.

Comments on questionnaires point to some difficulties schools experience in establishing and continuing school-industry programs: issues of resourcing, student numbers and staff training. Some comments are provided as examples:

- *No future programs are planned at this time because of (a) the high monetary cost of establishing such programs, (b) the continued difficulty of teacher training, (c) the reluctance of students to undertake a non-TER pathway.*

- *The college is investigating the possibility of offering dual recognition programmes, however, no definite plans are in place. Eventual provision of these programmes will depend on student interest as well as school resources.*

Schools may wish to offer school-industry programs, but find that they are not viable when there is insufficient interest.

- *Retail, Metals and Engineering, Hospitality and Office Skills - but students didn't take the opportunity in sufficient numbers to do these programs in 1996 or 1997.*

- *Our small school numbers dictate which courses run even after some excellent counselling and marketing.*

However, some schools have overcome these problem by forming school networks, or through their association with other schools.

- *We offer courses in Viticulture, TRAC (Retail Trades), Forestry, but not one student has taken this up this year. Problems due to numbers - 2 students wanted to do Viticulture but we need more to run the course. Next year one student is doing TRAC and we hope in 1998 more will be involved by combining with other schools in the area to overcome class size problems and staffing levels.*

Financing of the implementation of new programs was raised as an issue of some importance.

- *Time and costs of coordination are limiting factors for us.*

- *Whilst we find great benefit in these programs for all students, issues relating to resourcing remain significant. As long as schools are required to manage this new agenda, with its requisite understandings of flexible delivery, implications for timetabling and teaching/learning issues, without due recognition, the programs will remain peripheral to mainstream educational administration and management and then taken up only by those schools willing to take risks and find effective learning solutions for students.*

Training for staff and workplace supervisors involved in school-industry programs is also an issue in providing quality school-industry programs.

- *We would like structured workplace learning but it can only be taught by a Category A trainer. There are very few of these around.*

- *Hospitality and Office Skills - if we can ever get training for our staff.*

Schools in isolated areas face additional problems.

- *Constant pressure for work placements disadvantages isolated schools in small communities.*

- *.... is a small isolated town and does not have sufficient business to support numbers of students. Current Government push to have students in work placements is an excellent concept but disadvantages our students. Needs to be some consideration given to financially supporting isolated schools so that their students can develop the practical skill that would normally be achieved in industry. We are trying to achieve this by having full TAFE course running but finances and viable class sizes are continually a problem.*

- *The school is looking at Dual Recognition and other school-industry programs but as a small isolated rural school that does not have a TAFE nearby or schools to network with we are finding it impossible to implement programs.*

Attempts are being made by schools to overcome some of these problems.

- *Because of the difficulties we experienced with the work placement, we will be making application to appoint a work placement coordinator. This year we taught the modules via telematics to .... - we hope to consolidate this programme with a visual link in 1997.*

Summary

Numbers of school-industry programs are continuing to grow. Two-fifths (39 per cent) of the programs in this survey had commenced in 1996. The majority (90 per cent) of the programs were one or more years in length, and nine-tenths (88 per cent) of the programs involved some off-the-job training or classroom time. School personnel were the most likely to provide this training (80 per cent) and to be involved in decisions concerning its content (72 per cent). In almost four-fifths (78 per cent) of programs the results were recorded on the students' senior secondary certificate and a similar proportion (77 per cent) were accredited by the State or Territory vocational training authorities.

Programs where students spent more than 20 days in the workplace differed from programs with shorter periods in the workplace in a number of ways. Students in these programs were more likely to have their results recorded on their senior secondary certificate and to receive a certificate from a local or regional body. It was more likely that personnel from schools in combination with personnel from TAFE and other private training providers would deliver the off-the-job training and that groups such as local employers, off-the-job trainers and industry bodies would be involved in decisions concerning the learning which should occur in the workplace and off the job.

It is of importance to look not only at characteristics of the programs themselves, but also at the outcomes for students on completion of these programs. In 1996 two-fifths (39 per cent) of the programs led to advanced standing/credit into apprenticeships and one-third (36 per cent) led to advanced standing/credit into traineeships. Credit towards a TAFE or other VET course could be obtained in almost three-quarters (73 per cent) of the programs. The program contributed to the Tertiary Entrance Rank score in one-quarter of programs (27 per cent). Although only 14 per cent of programs reported that formal arrangements were in place to help students who had completed the program to find a job or a place in further education or training, informal arrangements were present in a further half of the programs. A little more than one-quarter (28 per cent) of programs conducted a destination survey.

Again, there were differences between extended programs and those involving 20 or fewer days in the workplace. Extended programs were less likely to lead to advanced standing/credit into apprenticeships and more likely to lead to advanced standing/credit into traineeships. These programs were more likely to assist students to find a job or place in

further education and more likely to conduct a survey on the destinations of students completing the programs.

An area of concern was the high rate of uncertainty displayed by respondents about the benefits of these programs for the students completing them. Aspects such as whether school-industry programs may lead to advanced standing/credit into traineeships and whether programs have access to priority entry or selection into apprenticeships and traineeships had very high uncertainty rates (32 and 43 per cent respectively). It would seem imperative that personnel involved in school-industry programs be aware of all the future possibilities for students, both in terms of advising students participating in these programs and for encouraging young people to enrol in quality school-industry programs.

7

Conclusion

School-industry programs have emerged as an important innovation in a context of historically high levels of participation in the upper secondary years; a decline in the opportunities for full-time work by young people; and a realisation that deferred entry to work may have deleterious consequences for individual development. They aim to provide for "learning about the world of work" as well as "learning employment-related skills". Structured learning in the workplace, that is assessed and accredited as part of school work, is the central means by which these goals are pursued.

School-industry programs are courses for Year 11 and/or Year 12 students that require students to spend time in the workplace as part of a structured experience that is recognised as part of their formal studies.

This report is based on the second national survey of the extent and characteristics of those programs. The survey was designed to monitor the scale and characteristics of school-industry programs. All schools that enrolled students in Years 11 and 12 during 1996 were surveyed and just under four out of every five of those schools responded. That in itself provides an index of the importance of these programs. The survey was commissioned by the *Australian Student Traineeship Foundation*.

Patterns of growth

Schools

The survey indicates continued growth in the number of schools throughout Australia providing school-industry programs. In 1995 some 46 per cent of schools provided some form of school-industry program. By 1996 that figure had grown to 62 per cent. The indications are that this growth will continue into 1997 with some 44 per cent of schools not currently providing a program indicating that they planned to do so in the future.

Within this general pattern there were differences in the extent of provision between sectors, States and locations and differences related to other characteristics such as the size of the school and the social characteristics of the area in which it was located. There were variations between regions

that suggested that it was important to have local support for the implementation of these programs.

Despite this general growth in the provision of school-industry programs by schools, a caution is also provided in the survey data. Growth was greatest in programs of shorter duration and some of the programs (perhaps up to 20 per cent of all programs) were not ones that would meet the criteria specified by the Australian Student Traineeship Foundation. It remains an important challenge to ensure that substantial high quality work placements continue to be provided. The possibility of further developing networks of schools may be one route to pursue.

Students

Even though a substantial number of schools provide school-industry programs, it remains the activity of a minority of students. Between 1995 and 1996 overall participation grew from seven to twelve per cent of the Year 11 and 12 population. Students who participated tended to be from Year 11 rather than Year 12 (70 per cent were from Year 11) and were evenly divided between males and females.

Again a note of caution against too much optimism for that which is provided by the data. For most students their involvement is in a program with just a short period of time in the workplace. Only 2.3 per cent of Year 11 and 12 students participated in extended school-industry programs. This means that approximately 8,600 students were engaged in programs with extended (i.e. more than 20 days in the workplace) work placements. In addition, more than 18 per cent of the programs were not ones which would meet the Australian Student Traineeship Foundation criteria.

All of the growth in student participation in school-industry programs between 1995 and 1996 was in programs with short duration work placements. Even though there were more schools providing extended duration programs, each program appeared to have fewer students in it. It remains a major challenge to involve more senior secondary students in school-industry programs with substantial and high quality learning in the workplace.

There are locations that have achieved high levels of participation in programs with extended periods of workplace learning (e.g. Tasmanian government schools with 7 per cent) and it should be possible to learn from those experiences. Student interest is vitally important for the viability of programs.

Evolution and consolidation

During 1996 school-industry programs continued to evolve in terms of procedures and content. For many schools and industries 1995 was the first venture into the field. In 1996 it was possible to build on that experience and, for new schools into the program, to learn from the experience of neighbours.

Industries

Quality work placements are a central feature of school-industry programs. In 1996, as in 1995, work placements covered a wide range of industries, matching the distribution of industries in which young people are employed. The retail, office/clerical and hospitality fields were dominant. It may be that there is a slight overemphasis on the hospitality industry, in terms of present employment distribution. The majority of the programs involved enterprises/ businesses of 100 or fewer employees, and in three-fifths of the programs students experienced workplace learning in more than one work site.

Best practice

Programs which involved more than 20 days in the workplace tended to be better integrated into the school curriculum and involve work placements with characteristics more in line with Australian Student Traineeship Foundation criteria for "best practice".

These extended programs were more likely to involve work placements involving more than one work site, and less likely to require students to miss classes to attend work placements. Structured learning in the workplace was more likely to feature in these programs, and supervisors were more likely to be present at work sites. Almost all of the extended programs used log books, and formal assessment of the learning in the workplace was more likely to be a feature. Students in these programs were more likely to have their results recorded on their senior secondary certificate and to receive a certificate from a local or regional body. It was more likely that personnel from schools in combination with personnel from TAFE and other private training providers would deliver the off-the-job training and that groups such as local employers, off-the-job trainers and industry bodies would be involved in decisions concerning the learning which should occur in the workplace and off the job. These programs were more likely to have a joint management group involving people from education and local employers .

There were indications that a number of characteristics of programs that would be considered to be "best practice" had become more widespread. For example, there was an increase in the extent to which workplace supervisors were involved in assessment, the extent of employer

involvement in negotiations regarding timing and duration of the work placements was encouraging and the use of joint management groups had grown.

Learning about work

Structured learning in the workplace was provided in almost three-quarters of the programs. Both national industry specific competencies and generic Key Competencies constituted part of this structured learning experience. Approximately nine-tenths of the programs which involved structured workplace learning incorporated these types of competencies. In addition, classroom or off-the-job training was provided in about nine-tenths of programs and, where this training was available, it augmented the workplace learning by providing both theory and understanding concerning the work placements. It would appear that many of the programs in this survey played a role in providing for "learning employment-related skills" and "learning about the world of work".

Other aspects of management

School-industry programs are still in a process of evolving. Comments on the questionnaires indicated that schools were "moving to" or "addressing" various aspects of these programs. Areas of the workplace learning where changes were mooted included using the time in the workplace for structured learning, assessing workplace learning formally and using log books for recording skills. Nominating supervisors to train students, providing training for supervisors and organising a joint management group are other aspects which were mentioned.

There are some areas of concern. Organisation of the work placements is still an issue. It is apparent that schools are still having some difficulty integrating work placements into school timetables. A large proportion of students are missing classes to attend work placements. Training of supervisors and school personnel is an issue that has received considerable attention but remains a concern. The fact that supervisors are not always taking up the offer of training could perhaps be a problem of lack of time.

Issues

Comments from schools pointed to some issues involved in the establishment and continuation of school-industry programs. Sufficient numbers of students for the viability of programs, resourcing and the costs involved in running programs, and the training of staff and personnel involved in school-industry programs remain issues of concern.

Further education, training and work

It is important to evaluate school-industry programs not only in terms of their coverage and characteristics but also in terms of the outcomes for students on completion of these programs. In 1996 two-fifths of the programs led to advanced standing or credit into apprenticeships and one-third led to advanced standing or credit into traineeships. Credit towards a TAFE or other VET course could be obtained in almost three-quarters of programs, and in one quarter of programs the school-industry program contributed to the Tertiary Entrance Rank. Even though only 14 per cent of programs reported that formal arrangements were in place to help students who had completed the program to find a job or a place in further education or training, informal arrangements were present in a further half of the programs.

There was considerable uncertainty among respondents about the benefits of these programs for the students completing them. This uncertainty concerned whether school-industry programs resulted in advanced standing or credit into traineeships and whether programs provided priority entry or selection into apprenticeships and traineeships. A number of schools conducted their own destination studies but it would seem imperative to have some more broadly-based information about the outcomes of these programs.

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Appendix A

SCHOOL-INDUSTRY PROGRAMS
NATIONAL SURVEY 1996

SCHOOL QUESTIONNAIRE

PROGRAM QUESTIONNAIRE

Australian Student Traineeship Foundation

NATIONAL SURVEY OF SCHOOL-INDUSTRY PROGRAMS

SCHOOL QUESTIONNAIRE

Below you will find some questions which ask for details about your school and whether your school offers school-industry programs. Please refer to the notes on the back of this sheet where indicated.

PLEASE fill in this sheet even if you do not have any programs (see Note 1).

ABOUT YOUR SCHOOL:

School name: .....

School address: ..... **State:** .....

Post code: ..... **Telephone:** ..... **Fax:** .....

Name of contact person to whom the summary report should be sent: .....

School sector: ❑ Government ❑ Catholic ❑ Independent

School population: ❑ Coeducational ❑ Girls only ❑ Boys only

School location: ❑ Capital city ❑ Country/provincial city (more than 25,000)
❑ Country town (1,000-25000) ❑ Other country area

How many students (in total) **are currently enrolled in: Year 11?** Males .....Females.....
Year 12? Males .....Females.....

ABOUT THE PROGRAMS:

Are school-industry programs (see Note 2 for definition) **offered in Year 11 and/or Year 12?**

❑ **YES** ⇨ **How many school-industry programs currently operate in your school?**.....
PLEASE fill in a separate Program Questionnaire for each program (see Note 3).

❑ **NO** ⇨ **Are program(s) planned in the future?** ❑ **YES** ⇨ Please tell us on the back of this sheet (see Note 4).

❑ **NO** ⇨ **THANK YOU**

Information about where and how to return the questionnaire(s) is on the back of this sheet. ⇨ ⇨ (see Note 5)

IMPORTANT NOTES FOR RESPONDENTS

NOTE 1. Why fill in this questionnaire?
We would appreciate your filling in the questions on this sheet (School Questionnaire) even if your school does not have any school-industry programs. This will allow us to obtain a more accurate picture of the extent of provision of these programs throughout Australia and also ensure that we do not send 'reminder' letters to your school requesting your participation.

NOTE 2. How are school-industry programs defined?
For the purpose of this survey school-industry programs are defined as follows:

- the program involves Year 11 and/or Year 12 students
- students spend time in the workplace ***as part of*** the program
- students are ***currently*** enrolled in the program.

NOTE 3. What is meant by 'How many school-industry programs operate in your school?'
Your school may offer two or more different programs and we would like to know about these separately. Your school may also offer programs which operate on a similar basis but are in different industries (eg. one in Hospitality and one in Retail). We would like to distinguish between these and count them as two (or more) programs. If your school has more than one program, please photocopy this questionnaire and fill it in separately for each program that your school offers.

NOTE 4. What information is wanted about future programs?
Please provide the title of the program and when you expect students to begin the program. If program(s) are to begin in 1997, please indicate the expected enrolments (by males and females for each of Year 11 and Year 12).

NOTE 5. How do I return the School Questionnaire, and any Program Questionnaire(s) if appropriate?
Use the Reply Paid envelope provided (Private Bag 55 CAMBERWELL VIC 3124), or fax the questionnaire(s) to (03) 9277 5500 (attention Marianne Fleming).

Planned future programs:

.....

.....

.....

.....

.....

.....

.....

.....

THANK YOU

Australian Student Traineeship Foundation

NATIONAL SURVEY OF SCHOOL-INDUSTRY PROGRAMS

PROGRAM QUESTIONNAIRE

School name: .....

Title of program: .....

Name of program contact person in school: .....

Phone number of program contact person (in case further details are needed): .....

If program is delivered by another school, please provide name of school: .....

1 DETAIL OF THE SCHOOL-INDUSTRY PROGRAM

In what year were students first enrolled in the program *(ie. when did program begin)*? 19___

How many students are currently enrolled in this program?

Year 11: Males _____ Females _____

Year 12: Males _____ Females _____

How many students do you expect to enrol in this program in 1997?

Year 11: Males _____ Females _____

Year 12: Males _____ Females _____

Does the program fit into any of the following categories? *(please tick appropriate box)*

- ❑ Work experience *(generally undertaken in Years 10 and 11)*
- ❑ Externally initiated business partnerships *(eg. E Team, Young Achievement Australia)*
- ❑ Transition education *(ie. workplace learning programs for students with disabilities)*
- ❑ Work Studies *(New South Wales)*
- ❑ Work Education *(Queensland, Tasmania)*
- ❑ Dual Recognition, Dual Certification *(Victoria)*
- ❑ Industry Studies, Content-Endorsed Course *(New South Wales)*
- ❑ TRAC
- ❑ INSTEP
- ❑ Other *(please tell us)*: _____

2 PROGRAM MANAGEMENT AND COORDINATION

Does the program have a joint management group consisting of people from education and local employers? ❑ YES ❑ NO

Is there a program coordinator for the program? ❑ YES ❑ NO ⇒ *Please go to question 3*

⇓

Is the program coordinator a teacher? ❑ YES ❑ NO

Where is the coordinator based? ❑ In a school ❑ In a group training company ❑ In a TAFE college ❑ In an education office ❑ Elsewhere *(please tell us)*: _____

Has the coordinator been trained for the role? ❑ YES ❑ NO

3 EMPLOYER PARTICIPATION

How many different employers are involved in this program (in your school)? ____

How many of these employers are:

- micro (ie. 5 or fewer employees)? ____
- small (ie. 6 to 20 employees)? ____
- medium (ie. 21 to 100 employees)? ____
- large (ie. more than 100 employees)? ____

Which industry(ies) does this program cover? *(tick as many boxes as you need to)*

- ❑ Agriculture, fishing and forestry
- ❑ Arts, entertainment, sports, recreation
- ❑ Automotive
- ❑ Building and construction
- ❑ Communication, printing, info. tech.
- ❑ Education
- ❑ Electronics
- ❑ Finance, insurance, banking
- ❑ Government administration
- ❑ Health and community services
- ❑ Hospitality
- ❑ Manufacturing, processing
- ❑ Metals and engineering
- ❑ Mining
- ❑ Office/ Clerical
- ❑ Property and business services
- ❑ Retail and wholesale trade
- ❑ Small business
- ❑ Tourism
- ❑ Transport, storage, distribution
- ❑ Utilities (electricity, gas, water)
- ❑ Other *(please tell us)*: _____

Are employers involved in helping to identify students best suited to the program? ❑ YES ❑ NO

How do employers contribute to the cost of the program?

❑ In cash ❑ In kind ❑ In cash and kind ❑ Contribute placements and training only

4 RECOGNITION AND CERTIFICATION

Are the students' results recorded on their Year 12 (or equivalent) certificate? ❑ YES ❑ NO

Is the program accredited by the State or Territory vocational training authority? ❑ YES ❑ NO

Do students receive any of the following certificates on successful completion of the program?

	YES	NO
A certificate awarded by the State or Territory's vocational training authority	❑	❑
A TAFE certificate	❑	❑
A certificate or other form of recognition from a national or State industry body *(eg. ITAB, industry association)*	❑	❑
A certificate from a local or regional body *(eg. Chamber of Commerce)*	❑	❑
Other *(if YES, please tell us)*: _____	❑	❑

5 POST-SCHOOL LINKAGES

Does the program lead to advanced standing/credit into an apprenticeship?

❑ YES ❑ NO ❑ Uncertain

If YES, does this credit (a) reduce the period of the indenture? ❑ YES ❑ NO

(b) reduce the off-the-job training component? ❑ YES ❑ NO

Does the program lead to advanced standing/credit into a traineeship?

❑ YES ❑ NO ❑ Uncertain

If YES, does this credit (a) reduce the period of the indenture? ❑ YES ❑ NO

(b) reduce the off-the-job training component? ❑ YES ❑ NO

Does the program have access to priority entry/selection to apprenticeships or traineeships for students who complete the program? ❑ YES ❑ NO ❑ Uncertain

	YES	NO	Uncertain
Does the program result in credit towards a TAFE or other VET course?	❑	❑	❑
Does the program contribute to the student's Tertiary Entrance Rank?	❑	❑	❑
Does the program conduct a survey on the destinations of graduates?	❑	❑	❑

Does the program make local arrangements to help graduating students find a job or a place in further education and training?

❑ YES ❑ NO ❑ Informally ❑ Uncertain

6 PROGRAM CONTENT

What is the program based on? (*tick as many boxes as you need to*)

❑ National TAFE or vocational modules
❑ Locally developed content
❑ Other (*please tell us*): _____

Does the program involve classroom or off-the-job training time as well as workplace learning?

❑ YES ❑ NO ⇒ ⇒ *Please go to question 7*

⇓

How many hours of classroom or off-the-job training do students receive **per year**? ____

Who is the off-the-job training delivered by? (*tick as many boxes as you need to*)

❑ School personnel ❑ TAFE
❑ Group training company ❑ Other private training provider

Did any of the following groups take part in negotiating which parts of the program should be taught in the workplace and which in the classroom or off-the-job? (*tick as many boxes as you need to*)

❑ Local employer ❑ School ❑ Off-the-job trainer ❑ Industry body

How is the classroom or off-the-job training time used? (*tick as many boxes as you need to*)

❑ To provide students with the theoretical knowledge on which to build practical experience
❑ To help students understand what they have learned in the workplace
❑ To fill in gaps in students' knowledge and understanding not covered in the workplace
❑ Other (*please tell us*): _____

7 ORGANISATION OF THE PROGRAM WITHIN THE SCHOOL

How is the program organised? *(tick as many boxes as you need)*

- ❑ A separately accredited subject ⇒ ⇒ ⇒
- ❑ A program embedded in other accredited subjects
- ❑ A program additional to the students' normal subjects

Is the program accredited at the
- State ..... ❑
- local/school level? .... ❑

For how long do students **normally** enrol in the program? *(please tick one box)*

- ❑ One semester or less
- ❑ One year only *(Year 11 or 12)*
- ❑ Either one or two years *(Year 11 and/or Year 12)*
- ❑ Two years *(Year 11 and Year 12)*
- ❑ More than two years

How many hours does a student spend in this program (total number of hours including work placements and off-the-job training) **per year**? ____

How are the work placements organised? *(please tick one box)*

- ❑ Students have to miss normal classes when they attend work placements
- ❑ Students miss some classes but arrangements are made to minimise number missed
- ❑ Students miss no other classes to attend their work placements

When do the work placements take place? *(please tick one box)*

- ❑ Only on normal school days (involving regular working hours)
- ❑ Both on normal school days and outside school time
- ❑ Only outside school time *(ie. evenings, weekends and/or vacations)*

Which of the following groups took part in negotiating the timing and length of work placements?

❑ Local employer ❑ School ❑ Both ❑ Other *(please tell us)*: _____

8 ORGANISATION OF WORKPLACEMENTS

Do students attend their work placements for the full working day which applies in the worksite?

❑ YES ❑ NO

Typically, how much time does each student spend in the workplace during the course?

- ❑ Five or less days per year
- ❑ 6 to 10 days per year
- ❑ 11 to 15 days per year
- ❑ 16 to 20 days per year
- ❑ 21 to 25 days per year
- ❑ More than 25 days per year

What proportion of the total program time do the work placements represent?

❑ 10% or less ❑ 11% to 20% ❑ 21% to 50% ❑ More than 50%

Where do each student's work placements take place?

- ❑ All at the same work site ⇒ ⇒ *Please go to question 9*
- ❑ At more than one site *(ie. the students are required to rotate among several work sites)*

⇓

What is the usual number of sites per student each year?

❑ One ❑ Two ❑ Three ❑ Four ❑ More than four

9 ASPECTS OF WORKPLACE LEARNING

How is the time in the workplace used? *(please tick one box)*

❑ For observation and experience **only**

❑ For structured learning *(ie.students are required to master a set of identified skills)*

⇓

If structured learning is used in the workplace, were the skills identified by:

❑ industry? ❑ education? ❑ both?

Does the structured learning involve:

	YES	NO
• national industry specific competencies?	❑	❑
• generic Key Competencies?	❑	❑

⇓

Are there nominated supervisors to teach the students in each work site that they are placed?

❑ YES ⇒ Are these supervisors provided with training for their role? ❑ YES ❑ NO

❑ NO

⇓

Please go to question 10

If supervisors received training, what did the training involve?

❑ Informal induction/orientation briefing
❑ Workplace Trainer Category 1 training
❑ Workplace Assessor training
❑ Other *(please tell us)*: _____

10 RECORDING & ASSESSMENT OF WORKPLACE LEARNING

Is a competency log book used to record skills or learning outcomes achieved by individual students in the workplace? ❑ YES ❑ NO

Is learning in the workplace assessed formally? ❑ YES ❑ NO ⇒ ⇒ ***THANK YOU***

⇓

Where do the assessments take place? ❑ In the workplace ❑ In school ❑ In both

What type of assessments are used to assess workplace learning? *(please tick one box)*

❑ A generalised oral or written report on the students' performance
❑ Comparisons with agreed learning outcomes contained in the curriculum

Do the assessments count towards the students'school course? ❑ YES ❑ NO

Do the assessments count towards vocational certificates? ❑ YES ❑ NO
(eg. certificates awarded by TAFE or State Training Authorities)

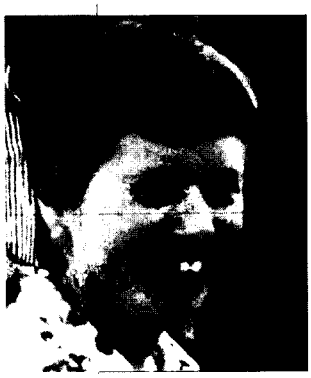
Who are the assessments of workplace learning carried out by? *(tick as many boxes as you need to)*

❑ School teacher ❑ Workplace supervisor
❑ TAFE teacher ❑ Other *(please tell us)*: _____

THANK YOU VERY MUCH FOR YOUR HELP

About the authors

John Ainley is an Associate Director of the Australian Council for Educational Research and the author of a number of research reports and articles concerned with postcompulsory education. Recent publications include two national reports on subject choice in the senior secondary years (Subject Choice in Senior Secondary School and Subject Choice in Years 11 and 12) and a report on the progress of students through the senior secondary years in New South Wales (Progress Through High School).



Marianne Fleming is a Research Officer at the Australian Council for Educational Research where she has contributed to several reports and articles on career development among adolescents and secondary schooling in Australia. She was an author of the national report Subject Choice in Years 11 and 12, has contributed to a project on the development of occupational interests among school students and has adapted a computer-based vocational guidance program (SIGI Plus) for use in Australia.

John Ainley and Marianne Fleming were also the authors for the preceding National Survey publication entitled, School-Industry Programs National Survey 1995.

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