

Learning and Training in School-Based Apprenticeships and Traineeships

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Abstract

The number of young people commencing apprenticeships and traineeships whilst at school, and monitored by their school, has grown considerably, encouraged by State and Federal governments, since the first participants began in 1997. There has as yet been little research into the nature of the training given to, and learning experienced by, such young people; most published literature has related to organisational issues. This paper reports on a research project funded by the National Research and Evaluation Committee into learning and training in school-based new apprenticeships (SBNAs). A questionnaire was sent to a large sample of all SBNAs in three States: Queensland, Victoria and South Australia, using a survey instrument adapted from a previous NREC study, School students' learning from their paid and unpaid work. The results present an overview of SBNA employment, training and learning practices which will provide an important basis for development of policy and practice in this area.

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Introduction

This paper reports on a project, funded by the National Research and Evaluation Committee, which set out to examine learning and training in school-based apprenticeships and traineeships. In school-based new apprenticeships (SBNAs¹) young people are employed and engaged in a contract of training while still involved in full-time, or in some cases, part-time school studies. Although the program began only in 1997, there are now thousands of young Australians involved in SBNAs.

An earlier research project (Smith & Green, 2001), examining school students' learning from paid and unpaid work, found exceptionally high learning outcomes from SBNAs. Young people in these arrangements appeared, from the results, to have quite superior training and learning experiences to young people in other part-time jobs or young people in vocational placements. However the sample methods in that earlier study captured only a small number of school-based apprentices and trainees, and hence this important finding needed to be tested on a larger number of such young people. The current project therefore set out to test the finding on a substantial sample of SBNAs in the three Australian States with the largest numbers of young people in such arrangements: Queensland, Victoria and South Australia.

General Context

School-based apprenticeships and traineeships need to be seen in the context of several developments in the area of young people's employment and post-compulsory education. These are:

- Attention paid to apprenticeships and traineeships as important forms of entry-level training, particularly for young people (eg Robinson, 2001; Smart 2001). Recent work on apprenticeships and traineeships that has examined learning issues includes Harris, Willis, Simons & Underwood, 1998 and Smith, 2000.
- Growth of Vocational Education and Training (VET) in schools programs. 90% of schools offering senior secondary programs now offer VET in schools programs and over 150,000 students were involved in such programs in 2000 (MCEETYA, 2001).
- The prevalence of part-time work among senior school children. Estimates of participation in part-time work are generally around 60% of students in Years 11 and 12 (eg Smith & Green, 2001). SBNAs reflect, in part, a wish to utilise such experiences in a positive educational manner.

¹ For the purposes of brevity the term SBNA (school based new apprentice/apprenticeship) is used throughout the paper to refer to the student/program. In some States and Territories, different abbreviations are used, eg SAT, SNAPs.

- Continuing concern with the safe transition of young people from school to work (eg Frost 1998) and the search for innovative methods of achieving this (MCEETYA, 2001).

What are SBNAs?

In an SBNA, the student, while counting as a full-time school student, is employed part-time as an apprentice or trainee (Frost, 1998). As with other apprentices and trainees, a contract of training is established which is registered with the appropriate State registration authority. Thus the student, as part of the contract of training, gains a VET qualification, which is most commonly at AQF level 2. In addition, the training generally counts towards the student's senior secondary school certificate and in some cases, for tertiary entrance ranking.

The student is paid for the time spent at work and in formal off-the-job training. Off-the-job training is conducted at an RTO (registered training organisation, which may be TAFE or another provider) although in some cases some of the training may be 'sub-contracted' to the student's school, and in other cases may be conducted entirely on the job.

Growth of SBNAs

SBNAs were introduced in 1997, arrangements having been established by MCEETYA in June of that year. Commencements in SBNAs increased rapidly from 1591 in 1998 to 4288 in 2000 (MCEETYA, 2001). In 2000 there were 5957 in training. SBNAs can only be introduced where industrial awards allow for part-time apprenticeships and traineeships. In some cases school students undertake part-time traineeships that have no connection to school (Smith & Green, 2001). These are not included in SBNA figures and are recorded separately in State Training Authority data collection in most States (but not South Australia). From 2002 the introduction of a new national Contract of Training will see SBNAs recorded separately in all States.

The three States in the study (Queensland, Victoria and South Australia) have the highest numbers among States and Territories. Numbers for 2000, the latest year for which figures were available at the time of the study, are given in Table 1.

Table 1. SBNAs in 2000: Commencements and numbers in place

<i>State</i>	<i>SBNAs commencing 2000</i>	<i>SBNAs in place 2000</i>
Queensland	2842	3687
Victoria	486	841
South Australia	389	553

MCEETYA, 2001: 29.

Literature on SBNAs

Much literature on SBNAs tends to fall into the following categories, in common with VET in schools literature (Smith & Green, 2001). These are:

- Scoping – detailing the size and institutional arrangements for SBNAs (eg Malley *et al*, 2001; MCEETYA, 2001; Education Outcomes Research Unit, 2001; Price, 1999: *Training Agenda*, 1998)

- Celebrating success – describing case studies selected to showcase the concept. These include Irwin (1999), *VETNETWORKER* (1999), *VETNETWORKER* (2000) and Grace (2000).
- Guides published in each State for the use of those involved in SBNAs, particularly schools and employers (eg DETE, 2001, an extremely detailed and comprehensive example).

Only a small body of literature on SBNAs is research-based. The following points summarise previous research findings about students and employers involved in SBNAs that may impact upon learning and training. A current Australian National Training Authority (ANTA)-funded evaluation of SBNAs will add to this body of knowledge.

Positive features:

- Employers see SBNAs as a useful recruitment tool, especially in industries with a high labour turnover (Frost, 1998; Andrews *et al*, 2000) and those with recruitment difficulties (Schofield & Associates, 2000)
- SBNAs can be seen as a career ‘try-out’ activity (Andrews *et al*, 2000)
- Students are introduced to the TAFE learning environment (Frost, 1998)
- Students have better contracted training outcomes post-school than the average (Education Outcomes Unit, 2001)
- Employers are favourably disposed towards SBNAs as very young learners (Andrews *et al*, 2000)
- An SBNA may grow out of a previous vocational placement and possibly an earlier period of work experience (Andrews *et al*, 2000)
- Payment for SBNAs means some students can finish school rather than leave to earn an income (Andrews *et al*, 2000)
- Some students plan to use their AQF qualification to link to further education (Andrews *et al*, 2000)
- Some school-based apprentices like the security of knowing their employment will continue after they left school, removing Year 12 anxiety (Irwin, 1999).

Difficulties:

- Most students work too few hours, eg eight or nine hours per week (Andrews *et al* 2000), whereas the optimum contract is half-time (DETE, 2001)
- On the other hand, working long hours as an SBNA may put ‘excess pressure’ on students (Schofield *et al*, 2000)
- Employers may find it hard to ‘save’ useful training tasks for when the trainee is due in to work (Frost, 1999)
- Most schools only have a few SBNAs, meaning students need to take a great deal of responsibility for organising their work and study (Frost, 1998)
- Students lose the chance to undergo another post-school contracted training course at the same AQF level (Andrews *et al*, 2000)
- Some employers find the bureaucratic procedures too difficult (Andrews *et al*, 2000)
- Schools are rarely ‘extremely’ satisfied with the learning provision from RTOs; dissatisfaction appears to be greater where the SBNA is on-the-job. There are several examples of RTOs giving inappropriate workbooks to SBNAs to complete on their own (Andrews *et al*, 2000).

- Schools are hesitant to offer advice to employers on choice of training provider, whereas employers would welcome advice (Andrews *et al*, 2000)
- There is only limited evidence of extra assistance being offered to equity groups (Andrews *et al*, 2000)
- Employers prefer applicants for SBNAs to be carefully screened but schools are unwilling to do this (Andrews *et al*, 2000)
- Timetabling difficulties means students may miss out not only on lessons but also on extra-curricular activities such as sport or drama (Andrews *et al*, 2000).

Research Method

The major research method for the project was a survey of students undertaking school-based new apprenticeships. The project wished to compare the findings among a large sample of SBNAs with some of the findings of the previous project (Smith & Green, 2001). Therefore the questionnaire incorporated some of the same questions, particularly those relating to student characteristics and learning and training issues. Several other questions were added as a result of the review of the literature on SBNAs, literature on apprenticeships and traineeships more generally, and the input of reference group members and other stakeholders.

A sample of 50% of SBNAs was initially desired in each of the three States. Due to various difficulties the eventual sample was 50% in Victoria, approximately 36% in Queensland and 50% of all school students who were part-time apprentices and trainees in SA (SA did not, in 2001, flag school-based apprentices and trainees separately.) After discussion with State Training Authorities (STAs) and VET-in-schools personnel in the three States involved, it was decided to administer the survey via a questionnaire sent direct to the homes of the SBNAs. This was done through the apprentice and trainee database held by each STA. A covering letter was sent, explaining clearly what a SBNA was and who was eligible to respond.

The response rate exceeded all expectations, especially considering the length of the questionnaire (eight pages), the age of the respondents and the fact that final school exams were approaching for Years 12 and 13 students at the time of the survey (late September/early October 2001). 641 responses were received in time to be processed. These constituted 27.5% of the 2330 questionnaires sent out and a true response rate of around 30.3%, as at least half of the South Australian students who received questionnaires were not undertaking school-based apprenticeships/traineeships and were therefore ineligible to reply. The response rate was uniform across all three States. The survey, despite its length, was exceptionally well completed, with high response rates to the qualitative questions as well as the multiple choice questions.

Profile of SBNAs

The profile of the respondents gave an interesting insight into the nature of the SBNA population. Compared with the general characteristics of the Australian population and the findings of the previous study about Year 10 to 12 students (Smith & Green, 2001: 43), the figures appear to suggest that:

- SBNAs are distributed across school sectors in line with the general school population

- They are less likely than most Australians of the same age to live in a metropolitan area
- They are more likely to be female than male
- They are disproportionately Australian-born with Australian or English-speaking parents (in line with apprenticeships and traineeships generally)
- The vast majority expect to complete Year 12
- They are less likely than the average to aspire to immediate university entrance
- Compared with the sample of students from the previous study they are worse-off financially and less likely to have above-average academic ability (figure 2).

Students were given a list of reasons why they might have chosen to undertake a SBNA. They were asked to select three and then rank them. Two-fifths of the students said that the most important reason was to get the qualification; just over one-third said that getting specific experience in an industry was the most important reason. The only other reason that gained over 5% of responses was to help get a part-time job whilst at university or other tertiary institution.

Just over three-quarters (77.7%) had started their SBNA in Year 11 of school; 11.8% had begun during Year 10 and 10.5% during Year 12. Those who began during Year 12 would presumably not be able to complete their contract of training before they finished school. The majority of respondents had been working as SBNAs for some time. Thus their responses to learning and training questions can be regarded as well-informed.

Nature of the Job

Students were asked how they were employed: whether they were employed directly by an organisation or by a Group Training Company (GTC)². To examine the stability of employment they were asked to indicate whether they had worked for one or more than one employer (or host employer in the case of GTCs). Almost exactly half of the respondents (50.1%) were employed by Group Training Companies. Victoria was the State with the highest proportion of SBNAs employed by GTCs.

As might be expected, those working for GTCs were found to be more likely to have changed employers. 7.5% of the total who worked for GTCs had more than one employer whereas only 1.8% of the directly-employed had changed jobs.

Most of the students had learned about the SBNA through school, either through a teacher or co-ordinator (58%) or from a notice board at school (6.7%). 13.7% already worked for the employer before becoming an SBNA. There appeared to be some differences between SBNAs employed in the different modes. These included:

- Those working for GTCs were much more likely than the average to have found about the SBNA through school

² GTCs are large employers of apprentices and trainees. They 'lease' their employees to host employers, performing all the normal employer functions such as payroll and personnel issues. They were introduced to boost apprentice and trainee numbers particularly in industries where employers were reluctant or unable to commit to long-term investment in apprentices and trainees.

- Those working directly for only one employer were more likely than the average to have worked for the employer already or to have heard about the job through a family member.

By industry area the following responses were obtained (Table 2):

Table 2: Distribution of SBNAs by industry area

	<i>Total</i>	
	Count	%
Farming, forestry, mining	69	10.9%
Manufacturing	33	5.2%
Building	31	4.9%
Retailing	165	26.1%
Fast food, cafes, restaurants	151	23.9%
Cultural, recreational, sporting	12	1.9%
Banking/real estate/finance	21	3.3%
Government administration	18	2.8%
Health, personal and community services	32	5.1%
Communications, media, computing	28	4.4%
Office/Business	35	5.5%
Automotive	32	5.1%
Other	6	0.9%
Total	633	100.0%

These results show that SBNAs involve a wider range of industries than ordinary part-time student jobs, which are overwhelmingly concentrated in retail and fast food (Smith & Green, 2001). There were some variations by State. Queensland had a distribution much like the average across the three States. Victorian SBNAs were somewhat higher in farming/forestry/mining and much lower in building than the average. South Australia showed a quite different pattern. SBNAs were concentrated almost exclusively in three industry areas: retailing, fast food/cafes/restaurants and farming/forestry/mining.

There was considerable gender differentiation in the industry of employment. Females were twice as likely as males to be employed in retailing and 30% more likely to be in fast food/cafes/restaurants. Almost all of those in manufacturing, building and farming/forestry/mining were males, while almost all of those in health/personal & community services, in banking/finance and in government administration were females.

The Working Environment

The average number of hours worked per week was 10.5³. This is not much higher than the average number of hours for all part-time student jobs, which has been found to be 8.5 hours a week (Smith & Green, 2001: 10). While the respondents were asked to give the average number of hours a week, it is possible that some of those working longer hours in school holidays did not include these longer hours in their average figure.

The most common pattern of working was a set number of hours each week on school days; 55% of the SBNAs were working in this manner. 35% worked for a set number of hours per

³ 10.5 was the mean. The mode (most common) was 8 hours and the median was 9.

week including weekends. 57% of the SBNA's also worked for extra hours in the school holidays. Inspection of 'other' responses suggested that quite a number of students did not have regular hours of work, working as casuals or attending for extra hours when their employers asked, for example to cover busy periods or sick leave. Some students said that they attended on days which their schools set aside for non-curricular activities, or that their employer allowed them to work when it suited them.

Although some students mentioned problems fitting in their SBNA hours as well as their school work, over half of the respondents (54%) said that it was not hard to fit in their jobs with their school work. Nearly two-fifths (38.9%) found it 'quite hard' but only 6.3% found it 'very hard'. In comparison with the large numbers of students in ordinary part-time jobs in the previous study, SBNA's were more likely than the average part-time student worker to experience some difficulty in fitting the job in, but less likely to find it 'very hard' (9.2% of all student workers found it 'very hard' to fit the job in). Those who worked extra hours in the school holidays found slightly less difficulty but the difference was negligible.

However, almost half of the students reported some problems with timetabling their working and training hours, and of these over half had to sort the problems out themselves. When analysed by State there were some differences. Victorian students were slightly more likely to experience no difficulties. South Australian students experienced more difficulties and were more likely to have to sort the problems out themselves (31.8% fell into this category).

The SBNA's overwhelmingly enjoyed their work; 67.3% said they enjoyed their job 'a lot', 25.5% 'some'; with only 5.2% saying 'a bit' and 1.9% 'not at all'. This compares very favourably with normal part-time student work. Smith & Green (2001) found that only 45.5% of students in ordinary part-time work enjoyed their work a lot and 44.4% a bit, with 10.1% not enjoying their jobs at all. (The option 'some' was not given in that study.)

Enjoyment of the job varied quite a lot across industry areas. Those working in retail were the least satisfied with their jobs. Only 51.5% of these SBNA's enjoyed their jobs 'a lot' compared with the average of 67.3%. Communications/media/computing, manufacturing and fast food/cafes/restaurants were also slightly below average. The industry areas where SBNA's were most satisfied were cultural/recreational/sporting (100% enjoyed their jobs 'a lot') and building (87.1%). Automotive, health/personal/community services and office/business were also above average.

Compared with ordinary part-time work, SBNA's were much more likely to be working with adults rather than other schoolchildren or other teenagers. Table 3 compares the results for SBNA's with the findings for ordinary student-worker jobs from the previous study (Smith & Green, 2001).

Table 3. Amount of time spent working with adults and other teenagers, SBNAs and ordinary student-workers

<i>Age of fellow workers</i>	<i>SBNAs</i>	<i>Ordinary student-workers</i>
	%	%
Spent most time working with adults	63.4	39.5
Spent most time working with teenagers	9.7	27.1
Worked equally with adults and teenagers	26.7	33.4

The SBNAs were asked how often they discussed their progress at work with their boss or supervisor. Only 21% said they discussed their progress ‘often’, with 33% each answering ‘sometimes’ or ‘occasionally’. 12% said they never discussed their progress. Those working for a GTC were found to be less likely to discuss their progress at work often with their workplace supervisor than those working directly for an employer. Those working mainly with adults were more likely to have a supervisor who was interested in their progress. However, even among these SBNAs 40% discussed their progress only occasionally, or not at all.

There was a reasonable amount of feedback from jobs to school life and peers. Table 4 shows how often the students discussed their SBNA in class at school, and with friends.

Table 4. How often do you discuss the apprentice/traineeship in class at school, and with friends?

	<i>In class</i>		<i>With friends</i>	
	No.	%	No.	%
Often	67	11.3	161	25.8
Occasionally	303	51.3	361	58.0
Never	220	37.2	100	16.0
Total	590	100.0	622	100.0

These results show a much greater integration of SBNAs with school life and peer interaction than ordinary student part-time work. The previous study (Smith & Green, 2001: 69) showed that students’ ordinary part-time jobs were very rarely discussed in class (68.8% said that they were never discussed), and that over a quarter of students (26.6%) never discussed their jobs with their friends, with only 5.8% discussing their jobs ‘often’ with friends.

Learning and Training

On the Job Training

Respondents were asked to choose from a list of ways of learning at work, and to rank the three most important for them in their SBNA. Almost half (48.9%) of the SBNAs reported that the most important way in which they learned at work was through being shown by a trainer or supervisor. Just under one-fifth (19.6%) said they learned most from being shown by fellow workers. Watching others’ was the most important method for just over one-tenth (10.1%). 44 respondents (7%) said that ‘trial and error’ was their main learning method. These results

compared favourably with ordinary part-time work for school students (Smith & Green, 2001), with SBNA's more likely to be trained formally. On the basis of 'first most important learning method', 'being shown by a trainer or supervisor' was well ahead for SBNA's, with the 48.9% reported above well ahead of the previous project's findings of 41.8% for ordinary part-time student workers.

Some forms of learning were clearly more effective than others. Those whose first-most-important way of learning at work was doing an off the job course were most likely to feel clear about how to do their tasks⁴. Asking questions of a supervisor, asking questions of a fellow worker and being shown by a trainer or supervisor were also more effective than the average. Trial and error, not surprisingly, was the least effective. There was a very clear correlation between the interest of a supervisor and how well trained the SBNA's felt. Of those who discussed their progress at work often with their supervisor, over 68% said they always felt clear about how to do their job, whereas only 43% of those who never discussed their progress felt clear about how to do their job. Moreover, those who were employed directly by a company felt somewhat better trained (63% always felt clear about their work) than those who were employed by a Group Training Company, especially those who worked for two or more host employers (53% of these always felt clear).

The SBNA's were asked to write down an important specific skill that was needed in the job. These were coded as follows (Table 5):

Table 5: Important specific skills needed in the SBNA's' jobs

<i>Main specific skills</i>	<i>No.</i>	<i>%</i>
Operating machinery/equipment	121	21.0
Handling tools/raw materials	113	19.7
Communication with other workers	107	18.6
Customer service	50	8.7
Computer operation	42	7.3
Cognitive skills	29	5.0
Organising work	27	4.7
Handling people (eg elderly, children)	22	3.8
Administration	21	3.7
Handling animals	19	3.3
Other	19	3.3
No skills	5	0.9

Some of these skills are very specific and others are quite general. When asked how well they had learned the skill, 54% said very well, 31% quite well and 5% 'a bit'. 10% said they knew how to do it already. Those doing an apprenticeship were less likely to have learned the skill 'very well' than those in traineeships. This is in line with other research on apprenticeships and traineeships, which shows that apprentices learn skills at a slower rate than trainees (Smith, 2000).

⁴ How clear the SBNA was about workplace tasks was used as a proxy for quality of training, since an objective measure of quality of training would be impossible.

Generic Skills Development

A list of seven generic skills was given to students and they were asked how much they had developed them in their jobs. They were given a choice of 'a lot', 'some', 'a bit' and 'not at all'. The list was loosely based on the Mayer key competencies (AEC/MOVEET, 1993). As in ordinary part-time jobs (Smith & Green, 2001: 60), 'behaving at work', 'verbal communication' and 'using your initiative' were the three generic skills most developed. The least most developed was 'communication in writing'. However compared with ordinary part-time jobs, there was less difference between the highest and lowest scoring skills. 'Working in teams', 'solving problems' and 'how to behave at work' all scored higher in SBNAs than in ordinary part-time work.

In order to gain an overall picture of generic skills development, for each SBNA, each skill was assigned a value (3 to 'a lot', 2 to 'some' and so on). These were then added to give a generic skills index for each student which was somewhere between 0 and 21. The previous project (Smith & Green, 2001) had found that the mean generic skills index for the small number of SBNAs in that study was 18.33 compared with 14.50 for non-school based apprentices and trainees and 13.98 for all student-workers. The findings this time were that the mean generic skills index for the 617 SBNAs who completed this question was 15.07. This is not as high as might have been expected from the previous project, but is still considerably higher than the average for student part-time jobs and for non-school-based apprentices and trainees.

Further analysis revealed a number of variations, for example:

- *By mode of employment:* those employed directly by a company showed slightly higher generic skills indices than those working for a Group Training Company. The most significant finding, however, for both those employed directly and those working for a GTC, was that those who worked in two or more workplaces developed their generic skills more (0.70 more in each case).
- *By mode of off the job training:* the best mean generic skills index belonged to those who were studying on block release (15.56 at private RTO and 15.37 at TAFE) and the worst (13.80) to those who studied at home in their own time. School (14.62) was the next lowest.
- *By mode of on the job training:* significantly higher than average indices were shown by those whose first most important method of learning was off-the-job courses (16.07) and watching others (15.78).

Off the Job Training

Almost a quarter of the SBNAs were doing all of their training on the job. A further quarter attended TAFE or another RTO on block release, with only 19% going to a training provider on traditional day release from work. The students' qualitative responses suggested that block release was not necessarily regular, often being structured around school holidays or on an ad hoc basis. Only just over 10% of students were undertaking their off the job training at school. South Australia was the heaviest user of wholly on-the-job traineeships and apprenticeships with Queensland well below the average. Queensland SBNAs were the highest users of TAFE. Victorian students were the most likely to be doing all their off-the-job training in their own time, or at school (although the numbers for both were small).

Retail and fast food were more likely than the average to involve fully on-the-job traineeships. TAFE training was most common in the traditional trade areas of manufacturing, building, and automotive. Office/business SBNAs were much more likely than the average to be doing their off-the-job training at a private RTO or at school. Analysis by type of contract of training showed apprentices heavily concentrated in TAFE (over 45%) whereas trainees were much more evenly distributed across the different modes of delivery.

Most SBNAs found their off-the-job training helped in their jobs, with only just over one-quarter (27.6%) saying it did not help, or only helped a bit. Non-TAFE RTOs appeared to have been the most useful for the SBNAs, with regular TAFE attendance a fairly close second. School and distance education/online did not rate very highly among students. Similar patterns were found in students' answers to a question about how much their workplace learning helped in their off the job training.

One quarter of SBNAs discussed their workplace experience 'often' with their off their job trainers, with one-third discussing them 'sometimes'. Some training providers appeared to have made more effort than others to discuss SBNAs' workplace experiences. In general, workplace experiences were more likely to be discussed in the off-the-job training than vice versa. Only one-fifth of SBNA reported that their workplace bosses often discussed their off-the-job training with them. One-third said that it was discussed 'sometimes', 30% 'occasionally' and 16% 'never'.

Over a hundred respondents chose to make extra comments about their off the job learning. These comments, while mainly positive, were less enthusiastic than comments about on the job learning. Positive comments had a number of themes, including learning a wider range of tasks than could be done at work, learning underlying knowledge and theory, and receiving individual attention from the trainer. The negative comments related primarily to lack of relevance to workplace tasks and to poor teaching or organisation.

Conclusions

The overall impression gained from the analysis of the 641 questionnaires is that undertaking a SBNA is a highly positive experience for the majority of those students involved. It does need to be acknowledged that those returning the questionnaire might not be entirely typical of the full population of SBNAs, but the high return rate of 30% indicates a high degree of representativeness. The conclusions which follow are informed partly by the qualitative responses to the survey which, for reasons of space, have not been described in this paper.

It has been pointed out by many writers (eg Robinson, 2001) that apprenticeships and traineeships offer an ideal way to introduce young people to working life. The combination of work and study allows for the young people to progress in their careers and there is a tradition of employers caring for and mentoring young workers in such contracts of training. There were however some misgivings, when school-based new apprenticeships were introduced, about whether such arrangements could combine with schooling. This study has confirmed, however, that in most cases this combination has been very successful.

One factor in the success of SBNAs may be that most senior school students are working anyway, and so SBNAs are not significantly different from their peers. Compared with ordinary part-time work, SBNAs score higher on a number of significant indicators. These are:

- Enjoyment of job
- Attention of a supervisor
- Working with adults rather than other teenagers
- Level of responsibility.

These indicators were all shown in the previous study (Smith & Green, 2001) to be associated with higher learning outcomes.

The addition of off the job training to the workplace component of the SBNA appears to enhance enjoyment and learning outcomes. Students appeared to welcome the addition of another interested adult to their development, although in a number of cases they voiced some specific complaints about their training providers. Several students commented on the way in which off the job training added to their overall understanding of their field of practice. Most valued the qualification that they would gain as a result of their study.

The previous study noted the superiority of learning outcomes for school-based apprentices and trainees compared with other school students who were undertaking apprenticeships and traineeships independently. While the current study did not survey non-school based new apprentices, there were some clear findings about links between school and the workplace which were found to be much greater than in ordinary part-time work. The students' jobs were discussed quite frequently at school and with friends, and they noted that their jobs helped them in other subjects. Added to the fact that most had found out about their jobs through school, it was evident that SBNAs were legitimised in the eyes of the school in the way that other part-time jobs are clearly not. However students undertaking their off the job training at school did not appear as satisfied with it as did students attending other RTOs. One explanation for this is that those undertaking SBNAs are, on the whole, more eager to escape the school environment than other senior school students. This would also go some way to explaining the greater satisfaction of SBNAs with workplace training than off the job training in general.

What Problems Remain?

While the overall tenor of the findings is very positive, some problems exist. These include:

- The low number of hours worked by SBNAs (mean of 10.5) is significantly lower than that recommended (eg by DETE 2000) and it is difficult to see how students could complete the hours required even for a traineeship within senior high school years. The question then arises as to whether school-based traineeships can be regarded as fully equivalent to those undertaken by full-time workers.
- While training undertaken during school holidays does not interfere with work or school, it may prove quite a burden for some students to lose their holiday periods, although this issue was not specifically mentioned by any students.

- The evidence of poor quality practices from some training providers adds to the weight of evidence provided by Andrews et al (2000)
- Significant problems exist in timetabling students' working hours around school, and students are too often left to solve the problems themselves. This seems unreasonable when schools are clearly highly instrumental in recruiting students into SBNAs.

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