SUPPORT DOCUMENT

Group training and host employers in Australia

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This document was produced by the Duncan Macdonald, Phillip Toner and Nic Crose based on their research for the report *Group Training in Australia: A study of group training organisations and host employers*, and is an added resource for further information. The report is available on NCVER's website:
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GROUP TRAINING AND HOST EMPLOYERS IN AUSTRALIA

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Background

In 2001, the ESC conducted a study into group training in Australia on behalf of NCVER. That study focussed, as it were, on the supply-side of the Group Training system by examining the structure and function of Group Training Companies (GTCs). Thus, in keeping with the approach taken by Dench McLean Associates (1996), the next stage focused on the demand-side of the Group Training system by examining aspects of host employers' involvement in, and experience of, the system.

Issues to emerge from the telephone survey of GTCs and the broader literature informed the development of a preliminary list of questions, which, after refinement on the basis of feedback from various interested parties, became the survey instrument. A sample frame of some 228 host employers was constructed with assistance from Group Training Australia and with the canvassing of GTCs by Field Works a Melbourne-based communications and data collection agency. A total of 173 host employers completed the questionnaire, yielding a response rate of 75.87%. In addition to this overall rate being very pleasing, the response rate for individual items was very high, ranging between 93% to 100% for all items with just a few exceptions.

The survey instrument contained four sections. Section A covered staff levels at the workplaces surveyed and New Apprentices[1] hosted currently and three years ago. Section B requested information on reasons for hosting New Apprentices, awareness of services provided by GTCs, other than group training, and the extent to which New Apprentices being hosted were employed directly by the host employer, either before or after their training was complete. Section C focused on the perceived level of satisfaction with various aspects of services provided by a GTC and Section D canvassed views on the principle and application of rotation and on the hosting of New Apprentices from disadvantaged groups along with associated difficulties. Finally, comments relating to group training and its future were requested.

Results

While a number of important findings emerged, the most striking outcome of the survey was the very high level of satisfaction that host employers reported having with the services provided by their group training companies. The percentages of

[1] The term New Apprentices was introduced with reforms to the training system in 1997 and refers to both traditional trade apprentices and trainees. The term is used in this study in many places where the subjects are apprentices and/or trainees. However, in a number of places in the survey the distinction is made between apprentices and trainees and it was found that respondents had little difficulty making this distinction.

employers claiming that they were either satisfied or very satisfied with the various aspects of group training about which they were questioned ranged between 91% and 96% and when asked to comment generally about group training, 122 of the almost 170 comments were to the effect that no problems were experienced and that the program works well. Moreover, these high levels of satisfaction went across all industries, across metropolitan and non-metropolitan locations and across all workplace size categories.

The next most important finding concerns the reasons given by respondents for their use of group training. Respondents were asked to choose from five possible reasons for hosting apprentices/trainees; savings on recruitment and selection, avoiding administrative complexity, lack of continuous work, saving on employment costs and any other reason. Given that over 60% of the sample had less than 20 employees, it would be expected that lack of continuous work would rate at least fairly highly, yet it rated lowest of the five alternatives as the most important reason and as the second most important reason. From the host employers' perspective, according to the responses, savings on recruitment and selection, the avoidance of administrative complexity and saving on employment costs, were more important reasons for hosting New Apprentices.

The relative unimportance of a lack of continuous work seems consistent with the significant role played by larger firms in group training (see below). However, the critical point in respect of policy appears to be the use of group training, in preference to direct employment of apprentices and trainees, because of the cost savings it enables, rather than because of any innate inability to fully employee those in training. More attention will be given to these findings in the conclusion to this summary. Before that, there will be some discussion of other findings.

First, there is the influence of workplace size. While Misko (1997), among others, points out that group training originally developed in the building and automotive repair industries to overcome problems associated with small enterprises and increasing skill shortages, the results from this survey suggest that larger workplaces make at least the same use of group training, proportionally speaking, as smaller workplaces. As would be expected the larger workplaces host on average more apprentices per workplace than smaller workplaces. Workplaces with more than 200 employees have, on average, 11 apprentices per workplace compared to 1.4 apprentices in workplaces with less than 10 employees.

However, of the 329 apprentices hosted by employers in the survey, only 30% were hosted in workplaces with more than 200 employees with the majority, or 70 percent of apprentices, being hosted in small to medium workplaces. 13% are hosted in workplaces with less than 10 employees; 23% in workplaces with 10-19 employees; 10% in workplaces with 20-29 employees and another 25% in workplaces with 50-199 employees.

Of the 406 trainees hosted by employers in the survey, 47% are hosted in workplaces with more than 200 employees. Thus it can be seen that a significantly higher proportion of trainees, than apprentices, are hosted in large workplaces. This reflects the fact that most trainees are employed in service industries such as retailing, hospitality, insurance, and the public service, and in occupations such as elementary and intermediate sales and service (Toner 2002). Many firms and establishments in

these industries are large in terms of workplace size. At the other end of the scale, workplaces with less than 10 employees host 11% of trainees while workplaces with between 10 and 19 employees host 12%; workplaces with 20-49 employees host 10% and workplaces with 50-199 employees host 20%.

The average number of trainees in workplaces with more than 200 employees is 24, which is more than double the average number apprentices in equivalent size workplaces. The average number of trainees in workplaces with less than 10 employees is 1.29. This is slightly smaller than the average number of apprentices in the same size workplace.

Moving on to other findings and one that does not sit very comfortably with a conclusion reached in the earlier study of GTCs, concerns the use by host employers of services, other than group training, that are supplied by GTCs. According to several different sources, GTCs began to increase their offerings of additional services in the early nineties following a DEETYA recommendation that government funding be reduced to encourage greater self sufficiency on the part of GTCs. While the recommendation was never implemented, many GTCs began to reduce their dependency on government support by offering a range of services related to the group training function. Indeed the ESC's earlier study found that all GTCs now offer such services which include operating Registered Training Organisations, New Apprenticeship Centres or as a Job Network Provider and a general labour hire provider. Deregulation of various labour market institutions during the nineties encouraged these activities and it was found that GTCs emerging since 1990 were less likely to be in receipt of Joint Policy Funds and more likely to be dependent on the offering of the additional services. In this current survey, however, it was found that almost two thirds of respondent host employers were not even aware that their GTC offered these additional services and very few, who were aware, actually made use of the services. For example, when asked to specify the first additional service used, only 40 of the 173 respondents indicated that they used a service and, in respect of using a second additional service, only 15 responded in the affirmative.

Another finding concerns the direct employment of previously hosted New Apprentices. To attempt to assess the extent to which group training was used as a form of probationary employment, or as a screening device, by employers, respondents were asked if they had directly employed previously hosted apprentices and trainees either before, or after, their training was complete. While over half the respondents indicated that they directly employed previously hosted New Apprentices on the completion of their training, less than 10% indicated that they employed previously hosted New Apprentices while they were still undergoing training. Given the small number of New Apprentices directly employed by the respondent organisations, 86% employing no apprentices and 88% employing no trainees, this latter result is not surprising.

It was also found that the hosting of apprentices and trainees is significantly associated with certain industry sectors. For apprentices, workplaces in manufacturing and construction hosted significantly more than those in other industries and that fits with the traditional picture of group training. In the case of trainees it was manufacturing and health whose workplaces hosted significantly more.

Finally, mention should be made of attitudes and experiences concerning, a) rotation of New Apprentices for the purpose of broadening their training, a perceived advantage of group training and b) the hosting of New Apprentices from disadvantaged groups. In respect of rotation, there was strong support for this as a principle and for relinquishing New Apprentices to rotation. This is potentially at odds with findings from the previous study into GTCs in that a significant proportion of the GTCs perceived host employers to be reluctant to lose good apprentices and trainees just so they could broaden their experience. However this was just the perception of the GTCs and our sample of host employers is a very small one. Nevertheless, this could be another area requiring more investigation especially given the narrowing of training opportunities as work, in many industries, continues to become more fragmented and more specialised. Turning to the hosting of New Apprentices from disadvantaged groups, it is disappointing to see that only 15% of respondents indicated they were hosting an apprentice or trainee that fell into this category especially in light of the encouragement by government for this to occur. When asked if difficulties were encountered, approximately half of those involved responded in the affirmative and again a much larger survey would be required to assess accurately the extent and nature of problems being experienced in the employment of these people.

Conclusion

The very high levels of satisfaction with group training services reported by this sample of host employers should be very pleasing to government and to those bodies responsible for the support and sponsorship of group training in Australia. However, this study throws up at least one issue which government policy makers may wish to further explore with a much larger survey of host employers. This issue concerns the reasons for employers using group training rather than employing apprentices and trainees themselves. It seems group training is used much more because of the savings in time and resources it provides, rather than because of any innate difficulties in providing training opportunities. While this finding obviously needs to be tested further, one possible interpretation is that group training is being used by employers to reduce the various costs associated with the employment of apprentices and trainees; costs that have been increased substantially by the well documented administrative complexity of the training system. Perhaps, then it could be argued that, to the extent that government assists group training and thus indirectly subsidises the training costs of employers, it is only compensating them for the expenses arising from the complex administrative system it put in place.

Also, it could be argued that, in the absence of government assisted group training, employers would contribute less to skill creation especially in the light of the numbers they employ directly, compared to the number they host. However, the extent to which their hosting of New Apprentices is cost sensitive is unknown so that the potential impact of the higher charge-out rates, that would probably result from reductions in government assistance, cannot be estimated at this stage.

Chapter 1: The Survey and Descriptive Analysis of Results

1.1 Introduction

In 2001, the ESC conducted a study into group training in Australia on behalf of NCVER. The study involved a literature survey and a survey of Group Training Companies (GTCs) and revealed a number of interesting research and policy issues associated with host employers that need to be followed up with more intensive investigation. That study focussed, as it were, on the supply-side of the Group Training system by examining the structure and function of GTCs. Thus it was decided that, in keeping with the approach taken by Dench McLean Associates (1996), the next stage should focus on the demand-side of the Group Training system by examining aspects of host employers' involvement in, and experience of, the system.

The development of the survey was informed by a) the results of the telephone survey of GTCs, b) the broader literature and c) input from a variety of stakeholders (see below). However, the literature is relatively silent on host employers with Mathers (2000) pointing out that one of the gaps in published research is host employers and their characteristics and awareness of group training especially in the capital cities. An exception is the 1996 study by Dench McLean Associates that contains a section on host employers based on a survey of 543 such organisations. Where appropriate, comparisons with the findings of that study will be drawn. Otherwise, however, there is very little comprehensive information about host employers so the first aim of this survey was to document the characteristics and functions of these organisations and to discover how they perceive the services provided to them by their GTC. The second aim was to find out the actual reasons for their use of group training services in order to assess the extent to which the host employers in this sample, at least, were motivated by the factors identified in earlier research as driving the development of group training. Questions were also asked about the use of services provided by GTCs other than group training. The rationale for these questions lay in the desire to investigate further the growth in these additional services that is documented in the literature and also emerged from the ESC's survey of GTCs.

More precisely, the major areas of inquiry in the survey were:

- The industry sector, size and location of the workplaces surveyed;
- The number of apprentices and trainees employed, the number hosted currently and those hosted three years ago;
- The host employers' level of satisfaction with various aspects of group training and the services provided by their GTC;

- The reasons for hosting apprentices and trainees (New Apprentices) and the extent to which group training is used as an employment screening device;
- Host employers' experiences with hosting New Apprentices and their views on aspects such as rotation and hosting those from disadvantaged backgrounds; and
- Host employers' views on group training in general and on its future.

A preliminary list of questions was drawn up and circulated to a steering committee put together by NCVER and representing organisations such as Group Training Australia (GTA), the NSW Department of Education and Training (DET) and the Australian National Training Authority (ANTA). The questions were revised in the light of comments received and were then recirculated to members of the steering committee. Special mention must be made of the assistance provided by GTA and a number of its Directors both in guiding the development of the survey instrument and in contributing contact details for the sample of host employers (see below).

Following the discussion of the methodology, sampling frame, instrument and response rate, this chapter presents the responses of host employers to the questions asked and provides a descriptive analysis of these responses. Chapter 2 explores relationships that may exist between the various characteristics, experiences and attitudes of employers as revealed by the survey (the investigative analysis) and Chapter 3 discusses the findings of both the descriptive and investigative analysis.

1.2 Methodology, Sampling Frame, Instrument and Response Rate

Two separate sources were drawn on to construct the sample frame. First, as a result of a request by Group Training Australia, a number of member GTCs supplied names and contact details of some of their host employers having obtained permission from those organisations. Second, Field Works made contact with a sample of GTCs that participated in the first stage survey and requested them to provide names and contact details of up to 20 of their current host employers. A sample of convenience was then drawn from this sample frame. 228 host employers were invited to participate in the survey with 173 completing the questionnaire, yielding the very high response rate of 75.87% for the survey. The response rate for individual items was also very high, ranging between 93% to 100% for all items with only two exceptions. Such a high response rate to all questions is unusual and contributed significantly to the quality of the results of this survey.

Given that the total of employers hosting New Apprentices appears to number well over 20,000 and possibly over 50,000[2], the size of the sample is extremely small. However, it can claim to be at least representative with respect to the industry sectors

[2] The ESC report into group training in Australia undertaken for NCVER in 2001 found there were over 21,000 host employers but this was based on a sample of GTCs, not the total population. The Dench McLean Associates (1996) study estimated that there were over 25,000 host employers in 1996 and they estimated that this number would almost double by 2000.

of the economy and to have provided high quality data (see below). To provide a measure of the sample's representativeness, comparisons were made with the Dench McLean study in respect of the size distribution of workplaces (ie, no. of employees) and with ABS Business Registry data (ABS, 1998) in respect of industry sector.

These comparisons are shown in Figures 1 and 2 and are discussed in the paragraphs thereafter. When account is taken of the fact that the sample is not drawn from the population of all workplaces nationally but those utilising the services of group training, and that this had, unfortunately, to be a sample of convenience, the size and industry distributions do not appear too different from what might be expected. In addition, the geographic distribution of the sample adds to its representativeness. Tables 1 and 2 show that, first, there is an almost even split between metropolitan and non-metropolitan locations according to the definition used in the survey and second, the sample draws from all states apart from Tasmania.

The survey instrument and a covering letter were faxed to respondents, identified as the Owner, Manager, or HR manager with the data gathered through telephone interview some days later. Telephone interviewers specifically asked for the Owner, Manager, or HR manager to interview, as they would be in the best position to answer detailed questions relating to the characteristics and function of their organisation. For multi-site organisations the respondents were asked to simply respond in respect of the workplace at which they were located. Thus the actual unit of analysis, strictly speaking, is the workplace rather than the organisation of the host employer as a whole.

The questionnaire contained four sections. Section A contained 10 items relating to the staff levels at the workplaces surveyed and the number of New Apprentices hosted currently and three years ago. Section B had eight items requesting information on why employers hosted New Apprentices, awareness of services provided by GTCs other than group training and the extent to which New Apprentices being hosted were employed directly, either before or after their training was complete. Section C had 7 (closed) items relating to the perceived level of satisfaction with various aspects of services provided by a GTC and one (open-ended) item requesting information on how GTCs could improve the quality of services they provided. Section D had 5 items relating to employers' views on the principle of rotation and preparedness to lose New Apprentices to rotation, whether New Apprentices from a disadvantaged group were hosted and, if so, what difficulties were encountered and finally, any comments host employers could offer relating to group training and its future.

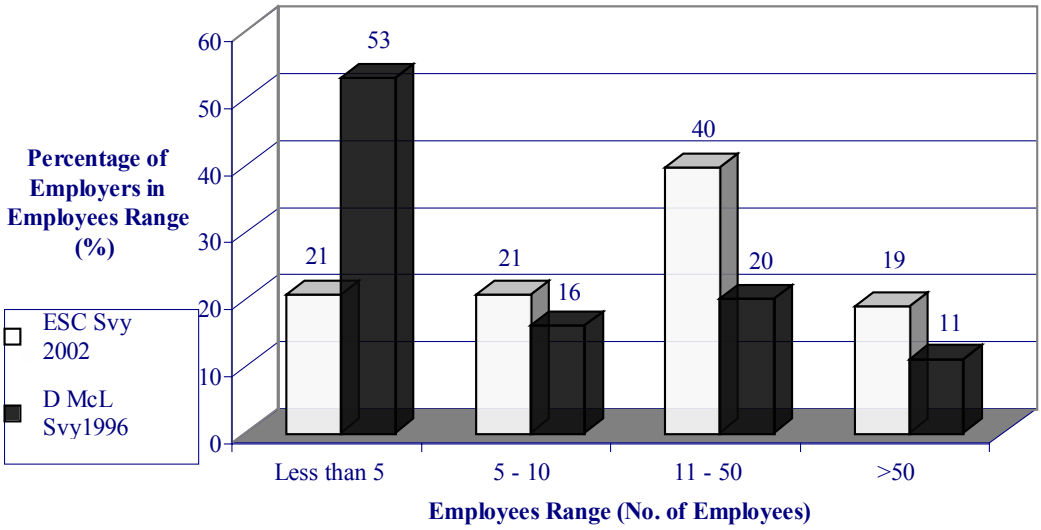
1.3 Basic Characteristics of Host Employers

1.31 Size of Workplace

To get some idea of the size of the workplace surveyed, respondents were asked how many employees there were at the present time. As explained above, in instances where the firm or organisation has more than one workplace, respondents were asked to answer this, and subsequent questions, in terms of the respondent's particular workplace.

The distribution by size of respondent organisations is shown in Figure 1 where it is compared to the distribution of host employers according to the Dench McLean Associates survey conducted in 1996.

Figure 1: Percentage of Host Employers by No of Employees – ESC Sample vs Dench McLean Associates Survey (1996)



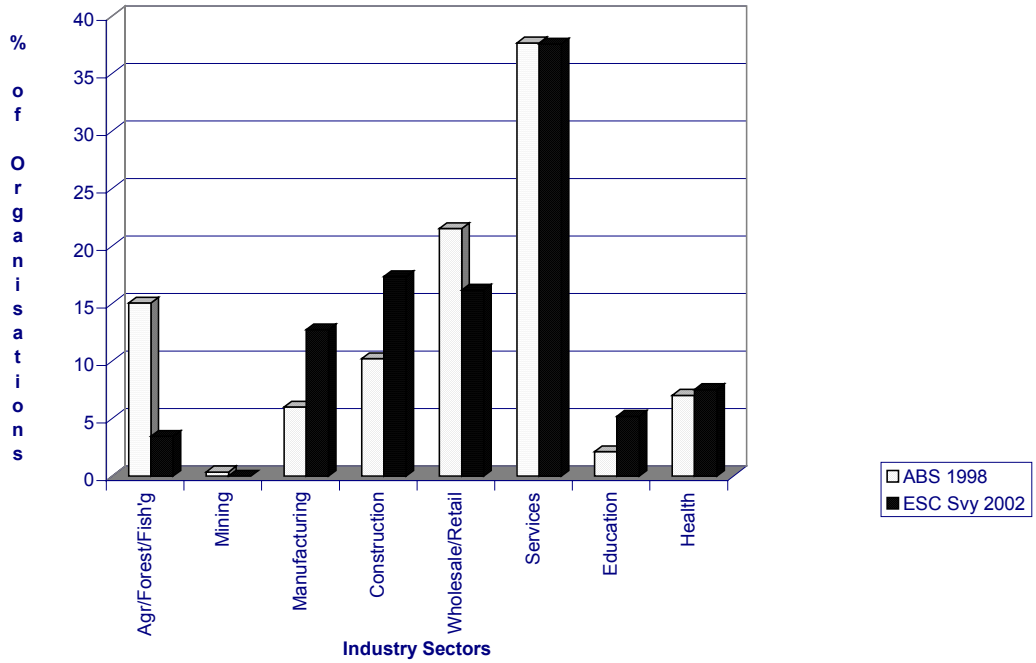
There are two very obvious differences between the two distributions. The ESC sample has significantly less host employers in the micro enterprise (less than 5 employees) range and has substantially more in the 11-50 employees range. It must be remembered that there is a time gap of 7 years between the two surveys and that the distribution could have altered significantly during this period. However reference to ABS 1998 data for firm size distribution[3] does indicate that our sample is not representative in respect of very small enterprises. It must be remembered this is a sample of convenience, as indicated earlier, and was not expected to mirror exactly the population from which it was drawn.

1.32 Industry

To identify the industry sector to which the workplace belonged, respondents were asked to name the main product produced or principal service provided. The results are shown in Figure 2 in which, a number of the standard industry sectors, ie, services, have been combined due to the low number of organisations responding. In order to provide a valid comparison, ABS data for the services sectors were combined in exactly the same way as for the sample.

[3] Unfortunately 1998 is the last year in which the ABS collected firm size data on the basis of number of employees. This is now measured in terms of turnover. Also it must be remembered that the ABS uses organisations rather than workplaces as its unit of measurement.

Figure 2: Percentage of Businesses by Industry Sector – ESC Sample vs National Data



There is a heavy predominance of respondent organisations in the services sector, 37%, and this matches, almost exactly, the proportion of workplaces in the services sector in the national distribution according to the 1998 ABS statistics. Other features to come out of the comparison with the national distribution of workplaces are that the sample has noticeably higher proportions in the manufacturing, construction and education sectors and noticeably lower proportions in the Agriculture/Forestry/Fishing and the Wholesale/Retail sectors. Again, it must be remembered this is a sample of workplaces hosting apprentices/trainees from GTCs so at least some of the differences between it and the national distribution of all workplaces probably reflects the prevalence of group training. For example, the higher proportions in the construction and manufacturing sectors could very easily be explained in that way. Unfortunately, it was not possible to draw direct comparisons with the Dench McLean Associates 1996 survey but their figures show an even greater predominance of host employers in the construction and mining/manufacturing sectors. Also, again, ours is a sample of convenience but it does not seem to be too greatly different from the population from which it was drawn.

1.33 Location

To avoid difficulties associated with definitions of metropolitan, urban, non-urban etc, respondent organisations were asked about their location in terms of proximity to a capital city (within approximately 50 kilometres of the city centre). It was found (Table 1) that the respondent organisations are almost exactly divided between metropolitan and non-metropolitan locations, as defined by the corresponding item in the instrument. This is fairly close to the results coming out of the Dench McLean Associates 1996 study that found 54% of host employers based in metropolitan areas with 46% in rural. It is not clear exactly how they defined metropolitan and rural but

their equating metropolitan with "capitals" indicates that their definitions may well be very similar to the ones used in our study.

Table 1: Location of workplaces surveyed

Location	No. of workplaces	% of workplaces
Metropolitan	84	48.55
Non-Metropolitan	89	51.45
Total	173	100.00

Source: Host Employer Survey 2002

Table 2 shows the distribution of the workplaces surveyed across the states of Australia. Unfortunately there are none from the Northern Territory or Tasmania but states other than Tasmania are well represented and more importantly, workplaces surveyed are equally distributed across states.

Table 2: Geographic distribution of workplaces

State	No. of workplaces	% of workplaces
New South Wales	40	23.12
Queensland	38	21.97
South Australia	24	13.87
Victoria	42	24.28
Western Australia	29	16.76
Northern Territory	0	0.00
Tasmania	0	0.00
Total	173	100.00

Source: Host Employer Survey 2002

1.34 Employment of Apprentices and Trainees

Table 3 shows the number of apprentices **(traditional trade apprentices)** employed directly at the workplace and it is surprising how few were directly employed as opposed to being hosted from a GTC. 86% did not employ any directly while only 5 organisations employed more than two. Perhaps the fact that there were no respondent organisations with 500 or more employees and very few with 200-499 employees is significant here, especially as workplace size was found to be significantly associated with the direct employment of apprentices. It could also be significant that this is a sample of employers that host apprentices from GTCs so that it is likely that they would not directly employ apprentices as well as host them.

Table 3: No. of apprentices directly employed

No of apprentices	No. of workplaces	% of workplaces
0	148	86.05
1	14	8.14
2	5	2.91
3	1	0.58

6	1	0.58
7	2	1.16
9	1	0.58
Total	172	100.00

Source: Host Employer Survey 2002

In examining the characteristics of those workplaces that did directly employ apprentices it was found that they tend to fall into two groups (see Appendix D, Table D1). The first employ one or two apprentices, are generally found in the services sector, tend to be small in size and are predominately non-metropolitan. The second group employ between 3 and 9 apprentices and are primarily large, to very large, construction companies that can be either metropolitan or non-metropolitan.

Table 4 shows the number of trainees employed directly and the pattern here almost mirrors exactly the responses concerning employment of apprentices, ie very few workplaces directly employ large numbers of apprentices and/or trainees.

Table 4: No. of trainees directly employed

No of trainees	No. of workplaces	% of workplaces
0	153	88.44
1	11	6.36
2	3	1.73
3	1	0.58
6	1	0.58
10	1	0.58
11	1	0.58
24	1	0.58
28	1	0.58
Total	173	100.00

Source: Host Employer Survey 2002

Again attempts were made to identify characteristics of those few workplaces that did employ directly (Appendix D, Table D2) and it was found they belonged predominantly to the services sector and were spread across size categories and across locations. The next most prominent industry sector is Wholesale/Retail trade with all workplaces being located in non-metropolitan areas and all employing one trainee only. Among the very few others, was a medium sized construction company that employed 11 trainees and a large manufacturing company that employed one trainee.

1.35 Hosting of Apprentices and Trainees

The number of apprentices hosted from GTCs at the time of survey is shown in Table 5.

It may seem surprising that over half the workplaces did not host any apprentices and, of those that did, the vast majority only hosted 1 or 2. However, of those with no apprentices hosted, most were hosting trainees although some 10 respondent workplaces were found to be hosting neither apprentices nor trainees and these

organisations are discussed below. At the other end of the scale, 7 of the 173 respondent organisations hosted 10 or more trainees.

Table 5: No. of apprentices hosted

No of apprentices	No. of workplaces	% of workplaces
0	91	52.91
1	35	20.35
2	23	13.37
3	4	2.33
4	6	3.49
5	1	0.58
6	1	0.58
7	1	0.58
8	2	1.16
9	1	0.58
10	2	1.16
11	1	0.58
20	1	0.58
23	1	0.58
25	1	0.58
70	1	0.58
Total	172	100.00

Source: Host Employer Survey 2002

The situation in respect of trainees (Table 6) was very similar except that 39%, instead of 53%, were not hosting any trainees although the percentage with just 1 trainee, 34%, was 13 percentage points higher than was the case for apprentices.

Table 6: No. of trainees hosted

No of trainees	No. of workplaces	% of workplaces
0	68	39.31
1	58	33.53
2	19	10.98
3	10	5.78
4	3	1.73
5	3	1.73
6	5	2.89
8	1	0.58
12	1	0.58
14	1	0.58
20	1	0.58
28	1	0.58
40	1	0.58
100	1	0.58

Total	173	100.00

Source: Host Employer Survey 2002

As mentioned, 10 of the 173 respondent workplaces were hosting neither apprentices nor trainees at the time of the survey. Given that they were identified by a GTC as a host employer one can only assume that their present situation had occurred relatively recently. Investigation of the survey data has revealed that with only one exception they are small to very small workplaces, belong predominantly to the services and construction industries and tend to be non-metropolitan.

At the other end of the scale, there are a small number of workplaces that host relatively large numbers of trainees and/or apprentices. When the available data was investigated, it was found these are, in the main, located in non-metropolitan areas (see Appendix C). The industries to which these workplaces belong are mainly construction and services (especially if health is included in services). The exception is the one workplace in manufacturing that hosts the greatest number of both apprentices and trainees.

1.36 Changes to Numbers Hosted

Respondents were asked about their use of group training three years ago. They were asked about the number of apprentices and the number of trainees they hosted then. For those unsure of the exact situation three years ago, the opportunity was provided to just state the number of both, as a total, but only 3 of the 173 organisations found it necessary to take that up.

61% of workplaces were not hosting apprentices three years ago and 68% were not hosting trainees (Tables 7 and 8), so, unfortunately, showing percentage changes over time was not feasible.

Table 7: No. of apprentices hosted 3 years ago

No of apprentices	No. of workplaces	% of workplaces
0	98	61.25
1	21	13.13
2	23	14.38
3	5	3.13
4	4	2.50
5	2	1.25
6	1	0.63
8	1	0.63
9	1	0.63
10	1	0.63
11	1	0.63
12	1	0.63
15	1	0.63
Total	160	100.00

Source: Host Employer Survey 2002

Table 8: No. of trainees hosted 3 years ago

No of trainees	No. of workplaces	% of workplaces
0	110	68.32
1	26	16.15
2	13	8.07
3	4	2.48
4	2	1.24
5	1	0.62
6	1	0.62
10	1	0.62
14	1	0.62
16	1	0.62
30	1	0.62
Total	161	100.00

Source: Host Employer Survey 2002

In order to see whether those workplaces hosting three years ago exhibited any characteristics that differentiated them from those who were not hosting then, tests were run to identify statistically significant differences between the two groups with respect to workplace size, industry sector and location. No significant differences were found between workplaces that hosted and those that didn't host New Apprentices with respect to workplace size and location. However, with respect to industry sectors, there were significant differences (see Appendix E). In the case of apprentices, there were significantly more workplaces hosting in the Construction and Services sectors, compared to the other sectors. While for trainees, it is solely within the services sector where the significant difference emerges and where there are substantially more workplaces hosting trainees than any other industry sector. These results generally fit the accepted patterns of use of group training over time within industry sectors; ie, traditional concentration of hosted apprentices in construction and the growth of trainee hosting in the services sector (see for example Dench McLean Associates, 1996), even when the small size of this sample is kept in mind along with it being a sample of convenience.

1.4 Use of Group Training

1.41 Main Reasons for Hosting Apprentices/Trainees

Group training originally developed in the building and automotive repair industries and was designed, it seems, to overcome a variety of impediments to employer investment in vocational training through direct employment of apprentices and trainees. These impediments include downturns in business cycles; increased firm specialisation; reduction in firm size; an increased competitive environment; growth of employment through labour hire and privatisation and corporatisation of public enterprises. More precisely, it was originally intended, at least according to Misko

(1997), to overcome problems associated with small enterprises and increasing skill shortages. Thus it was felt important to discover just why host employers in this sample were actually making use of group training and to see if the rationale for group training was still the same as it was originally. To test this, respondents were asked to indicate, from the list in the tables (Tables 9 and 10), the most important reason for using group training and the second most important reason.

Table 9: Most important reason for hosting apprentices

Reason given	No. of workplaces	% of workplaces
Savings on recruitment selection	41	23.70
Avoid admin complexity	45	26.01
Lack of sufficient continuous work	23	13.29
Reducing employment costs	36	20.81
Other	28	16.18
Total	173	100.00

Source: Host Employer Survey 2002

Table 10: Second important reason for hosting apprentices

Reason given	No. of workplaces	% of workplaces
Savings on recruitment selection	39	23.08
Avoid admin complexity	39	23.08
Lack of sufficient continuous work	12	7.10
Reducing employment costs	29	17.16
Other	18	10.65
No other reason	32	18.93
Total	169	100.00

Source: Host Employer Survey 2002

There were several surprises out of the responses to this question. First there was a remarkably even spread across the five alternatives and second, the reason suggested by conventional wisdom, given the large proportion of small workplaces, lack of sufficient continuous work, proved the least common, well behind savings on recruitment and selection and avoiding administrative complexity. Even when attention is given to the second most important reason, lack of work still shows out as surprisingly unimportant. While it is hard to understand why this reason did not figure more prominently, given the high proportion of small organisations involved, the results may, on the other hand, demonstrate how much recruitment costs and the administrative complexity of the New Apprenticeship system impact on decision making concerning training.

1.42 Use of Other Services

In 1991, the bi-annual review of group training by DEETYA resulted in a recommendation that government funding be reduced in an attempt to encourage GTCs to become self sufficient through the adoption of an increased range of commercial activities. While this recommendation was never implemented, being in

fact shelved in 1993 because of the economic downturn of the time, it was found by KPMG (1997) to have influenced GTCs to diversify their activities with a view to greater self-sufficiency. Their new activities involved them offering various additional services to business on a commercial basis, including:

- training (other than that concerning their own apprentices and trainees);
- employment placement services often stemming from the outsourcing of the functions of the former Commonwealth Employment Service;
- training and employment services under contract from State/Territory governments; and
- traditional labour hire services.

Thus it was felt to be important to discover to what extent host employers were making use of the services provided by GTCs that were additional to group training.

Before asking about the use of these other services, respondents were asked if they were aware of the provision of other services and it emerged that only slightly more than one third of respondent organisations were aware that their GTC provided other services (Table 11). Moreover of that third of respondents, very few actually used any of the other services (Tables 12).

Table 11: Awareness of other services offered by GTC

Response	No. of workplaces	% of workplaces
Yes	66	38.15
No	107	61.85
Total	173	100.00

Source: Host Employer Survey 2002

Table 12: Additional service used*

Additional service used	No. of workplaces	% of workplaces
New Apprenticeship Centre	7	10.61
Registered Training Organisation	18	27.27
Job Network Provider	5	7.58
General Labour Hire	9	13.64
Business Enterprise Centre	0	0.00
Other	1	1.52
Do not use additional services	26	39.39
Total	66	100.00

Source: Host Employer Survey 2002

* only the primary additional service used by each respondent is included

1.43 Subsequent Employment of Group Training Apprentices and Trainees

In order to attempt to assess the extent to which group training was used as a form of probationary employment, or screening device, by employers, respondents were asked if they had directly employed previously hosted apprentices and trainees either before or after their training was complete. In the case of training still being undertaken, only 10% of workplaces responded in the affirmative (Table 13), ie that they had taken over the training contract of apprentices and/or trainees from the GTC and employed them directly. Moreover, the numbers of apprentices and trainees involved over the last three years was very small (Table 14). This is not surprising when we look at the very small numbers of apprentices and trainees that are directly employed by the respondent organisations (see Tables 3 and 4).

Table 13: Direct employment of hosted New Apprentices (contract taken over)

Response	No. of workplaces	% of workplaces
Yes	17	9.83
No	156	90.17
Total	173	100.00

Source: Host Employer Survey 2002

Table 14: No. of hosted New Apprentices directly employed (contract taken over)

No. of New Apprentices	No. of workplaces	% of workplaces
0	1	5.88
1	11	64.71
2	3	17.65
3	2	11.76
Total	17	100.00

Source: Host Employer Survey 2002

When asked about direct employment of previously hosted apprentices and trainees, once their training was complete, far more workplaces, 56%, answered in the affirmative. In terms of the numbers so employed over the last three years, they tended to be three or less but some, obviously large organisations, had employed quite large numbers. Again this is not a surprising result given that it has been standard procedure for organisations to keep on their own apprentices and trainees if they need them and it would be expected they would do the same with those hosted from a GTC.

Table 15: Direct employment of hosted New Apprentices (completed training)

Response	No. of workplaces	% of workplaces
Yes	95	55.56
No	76	44.44
Total	171	100.00

Source: Host Employer Survey 2002

Table 16: No. of hosted New Apprentices directly employed (completed training)

No. of New Apprentices	No. of workplaces	% of workplaces
0	6	6.32
1	29	30.53
2	23	24.21
3	16	16.84
4	7	7.37
5	1	1.05
6	4	4.21
7	1	1.05
8	3	3.16
10	2	2.11
12	1	1.05
30	1	1.05
40	1	1.05
Total	95	100.00

Source: Host Employer Survey 2002

1.5 Satisfaction with group training

In the main, very high proportions of respondents indicated that they were either satisfied or very satisfied with the various aspects of group training about which they were questioned. However, there were some differences in respect of these various aspects.

Table 17 shows the percentages of workplaces that indicated the various levels of satisfaction with three aspects of group training services supplied by their GTCs: general administrative efficiency, cost effectiveness and quality of New Apprentices. Satisfaction with another three aspects, monitoring of the progress and behaviour of New Apprentices, support services (eg training and counselling) provided for New Apprentices and performance in the resolution of conflicts between New Apprentices and workplace personnel, is shown in Table 18.

Table 19: Satisfaction with aspects of group training

Level of satisfaction	General admin efficiency	Cost effectiveness	Quality of New Apprentices
		% of workplaces	
Very satisfied	49.71	35.26	42.77
Satisfied	46.24	56.65	46.82
Dissatisfied	3.47	5.78	5.78
Very dissatisfied	0.00	0.00	1.73
Don’t know / Not Applicable	0.58	2.31	2.89
Total	100.00	100.00	100.00

Source: Host Employer Survey 2002

Table 20: Satisfaction with further aspects of group training

Levels of satisfaction	Monitoring of progress	Support services provided	Resolution of conflict
		% of workplaces	
Very satisfied	41.62	32.37	25.43
Satisfied	47.98	53.76	35.84
Dissatisfied	9.25	6.36	2.31
Very dissatisfied	0.58	0.58	0.58
Don't know / Not Applicable	0.58	6.94	35.84
Total	100.00	100.00	100.00

Source: Host Employer Survey 2002

Looking at the two tables it can be seen that general administrative efficiency yielded the highest level of satisfaction and the largest percentage that indicated the highest level of satisfaction, "very satisfied". Only 4% indicated dissatisfaction. In respect of cost effectiveness, 6% indicated dissatisfaction and compared to administrative efficiency there were markedly fewer who indicated they were very satisfied (35% as compared to 50%). Going to quality of New Apprentices, satisfaction levels are more akin to those indicated for administrative efficiency although 5 organisations indicated that they did not know or that it was not applicable. Given that there were 10 respondent organisations that were not hosting any apprentices or trainees at the time of the survey this is perhaps not surprising.

With the monitoring of progress, there was 9% dissatisfied, as compared to 4% and 5% for some other aspects but satisfaction was still at very high levels. Not as many were very satisfied with support services provided, 32%, but only 7% were dissatisfied with another 7% saying it was not applicable or that they did not know. In the case of resolution of conflict between New Apprentices and workplace personnel, there was a surprising result in that over a third of respondents (36%) ticked the don't know/not applicable box. Among the others, very few (3%) were dissatisfied but it is difficult to understand why so many felt it was not applicable or that they did not know. One interpretation is that many workplaces do not experience this type of problem and therefore do not need this type of service from their GTC.

Respondents were also asked about their satisfaction with GTC services additional to group training but there were only 40 responses to this question. This is not surprising given that it was found from earlier questions that only approximately one third of workplaces knew of services provided by their GTC that were additional to group training (see Table 10) and that relatively few used any additional services (Table 11). Nevertheless, there were the same very high levels of satisfaction reported as for other aspects of group training.

Finally respondents were asked to suggest ways in which their Group Training Organisation could improve the quality of its group training services and the suggestions or comments provided are summarised in Table 21.

Table 21: Ways GTC can improve the quality of the training services it provides

Comment (No of times comment appears)
Better quality of and more apprentices and or trainees supplied by GTC – better screening/training/experience (19)
Better contact with the host employers :more regular contact by GTC and its field support officers (7)
Better administration: better management, more GTC staff, student support, conflict resolution (14)
Better Communication: information :eg, pay rates, courses/carrer path, what's required of employers and what employers's needs are, other services of GTC (26)
Better support for Aboriginal apprentices and/or trainees and needs to educate small businesses regarding aboriginal culture and the employer (2)
Costs could be reduced/cheaper (2)
Emphasis should return to 'on the job' training (2)
No problems with it (95)
Offering on-line programs would be good for students
They need to extend their scope of registration to include the local government training package.

26 respondents suggested better communication of information, 19 better quality of apprentices and trainees and 14 better administration and management. However, these were the only suggestions supported by any appreciable numbers and even more significantly, 95 responded by saying that they had no problems with their group training service. This outcome is consistent with the earlier responses indicating the very high levels of satisfaction with the specific aspects of group training.

1.6 Future development of group training

1.61 Rotation to provide broader training

Previous research indicated an expectation that there would be a certain amount of rotation given the involvement of a large number of small businesses but Mathers (1999) expressed some doubt about how much rotation occurs especially as it imposes increased costs particularly, again, in rural areas. Nevertheless rotation was seen as a potential advantage of group training in that it would provide broader training and research by KPMG (1997) reveals that one of the core services GTCs see themselves providing was more broadly monitoring the training needs of the apprentices and trainees through appropriate rotations.

Thus it was felt important to investigate host employer attitudes towards rotation. First they were asked whether they supported the principle of rotation of apprentices and trainees across host employers for the purpose of exposing them to a broad range of skills and work environments and 70% indicated support for the principle (Table 22).

Table 22: Principle of rotation supported by workplace

Response	No. of workplaces	% of workplaces
Yes	121	70.35
No	51	29.65

Total	172	100.00

Source: Host Employer Survey 2002

Second, those not supporting the principle were asked to provide reasons for their position and these are summarised in Table 23.

Table 23: Reason why rotation is not supported

Reason given (Frequency of reason given)
Apprentices and or trainees will not acquire sufficient skills (5)
Basically because we will lose the person we have trained up (9)
It won't make that much difference in this industry
Because the skills taught are specific to the business (20)
Because within local government we are large enough to give people a variety of experiences
Continuity :Rotation makes it hard to follow a continued training program (7)
Costs of re-training in is too much (5)
Employers need to make a long term commitment to their staff
I just don't
Rotating apprentices makes it difficult to develop rapport with employers and learn to be part of a company.

By far the most common reason concerned skill specificity. That is, it was felt that the relevant skills were specific to the business and that little of value could be learnt elsewhere.

Third, those in agreement with the principle of rotation were then asked if they were prepared to lose good apprentices and/or trainees just so they could gain broader experience elsewhere and 70% of those indicated in the affirmative (Table 24).

Table 24: Workplace prepared to lose New Apprentices to rotation

Response	No. of workplaces	% of workplaces
Yes	85	70.25
No	36	29.75
Total	121	100.00

Source: Host Employer Survey 2002

1.62 Hosting apprentices and/or trainees from disadvantaged groups

There is a strong consensus in the literature (see DEETYA, 1998) about the opportunities that equity groups provided for the growth of GTCs, especially in the light of the government's concerns that translated into direct financial incentives. A serious problem was identified however, concerning the need to provide employers with applicants acceptable to them. There was no point, it was argued, in GTCs taking on applicants for whom no work placements could be found. Thus it was found that the problem lay primarily with a lack of commitment to diversity on the part of

employers. With this in mind, the survey set out to discover, first, the proportion of workplaces that were hosting apprentices/trainees from a disadvantaged group (Table 25) and, second, whether they actually experienced any difficulties with them (Table 26).

Table 26: Hosting New Apprentices from a disadvantaged group

Response	No. of workplaces	% of workplaces
Yes	25	14.53
No	147	85.47
Total	172	100.00

Source: Host Employer Survey 2002

Table 27: Difficulties encountered with NAs from disadvantaged groups

Response	No. of workplaces	% of workplaces
Yes	13	52.00
No	12	48.00
Total	25	100.00

Source: Host Employer Survey 2002

Only 15% indicated that they were hosting apprentices/trainees from a disadvantaged group and of these 25 organisations, 13 said they experienced difficulties while 12 said they did not.

The types of difficulties experienced are outlined in the comments provided and an analysis of these comments reveals that they fall into the following categories (Table 28). While only 12 respondents cited a difficulty, it can be seen that a majority of those cited, and perhaps all, relate to aboriginal students.

Table 32: Difficulties associated with NAs from disadvantaged groups

Difficulties encountered
Aboriginal students require support to resolve cultural and social issues that they experience (5)
Attendance at work and training is an issue (5)
Drug and alcohol problems, lack of housing, literacy and numeracy, health (sugar diabetes and herat trouble) and their ability to manage money
More supervision is required

1.63 Any other comments about group training and its future.

The very high response rate to all the questions asked is mentioned in the methodology section (Section 1.2) and the response to this opportunity to provide general comments about group training and its future is consistent with this pattern. Some 170 comments were provided in all and they are summarised in Table 33. Moreover the nature of the comments is consistent with the high levels of satisfaction revealed in Section 1.5. 122 of the 170 comments indicate an absence of problems and state that the program works well while some of the other comments are also supportive of group training in general. Those indicating some need for improvement

point to the need for more funding, better scrutiny and monitoring of training and standards by both the GTCs and the government and better promotion of group training by GTCs.

Table 33: Comments regarding the future of group training

Comments Given (No of times comment appears)
All vocational training and education in regional areas needs greater financial support
Apprentices and trainees can gain opportunity & experience and become employable (10)
Better monitoring and standards for passing apprentices and trainees (6)
Better scrutiny by state and federal govt. to ensure better training and running of GTC (4)
Can have apprentices and/or trainees as work fluctuates, at low cost, for small business (3)
Can serve a role in the industry
Costs could be decreased (3)
Employers have an obligation to ensure they do not just take on trainees for a cost effective measure
Employers rely on outside help for trainees because we don't have the time to recruit (2)
For specialist professional firms, staff require long term training specific to that firm.
From our experience we have not had problems and the program works well (122)
GTC needs to promote themselves: services offered etc (3)
More can be done for disadvantaged groups (3)
Makes the process simpler it gives both parties (the employer and apprentice) more flexibility (3)
Needs to increase the number of applicants available to us: it is quite small (4)
Non-university courses are often giving students false expectation. In my area, in sports medicine, university graduates have difficulties obtaining employment and hence people with fewer qualifications have grave difficulties getting jobs.
Rotation of trainees could be offered more often to students
The end result is multi-skilling which is good. The program is good in the sense trainees are exposed to different workplaces and hence have the opportunity to adapt to different management practices and work cultures.

Chapter 2: Analysis of Relationships Between Key Variables

2.1 Introduction and Methodology

Additional analysis of the data was undertaken to investigate a number of possible relationships between some of the key variables in the survey. These relationships were suggested by the literature review and GT industry bodies as well as results from the survey of GTCs and the descriptive analysis presented above. For example, various studies have shown that group training originated in and was still heavily concentrated in, the construction and motor vehicle repair industries. One of the tests undertaken in this analysis was to discover whether there was any significant relationship between numbers of apprentices and trainees hosted and the industry sector in which host employers are located.

Three independent variables were selected:-

1. The size of the workplace surveyed (see Appendix A);
2. The industry sector of the workplace surveyed; and
3. The location of the workplace surveyed.

The dependent variables were defined to be:-

1. Item A4, number of apprentices employed directly;
2. Item A5, number of trainees employed directly;
3. Item A6, number of apprentices hosted;
4. Item A7, number of trainees hosted;
5. Item E5, change in the number of apprentices hosted at the workplace compared to 3 years ago. This dependent variable was constructed by subtracting Item A6 from A8, number of current apprentices hosted minus number of apprentices hosted 3 years ago; and
6. Item E6, change in the number of trainees hosted at the workplace compared to 3 years ago. This dependent variable was constructed by subtracting Item A7 from A9, number of current trainees minus number of trainees hosted 3 years ago.
7. Item B1, reason for hosting New Apprentices;

8. Item B3, direct employment of previously hosted New Apprentices (contract taken over);
9. Item B4, direct employment of previously hosted New Apprentices on the completion of training;
10. Items C1 to C7 satisfaction with various aspects of group training; and
11. Item D1, workplace support for the principle of rotation;

It should be noted that in testing for association with number of apprentices hosted (Item A6) and number of trainees hosted (Item A7) only those workplaces actually hosting apprentices and actually hosting trainees were included in the relevant calculations.

The Chi square, two tailed T Test and ANOVA/Duncan's Multiple range test as well as their non-parametric equivalents, the Mantel-Haenszel, Wilcoxon (two sample) and Kruskal-Wallis tests, respectively, were used to investigate these relationships. The non-parametric tests were used to verify parametric results and more importantly, to check on the validity of the underlying assumptions of the parametric tests. Non-parametric test results were used in preference to the parametric results, where there was a discrepancy between the two, due to the violation of assumptions associated with parametric tests. While all results will be presented, only significant results will be discussed. The Contingency Coefficient was used to evaluate the strength of associations where these were found to be significant. The significance level for all tests was set at 0.05.

2.2 Numbers of Apprentices and Trainees Hosted and Associated Variables

The aim of this analysis was to discover whether there was a significant association between the numbers of apprentices and trainees hosted and the designated independent variables being workplace size, industry sector and location.

2.21 Apprentices

The number of apprentices hosted was associated significantly with workplace size but not with industry sector or the location of the workplace.

Size

With respect to size, a significant difference in the average number of hosted apprentices across workplace size was found (P value of 0.005). Results indicate that it is the largest workplace size category that has the largest average number of hosted apprentices compared to the other categories of workplace size (see Table 1). It is no surprise that the largest workplaces host the most apprentices given their greater capacity and greater demand for skilled labour. Table 1 shows also that those workplaces with between 10 and 19 employees host, on average more apprentices than do those with between 20 and 49 employees. Thus while there are significant

differences across the workplace size categories, there is not a straightforward positive relationship between the variables.

Table 1: Average number of host apprentices by workplace size

Size of workplace	No of workplaces	Average No. of Host Apprentices
Less than 5	21	1.19
Between 5 and 9	11	1.55
Between 10 and 19	15	4.93
Between 20 and 49	11	2.91
Between 50 and 199	14	5.86
More than 200	**9**	**11.00**
Total	82	-

Source: Host Employer Survey 2002

2.22 Trainees

The number of trainees hosted was found to have a significant association with the size of the workplace only.

Size

A significant difference in the average number of hosted trainees across workplace size was found (P value of 0.0002). Results indicate that it is the largest workplace size that has the largest average number of hosted trainees compared to the other categories of workplace size (see Table 3).

Table 3: Average number of host trainees by workplace size

Size of Workplace	No of workplaces	Average No. of Host Trainees
Less than 5	13	1.39
Between 5 and 9	21	1.19
Between 10 and 19	24	2.04
Between 20 and 49	20	2.10
Between 50 and 199	19	4.32
More than 200	**8**	**23.63**
Total	104	-

Source: Host Employer Survey 2002

The relationship is a more straightforward, positive relationship than was the case with apprentices, but again it is not surprising that it is the larger workplaces that host the most trainees. Indeed other research has found that much of the very rapid growth in traineeships has taken place in the larger organisations (Toner, 2002).

2.3 Number of Apprentices and Trainees Hosted Across Time and Associated Variables

Here the attempt was made to discover whether any of the independent variables (workplace size, industry sector and location) were significantly associated with increases in the number of apprentices and trainees hosted over the last three years (ie numbers currently hosted compared to numbers hosted three years ago).

2.31 Apprentices

There were no significant associations between workplace size, industry sectors or workplace location and the number of apprentices hosted currently compared to 3 years ago.

2.32 Trainees

There were no significant associations between workplace size, industry sectors or workplace location and the number of trainees hosted currently compared to 3 years ago.

2.4 Reasons for Hosting New Apprentices and Associated Variables.

There was no significant association between the independent variables, size, industry sector, or location of the workplace, and the reason given for hosting New Apprentices (for example; saving on recruitment and selection, avoiding administrative complexity).

2.5 Direct Employment of Previously Hosted New Apprentices (Contract Taken Over) and Associated Variables

In Section 1.43 it was pointed out that respondents were asked about their employment (ie direct employment) of group training apprentices and trainees, that they had previously hosted, either before or after their training was complete. At this point it was explained that the rationale for these questions lay in the desire to assess the extent to which group training was used as a form of probationary employment, or screening device, by employers.

In this analysis the attempt was made to discover whether there was any significant relationship between this direct employment of previously hosted New Apprentices and workplace size, industry sector and location. In addition tests were run to see if there was any significant relationship with the level of satisfaction with GTC services; the rationale being that the level of satisfaction with GTC services may be related to the decision over whether or not to employ the hosted New Apprentices directly.

No significant association between the size, industry sector, location of the workplace and the direct employment of previously hosted New Apprentices, while they were still undertaking training, was found. With respect to levels of satisfaction with GTC services, significant associations were found with satisfaction with a GTC's monitoring of the progress and behaviour of its New Apprentices (P value of 0.048) and with satisfaction with a GTC's support services, eg, training and counselling (P value of 0.008). However no significant association was found with:

1. The general administrative efficiency (including communication, financial dealings, meeting commitments) of the GTC used;
2. The cost-effectiveness of GT services provided;
3. The quality of New Apprentices supplied to the workplace by the GTC; and
4. The performance of the GTC in resolving conflicts between New Apprentices and workplace personnel.

Of all the aspects of GTC services about which employers indicated their level of satisfaction, it would be expected that the most likely to be associated with the decision to employ directly hosted New Apprentices would be the quality of New Apprentices supplied to the workplace. The lack of association in that instance suggests that, for this sample, the quality of New Apprentices supplied by GTCs is not important to employers, given that first, the majority of workplaces surveyed are small to medium in size and hence employers prefer to train New Apprentices to meet their specific skill demands, and second, this is consistent with results presented below.

Satisfaction with a GTC's monitoring of the progress and behaviour of its New Apprentices

A significant association was found between the direct employment of New Apprentices (contract taken over) and satisfaction with a GTC's monitoring of the progress and behaviour of its New Apprentices (P value of 0.048). In this instance, there were 13 workplaces that directly employ New Apprentices that were satisfied with a GTC's monitoring of the progress and behaviour of its New Apprentices compared to 4 workplaces that directly employ New Apprentices that were dissatisfied with this GTC service.

Satisfaction with a GTC's support services

A significant association was also found between the direct employment of New Apprentices (contract taken over) and satisfaction with a GTC's support services, eg, training and counselling (P value of 0.008). There were 13 workplaces that directly employ New Apprentices that were satisfied with a GTC's support services compared to 4 workplaces that were dissatisfied with this GTC service.

2.6 Direct Employment of Previously Hosted New Apprentices on the Completion of Training and Associated Variables

The same tests of association were run against the direct employment of previously hosted New Apprentices on the completion of training as were run against direct employment of previously hosted New Apprentices still undergoing training. Significant associations were found with the size of the workplace and the location of the workplace but there was no significant association with the industry sector to which the workplace belonged. In respect of level of satisfaction with GTC services, no significant associations were found between the direct employment of previously hosted New Apprentices (completed training) and any of the aspects of these services that were selected for analysis.

Size

A significant association was found between the size of the workplace and the direct employment of New Apprentices who had completed their training, (P value of less than 0.0001). Furthermore, results indicate that more workplaces with 10-19, 20-40 and 50-199 employees hosted New Apprentices as opposed to the very small and very large workplaces surveyed (see Table 8). This result is not surprising for the very small workplaces given that they host very few New Apprentices anyway (see Tables 5 and 6 in Chapter 1) but for the very large workplaces, the result is surprising especially when it is remembered that they host significantly more New Apprentices than the smaller categories of workplaces.

Table 8: No. of workplaces that directly employ previously hosted New Apprentices

Size of workplace	Workplaces that directly employ		Workplaces that don't directly employ	
	No.	%	No.	%
Less than 5	9	5.26	25	14.26
Between 5 and 9	13	7.60	21	12.28
Between 10 and 19	**23**	**13.45**	**12**	**7.02**
Between 20 and 49	**22**	**12.87**	**7**	**4.09**
Between 50 and 199	**22**	**12.87**	**6**	**3.51**
More than 200	6	3.51	5	2.92
Total	95	55.56	76	44.44

Source: Host Employer Survey 2002

Location

A significant association was also found between the location of the workplace and the direct employment of New Apprentices who had completed their training (P value less than 0.03). Results indicate that more metropolitan workplaces (53 or 31%) directly employed New Apprentices who had completed their training as opposed to their non-metropolitan counterparts (42 or 25%). This result is somewhat surprising as it would be expected that the non-metropolitan workplaces, with fewer options for

recruiting, would be more likely to employ New Apprentices they had previously hosted.

2.7 Satisfaction with GTC Services and Associated Variables

In order to determine whether levels of satisfaction with GTC service varied according to workplace size, industry sector or location of the workplace the relevant tests of association were conducted. No significant association was found between any of these independent variables and levels of satisfaction with GTC services. It must be remembered that these levels of satisfaction were very high for all aspects of GTC services about which questions were asked but, to the extent that there were variations in the levels of satisfaction, it seems these were not associated with workplace size, industry sector nor location of the workplace.

2.8 Workplace support for the Principle of Rotation and Associated Variables

Finally attempts were made to discover whether support for the principle of rotation of New Apprentices to provide broader training varied according to the size, industry sector, location of the workplace. However no significant association was found between support for the principle of rotation and any of these independent variables.

Chapter 3 Discussion

While a number of important findings emerged, the most striking outcome of the survey was the very high level of satisfaction that host employers reported having with the services provided by their group training companies. The percentages of employers claiming that they were either satisfied or very satisfied with the various aspects of group training about which they were questioned ranged between 91% and 96% and when asked to comment generally about group training, 122 of the almost 170 comments were to the effect that no problems were experienced and that the program works well. These high levels of satisfaction went across all industries, across metropolitan and non-metropolitan locations and across all workplace size categories with tests for association between levels of satisfaction with group training services and size, location and industry all returning results of no significant association.

The next most important finding concerns the reasons given by respondents for their use of group training. Respondents were asked to choose from five possible reasons for hosting apprentices/trainees; savings on recruitment and selection, avoiding administrative complexity, lack of continuous work, saving on employment costs and any other reason. Given that over 60% of the sample had less than 20 employees, it would be expected that lack of continuous work would rate at least fairly highly, yet it rated lowest of the five alternatives as the most important reason and as the second most important reason. From the host employers' perspective, according to the responses, savings on recruitment and selection, the avoidance of administrative complexity and saving on employment costs, were more important reasons for hosting New Apprentices. In the "other" category, which also rated more highly than lack of continuous work, the most commonly mentioned reasons were largely altruistic in that they referred to assisting the local community and disadvantaged groups and increasing skill levels in the wider workforce. "Other" reasons, more selfishly based, related mainly to the flexibility of group training.

The relative unimportance of a lack of continuous work seems consistent with the significant role played by larger firms in group training (see below). However, the critical point in respect of policy appears to be the use of group training, in preference to direct employment of apprentices and trainees, because of the cost savings it enables, rather than because of any innate inability to fully employee those in training. More attention will be given to these findings in the conclusion to this chapter. Before that, there will be some discussion of other findings.

While Misko (1997), among others, points out that group training originally developed in the building and automotive repair industries to overcome problems associated with small enterprises and increasing skill shortages, the results from this survey suggest that larger workplaces make at least the same use of group training, proportionally speaking, as smaller workplaces. As would be expected the larger workplaces host on average more apprentices per workplace than smaller workplaces. Workplaces with more than 200 employees have, on average, 11 apprentices per workplace compared to 1.4 apprentices in workplaces with less than 10 employees.

However, of the 329 apprentices hosted by employers in the survey, only 30% were hosted in workplaces with more than 200 employees with the majority, or 70 percent of apprentices, being hosted in small to medium workplaces. 13% are hosted in workplaces with less than 10 employees; 23% in workplaces with 10-19 employees; 10% in workplaces with 20-29 employees and another 25% in workplaces with 50-199 employees.

Of the 406 trainees hosted by employers in the survey 47% are hosted in workplaces with more than 200 employees. A significantly higher proportion of trainees than apprentices are hosted in large workplaces. This reflects the fact that most trainees are employed in service industries such as retailing, hospitality, insurance, and the public service, and in occupations such as elementary and intermediate sales and service (Toner 2002). Many firms and establishments in these industries are large in terms of workplace size. At the other end of the scale, workplaces with less than 10 employees host 11% of trainees while workplaces with between 10 and 19 employees host 12%; workplaces with 20-49 employees host 10% and workplaces with 50-199 employees host 20%.

The average number of trainees in workplaces with more than 200 employees is 24, which is more than double the average number apprentices in equivalent size workplaces. The average number of trainees in workplaces with less than 10 employees is 1.29. This is slightly smaller than the average number of apprentices in the same size workplace.

Moving on to other findings and one that does not sit very comfortably with a conclusion reached in the earlier ESC study of GTCs, concerns the use by host employers of services, other than group training, that are supplied by GTCs. In the earlier study it was found that all GTCs undertake a range of additional commercial activities related to their core GT function such as, operating Registered Training Organisations, New Apprenticeship Centres or as a Job Network Provider and a general labour hire provider. It is only in the more recent past that many of these commercial activities became available to GTCs and it was found that those emerging since 1990, were less likely to be in receipt of Joint Policy Funds and more likely to be dependent on the offering of the additional services. In this survey, however, it was found that almost two thirds of respondent organisations were not even aware that their GTC offered these additional services and very few, who were aware, actually made use of the services. For example, when asked to specify the first additional service used, only 40 of the 173 respondents indicated that they used a service and in respect of using a second additional service only 15 responded in the affirmative. Such a response may be due to the predominance of small workplaces in the sample in combination with the very high level of satisfaction with services routinely provided by GTCs. This suggests that the large majority of their needs are met and, hence, further inquiry as to additional services offered by GTCs was not warranted. Of course it may be that it is employers other than those hosting apprentices and trainees that are using the additional services.

Another finding concerns the direct employment of previously hosted New Apprentices. While over half the respondents indicated that they directly employed previously hosted New Apprentices on the completion of their training, less than 10% indicated that they employed previously hosted New Apprentices while they were still undergoing training. Given the small number of New Apprentices directly employed

by the respondent organisations, 86% employing no apprentices and 88% employing no trainees, this latter result is not surprising. Also, the fact that a majority of respondents employed previously hosted employees on the completion of their training seems consistent with traditional practice except that, in earlier decades, these would have been their own apprentices and trainees rather than those from GTCs. Tests were conducted to see whether the level of satisfaction with group training services was linked to the direct employment of New Apprentices previously hosted but with just a couple of exceptions, no significant associations were found. It must be remembered however, that the levels of satisfaction were very high right across all size, industry and location categories of workplaces.

There was a further interesting finding concerning the hosting of apprentices and trainees. It is, according to the results, significantly associated with certain industry sectors. For apprentices, workplaces in manufacturing and construction hosted significantly more than those in other industries and that fits with the traditional picture of group training. In the case of trainees it was manufacturing and health whose workplaces hosted significantly more. Manufacturing industry then, is very closely linked with group training and given the importance of group training to skill creation, overall, in Australia, it would seem important for our future skill needs to ensure the continuation of a healthy manufacturing sector.

To continue the focus on the hosting of New Apprentices, in this case trainees, it was found that location proved to be significant in that non-metropolitan workplaces were more likely to host trainees than those deemed metropolitan according to the definition used in the survey. No particular reasons suggest themselves for this association and perhaps size and/or industry factors are at play. This is just one of many findings that it seems merit further research.

Finally, mention should be made of attitudes and experiences concerning, a) rotation of New Apprentices for the purpose of broadening their training and b) the hosting of New Apprentices from disadvantaged groups. In respect of rotation, there was strong support for this as a principle and for relinquishing New Apprentices to rotation. This is potentially at odds with findings from the previous study into GTCs in that a significant proportion of the GTCs perceived host employers to be reluctant to lose good apprentices and trainees just so they could broaden their experience. However this was just the perception of the GTCs and our sample of host employers is a very small one. Nevertheless, rotation could be another area requiring more investigation especially given the narrowing of training opportunities as work, in many industries, continues to become more fragmented and more specialised. In the light of the encouragement by government to employ New Apprentices from disadvantaged groups it is disappointing to see that only 15% of respondents indicated they were hosting an apprentice or trainee that fell into this category. When asked if difficulties were encountered, approximately half of this group responded in the affirmative and again a much larger survey would be required to assess accurately the extent and nature of problems being experienced in the employment of these people.

Conclusion

The very high levels of satisfaction with group training services reported by this sample of host employers should be very pleasing to government and to those bodies

responsible for the support and sponsorship of group training in Australia. However, this study throws up at least one issue which government policy makers may wish to further explore with a much larger survey of host employers. This issue concerns the reasons for employers using group training rather than employing apprentices and trainees themselves. It seems group training is used much more because of the savings in time and resources it provides, rather than because of any innate difficulties in providing training opportunities. While this finding obviously needs to be tested further, one possible interpretation is that group training is being used by employers to reduce the various costs associated with the employment of apprentices and trainees; costs that have been increased substantially by the well documented administrative complexity of the training system. Perhaps, then it could be argued that, to the extent that government assists group training and thus indirectly subsidises the training costs of employers, it is only compensating them for the expenses arising from the complex administrative system it put in place.

Also, it could be argued that in the absence of government assisted group training, employers would contribute less to skill creation especially in the light of the numbers they employ directly, compared to the number they host. However, the extent to which their hosting of New Apprentices is cost sensitive is unknown so that the potential impact of higher charge-out rates, that would most probably result from reductions in government assistance, cannot be estimated at this stage.

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Appendix A Details of Variables Used in the Analysis of Relationships between Key Variables (Chapter 2)

The size of a workplace was one of the independent variables used in this analysis and it was classified into:-

1. Category 1 – Less than 5 employees;
2. Category 2 – Between 5 and 9 employees;
3. Category 3 – Between 10 and 19 employees;
4. Category 4 – Between 20 and 49 employees;
5. Category 5 – Between 50 and 199 employees; and
6. Category 6 – More than 200 employees.

The following modifications to the data were made to enhance the validity of the Chi square test. These were:-

1. Item A2, the industry sectors were collapsed from 17 to 7 sectors that consist of agriculture/fishing/forestry, manufacturing, construction, wholesale/retail, services, education and health services. The services sector combines electricity/gas/water services, communication services, transport/storage services, accommodation/cafes/restaurants, government admin/defence services, cultural/recreation services, property/business services, and personal/other services. The rationale for having one large "services" sector lies in the very small number of observations in each of these sectors. The wholesale and retail sales sectors were also combined for the same reason;
2. Item A3, the size of the workplace, had the categories '200 - 499 employees' and 'more than 500 employees' collapsed into one category due to the small number of observations in each of the categories; and
3. Items C1-C7, the four levels of satisfaction with various services provided by GTCs, were collapsed into 2 categories (satisfaction and dissatisfaction) due to the small number of observations in the very dissatisfied category. The small number of respondents that answered, "Don't know/Not Applicable" to any of the satisfaction items were set to missing for the investigative analysis.

Finally while items C1-C7 relating to satisfaction with group training services are depicted as dependent variables, tests were conducted for association between them and other dependent variables items B3 and B4, the direct employment of previously hosted New Apprentices both before training was complete (item B3) and after the completion of training (item B4).

Appendix B Workplaces Directly Employing New Apprentices, Workplaces Hosting New Apprentices and Workplaces not Hosting nor Employing New Apprentices

Table B1: No. of Apprentices Directly Employed by Industry, Workplace Size and Location

No of Apprentices	Industry Sector	Workplace Size	Location
1	Manufacturing	5 - 9	Metro
1	Services	5 - 9	Metro
1	Manufacturing	5 - 9	Metro
1	Services	20 - 49	Non-Metro
1	Services	50 - 199	Metro
1	Construction	10 - 19	Metro
1	Construction	5 - 9	Metro
1	Services	50 - 199	Metro
1	Services	> 200	Non-Metro
1	Services	50 - 199	Non-Metro
1	Wholesale/Retail	5 - 9	Non-Metro
1	Wholesale/Retail	5 - 9	Non-Metro
1	Manufacturing	5 - 9	Non-Metro
1	Services	5 - 9	Metro
2	Construction	5 - 9	Metro
2	Wholesale/Retail	20 - 49	Metro
2	Wholesale/Retail	20 - 49	Metro
2	Services	5 - 9	Non-Metro
2	Services	50 - 199	Metro
3	Construction	50 - 199	Metro
6	Construction	> 200	Metro
7	Construction	20 - 49	Metro

7	Wholesale/Retail	50 - 199	Non-Metro
9	Manufacturing	> 200	Non-Metro

Source: Host Employer Survey 2002

Table B2: No. of Trainees Directly Employed by Industry, Workplace Size and Location

No of Trainees	Industry Sector	Workplace Size	Location
1	Services	5 - 9	Metro
1	Wholesale/Retail	< 5	Non-Metro
1	Services	50 - 199	Metro
1	Manufacturing	> 200	Non-Metro
1	Wholesale/Retail	20 - 49	Metro
1	Services	5 - 9	Non-Metro
1	Wholesale/Retail	10 - 19	Non-Metro
1	Services	20 - 49	Metro
1	Manufacturing	50 - 199	Metro
1	Services	20 - 49	Non-Metro
1	Wholesale/Retail	50 - 199	Non-Metro
2	Services	5 - 9	Non-Metro
2	Services	10 - 19	Metro
2	Health	50 - 199	Metro
3	Agri/Forest/Fish	5 - 9	Non-Metro
6	Health	50 - 199	Metro
10	Services	10 - 19	Metro
11	Construction	20 - 49	Metro
24	Services	> 200	Non-Metro
28	Services	> 200	Non-Metro

Source: Host Employer Survey 2002

Table B3: No. of Apprentices and Trainees Directly Employed by Industry, Workplace Size and Location

No of Apprentices	No of Trainees	Industry Sector	Workplace Size	Location

1	24	Services	> 200	Non-Metro
9	1	Manufacturing	> 200	Non-Metro
2	1	Wholesale/Retail	20 - 49	Metro
7	1	Wholesale/Retail	50 - 199	Non-Metro

Source: Host Employer Survey 2002

Table B4: No. of Apprentices and Trainees Hosted: by Industry, Workplace Size and Location

Industry Sector	Workplace Size	Location	No. of Hosted Apprentices	No. of Hosted Trainees
Services	> 200	Non-Metro	2	28
Health	> 200	Non-Metro	Don't Know	40
Manufacturing	> 200	Non-Metro	70	100
Services	50-199	Non-Metro	0	20
Construction	50-199	Metro	25	0
Construction	50-199	Non-Metro	20	0
Construction	50-199	Metro	23	5

Source: Host Employer Survey 2002

Table B5: Workplaces That Don't Host or Directly Employ NAs

Industry Type	Workplace Size	Location
Manufacturing	10-19	Non-Metro
Wholesale/Retail	10-19	Metro
Construction	5-9	Metro
Services	5-9	Non-Metro
Services	10-19	Non-Metro
*Services	*20-49	Metro

Source: Host Employer Survey 2002

Appendix C Hosting of New Apprentices 3 Years Ago by Industry Sector

Table C1: Hosting of Apprentices 3 Yrs Ago: by Industry Sector

Industry Sector	No of Workplaces Not Hosting (%)	No of Workplaces Hosting (%)	Total No. of Workplaces
Agr/Forest/Fishing	5 (3.13%)	1 (0.63%)	6 (3.75%)
Manufacturing	9 (5.63%)	12 (7.5%)	21 (13.13%)
Construction	10 (6.25%)	20 (12.5%)	30 (18.75%)
Wholesale/Retail	16 (10%)	9 (5.63%)	25 (15.63%)
Services	39 (24.38%)	19 (11.88%)	58 (36.25%)
Education	8 (5%)	1 (0.63%)	9 (5.63%)
Health	11 (6.88%)	0 (0%)	11 (6.88%)
Total	98 (61.25%)	62 (38.75%)	160 (100%)

Source: Host Employer Survey 2002

Table C2: Hosting of Trainees 3 Yrs Ago: by Industry Sector

Industry Sector	No of Workplaces Not Hosting (%)	No of Workplaces Hosting (%)	Total No. of Workplaces
Agr/Forest/Fishing	3 (1.86%)	3 (1.86%)	6 (3.73%)
Manufacturing	17 (10.56%)	4 (2.48%)	21 (13.04%)
Construction	28 (17.39%)	2 (1.24%)	30 (18.63%)
Wholesale/Retail	16 (9.94%)	9 (5.59%)	25 (15.53%)
Services	34 (21.12%)	24 (14.91%)	58 (36.02%)
Education	6 (3.73%)	3 (1.86%)	9 (5.59%)
Health	6 (3.73%)	6 (3.73%)	12 (7.45%)
Total	110 (68.32%)	51 (31.68%)	160 (100%)

Source: Host Employer Survey 2002

The above tables illustrate the number of workplaces that hosted New Apprentices 3 years prior to the survey versus workplaces that didn't, by industry sector. The difference in concentration between industry sectors is statistically significant ($P< 0.05$ for both tables), the level of association being moderately strong (Contingency Coefficient = 0.37 and 0.3 respectively).

THE STRUCTURE AND FUNCTION OF GROUP TRAINING COMPANIES IN AUSTRALIA

APPENDIX A

Table 1: Other Commercial or Government Supported Activity Operated by GTCs

Activity Reported
Aboriginal employment strategy
Agent to a group training centre
Community business employment
Construction building program, computer sales
Consultancy for disabled facilities
Disability employment service
Housing industry trade training building contracts
Housing industry trade training
Human resources consultants
Job pathways provider
Job placement program
Mature worker, migrant placement
Recruitment agency
State govt construction projects
Subcontractor with employment national / job match
Training admin body
Urban renewal
Work cover research in construction industry
Work for the dole

Table 2: Additional Activities of GTCs - Full Details

Additional Activity*	No. of GTCs	%
6	34	25.95
2	33	25.19
2,6	10	7.63
4	8	6.11
1,2	7	5.34
2,4	6	4.58
2,3	5	3.82
1,2,3,4	4	3.05
2,3,4,6	3	2.29
1,2,3,4,6	3	2.29
4,6	2	1.53
1,2,6	2	1.53
1,2,3	2	1.53
1,4,6	2	1.53
2,3,4	2	1.53
1,2,4	2	1.53
2,5,6	1	0.76
2,4,6	1	0.76
2,3,5	1	0.76
1	1	0.76
2,3,4,5	1	0.76
2,3,6	1	0.76

*Key to Additional Activity

1 = New Apprenticeship Centre (NAC)

2 = Registered Training Organisation (RTO)

3 = Job Network Provider

4 = General Labour Hire (Excluding apprentices and trainees)

5 = Business Enterprise Centre

6 = Any other commercial or government supported activity

Figure 1: Number of Part Time Staff (Core Services) at GTC

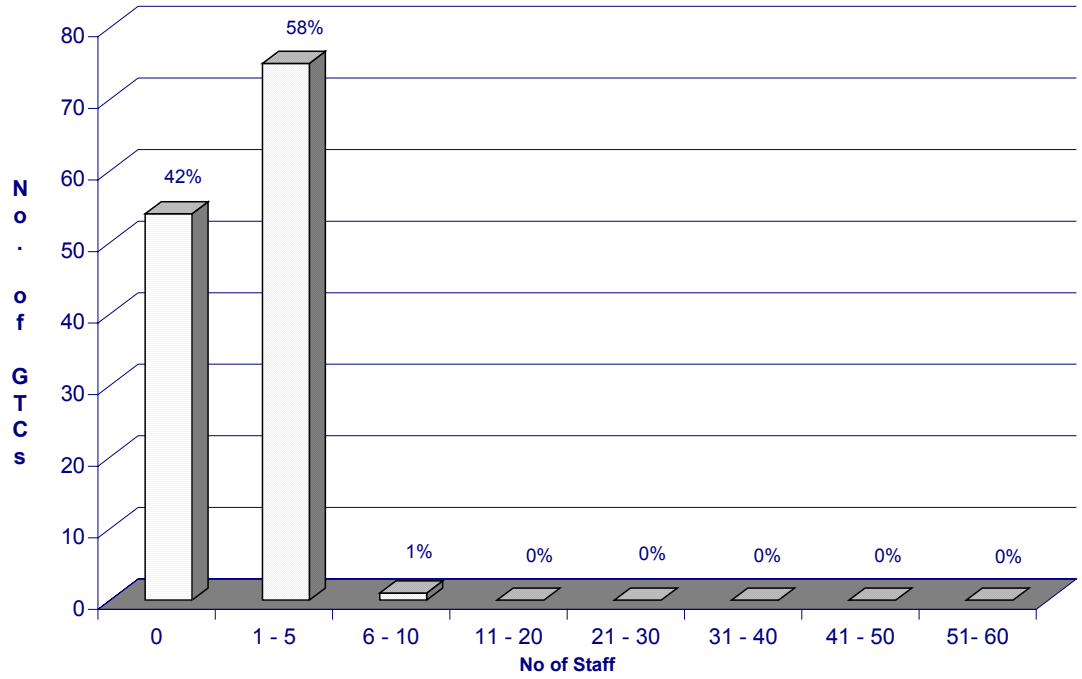

Figure 2: Number of Part Time Staff (All Services)

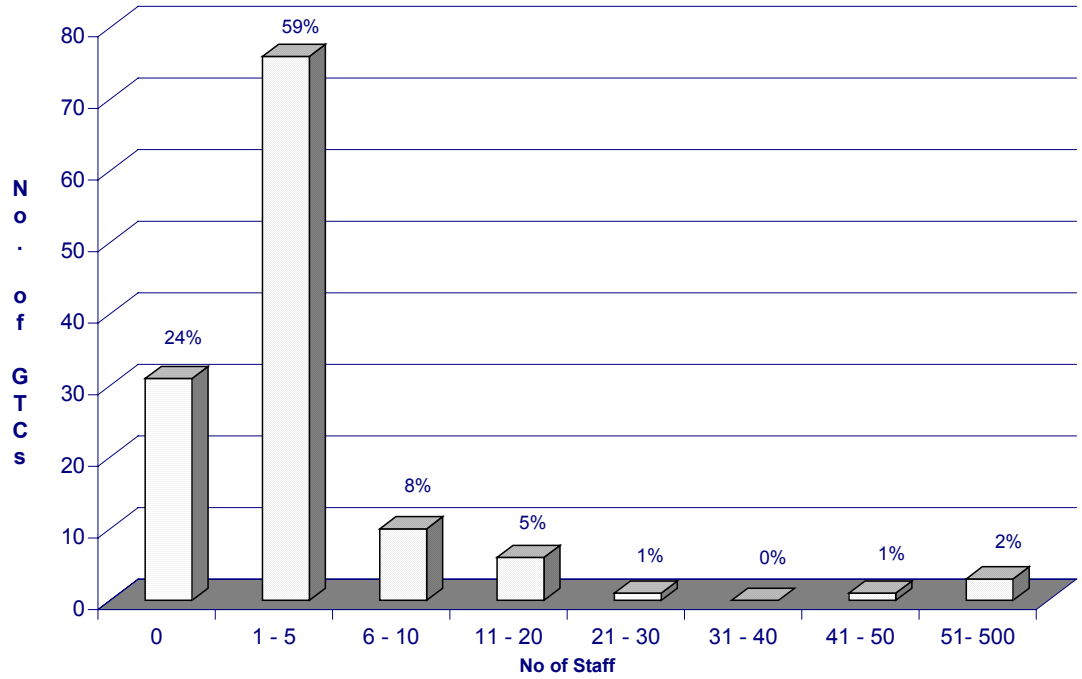

Table 3: Apprenticeships Employing the Most Apprentices

Apprenticeship*	No. of GTCs	%
1,2,3	23	19.83
3	13	11.21
1,3,4	10	8.62
1,2,4	8	6.9
5	7	6.03
1,2	5	4.31
8	4	3.45
4	4	3.45
2,3,5	4	3.45
1,3,6	3	2.59
1,3,5	3	2.59
2	3	2.59
2,3	3	2.59
3,4	2	1.72
3,8	2	1.72
2,3,4	2	1.72
3,4,5	2	1.72
3,5,6	2	1.72
6,8	1	0.86
3,5,7	1	0.86
6	1	0.86

*Key to Apprenticeship

1 = Metals/Engineering

2 = Electrical/electronic

3 = Construction

4 = Automotive

5 = Cooking/Hospitality

6 = Horticulture

7 = Hairdressing

8 = Other

Table 4: "Other" Traineeships employing the most trainees

Other Traineeships (No of GTCs)
Aged care/ Child care (5)
Agriculture (5)
Community care/services (5)
Sport and recreation (4)
Meat industry traineeships (3)
Financial services (2)
Warehousing (2)

Table 5: Traineeships Employing the Most Trainees

Traineeship*	No. of GTCs	%
1,2,7	10	8.3
1,2,15	7	5.83
2	6	5
15	6	5
2,15	5	4.17
1,2,3	4	3.33
1,2,5	4	3.33
2,13,15	3	2.5
2,8,15	3	2.5
2,7,13	3	2.5
1,2,8	3	2.5
1,2,6	2	1.67
11	2	1.67
2,9,15	2	1.67
1,2,13	2	1.67
2,7	2	1.67
2,7,8	2	1.67
2,5,7	2	1.67
4,15	2	1.67
2,11	2	1.67
13	2	1.67

*Key to Traineeship
1 = Retail
2 = Clerical/office administration
3 = Small Business
4 = Transport
5 = Metals/Engineering
6 = Electrical/electronic
7 = Cooking/Hospitality
8 = Information technology
9 = Automotive
10 = Security
11 = Construction
12 = Cleaning
13 = Horticulture
14 = Construction
15 = Other

Table 6: Industry Sectors Employing New Apprentices

Industry Sector*	No. of GTCs	%
5	12	9.23
1-17	6	4.62
1	3	2.31
7	3	2.31
8	3	2.31
9	2	1.54
5,7	2	1.54
3,5	2	1.54
12	2	1.54
7,8,12,15,17	1	0.77
3,7,17	1	0.77
2,13,15	1	0.77
1,3,5,7-9,12,14-16	1	0.77
1,3,5,7,12	1	0.77
1,3,5-10,12,14-17	1	0.77
12,17	1	0.77
3-5,10	1	0.77
3-5,14	1	0.77
12,15	1	0.77
4,5,8	1	0.77
17	1	0.77

*Key to Industry Sector

1 = Agriculture, forestry, fishing

2 = Mining

3 = Manufacturing

4 = Electricity, gas water

5 = Construction

6 = Wholesale

7 = Retail

8 = Accommodation, cafes, restaurants

9 = Transport, storage

10 = Communication services

11 = Finance & insurance

12 = Property & business services

13 = Govt admin & defence

14 = Education

15 = Health & community services

16 = Cultural & recreational services

17 = Personal &other services

Table 7: "Other" Strategies used to cope with New Apprentices who cannot be placed with a host employer over a few days

Other Strategy Used (No. of GTCs)
Annual leave/Rec leave/Paid leave (21)
Down time with pay (17)
Rotate to another host employer (2)
Contracts with private companies/build houses (1)
Employ through subsidiary company
Get them to do clerical or TAFE work
Have agreement with host employers
Paid job search time
Paid work for community organisations
Pay the wages
Provide work through our associated organisations
Put them in block release
Put them to work and cover their wages
Return to work program
Short term employment in similar industry
Short term paid placements with other hosts
Suspend contract, use annual leave (3)
We get them to work in our office
Where possible we would cover the cost

Table 8: Strategies Used by GTCs to cope with NewApprentices who cannot be placed with a host employerover a few days

Strategy Used*	No. of GTCs	%
1,2	16	12.21
1,2,5	16	12.21
1	15	11.45
5	14	10.69
1,4,5	10	7.63
1,5	7	5.34
4,5	6	4.58
1,4	6	4.58
1,2,3	5	3.82
1,2,4	5	3.82
4	4	3.05
2,4	4	3.05
1,3	4	3.05
1,2,4,5	3	2.29
2,3,4	2	1.53
2,5	2	1.53
1,2,3,5	2	1.53
1,2,3,4	2	1.53
2	1	0.76
1,3,4	1	0.76
2,3,5	1	0.76

*Key to Strategies Used by GTCs

1 = Provide additional training

2 = Offer the New Apprentice to a host employer for no cost/reduced cost

3 = Get them employed through general labour hire activities

4 = Stand down without pay

5 = Other

Table 9: "Other" activities undertaken by GTCs with New Apprentices who cannot be placed with a host employer over several weeks

Activities Undertaken
Additional training/attend college (10)
Annual leave RDOs (10)
Downtime with pay (8)
Employ them internally (6)
Found them other work (5)
Continue to try and find a new host employer (4)
Continue to employ and pay for 4 years
Depends on why, if not their fault pay for one week
Develop construction projects for disability
Explain to them what is happening and ask them if they will put in hardship or can they wait for the host employer
Leave without pay
Look for transfer to another location or GTC
Offer financial assistance
Offer to host at reduced cost
Pay them to do intensive job search
Pay wages
Provide discounted or paid short term placement with existing hosts or take holidays
Put them into business at no cost to them
Reduce the time spent training
State govt projects

Table 10: Activities Used by GTCs to cope with New Apprentices who cannot be placed with a host employer over several weeks

Activity*	No. of GTCs	%
4	43	32.82
1	26	19.85
2	16	12.21
1,4	10	7.63
1,2,3	9	6.87
1,3	5	3.82
3	5	3.82
1,2,4	4	3.05
2,4	3	2.29
1,2	3	2.29
2,3	2	1.53
1,2,3,4	2	1.53
3,4	2	1.53
1,3,4	1	0.76

*Key to Activity

1 = Suspend contract of employment

2 = Stand down without pay

3 = Terminate contract of employment

4 = Other

Table 11: Means Used by GTCs to Promote New Apprenticeships in the Community

Means or Activity Used
Address schools, trade displays, career markets, address service clubs
Ads in papers/careers days/school and TAFE talks/ marketing material to teachers and careers advisors
Advertise in local papers/we work with schools, we have a web page, careers days with schools/sales calls on our existing clients
Advertise in newspaper, TV and radio, word of mouth and cold calling with consultants
Advertise, promote to schools and RTOs and word of mouth referral
Advertisements- newspapers, radio (talkback spot), interviews and word of mouth
Advertising across all media, and articles, have a website that we keep up to date, information days and expos at schools, fleet of car that are sign written so we have exposure that way
Advertising and face to face- visits with employer
Advertising and personal contacts through service providers/newspapers, brochures and newsletters
Advertising and relationship strategies
Advertising both on press and radio and personal representation to industry
Advertising in newspapers, magazine, cinema, public bus company, company vehicles, signage, mail outs
Advertising in print and radio, word of mouth, and school visits
Advertising- print/ functions (breakfasts, traineeship awards)
Advertising through local communities and word of mouth
Advertising through local papers/networking in the community, mail outs to employers/working in schools talking to students/jobnetwork providers
Advertising, and promotion via industry, trade magazines, marketing, and public relations, and the other thing is careers markets.
Advertising, brochures, incentive schemes for existing host employers, editorial (we pay for those editorials), flyers and web page
Advertising, community services / local paper and radio stations / we sponsor things, and are involved with sponsoring local business as well
Advertising, mainly in the building trade magazines, presentations at schools in trade classes
Advertising, print media, liaise with schools and unemployed groups such as jobnetwork
Advertising, school presentation, sales or field consultants/radio and paper/local paper
Advertising/in the herald-sun/careers functions/job pathways program, the Victorian careers network/ you know all careers teachers, they've got an association, we use their mail out list
All forms of media advertising, career evenings
All the normal stuff, we go to schools for careers seminars and expos and stuff like that/ we go to all of the expos that are run by x number of people at colleges, schools, Centrelink/and we work with a lot of smaller organisations. I do information sessions with smaller kind of agencies that work around the area. Chamber of commerce/every single opportunity to talk to someone about new app and group training we take up
Associations with school and our members' articles in the paper and word of mouth
Attend various functions, eg trade nights that major companies run, go to school trade nights
Attendance at all local school career expos, presentations at club 8, ie, rotary, lions etc, editorials in local papers with good news stories

Table 11: Means Used by GTCs to Promote New Apprenticeships in the Community

Means or Activity Used
Basically we do run media releases when we're running specific pilot projects/we liaise and work closely with the school communities. I'm involved in committees dealing with the local manufacturing industries. So, industry associations/and we're just also part of the business networks, like the chamber of commerce
Brochures, schools, newsletter
Brochures and careers expos
Canvassing, newspaper ads, direct mail, newsletter
Career days, we do fax outs, mail outs/direct contact with host employers/industry reputation
Career expos, school career evenings at the schools
Careers days advertising, mail outs to schools and members, education nights, and direct marketing
Careers days, schools, NECA magazine, and pamphlets / a lot of schools come to one place, for careers days over night, and we talk to them there / we go out to schools and attend careers days
Cold canvassing, word of mouth among our customers (host employers) and print media and cinema
Community speaking, advertising
Direct contact with schools/rotary
Direct mail outs to employers, print advertising
Direct marketing/radio and newspaper
Direct promotion via our staff, we have a web site, and a job search assistant web site, we attend schools, and seminars, participate in community employment expos / field representatives, looking for positions and then matching them with apprentices or trainees
Door knocking advertising in papers and trade journals
Electrical contractors association magazine, newsletters and pamphlets
Electronic media advertising and articles in publications/go to schools do talks, have field days at local shires
Events, advertising, website, sponsorships, demonstrations
Face to face marketing via field officer visits, all media outlets, schools, promotional activities
Face to face, door knocking cold calling/mail out and phone marketing
Forums advertising (TV, radio, print) chambers of commerce and other business groups
Full marketing plan including cold calls program, client management program. Six groups in advertising (yellow pages, cinema, TV, radio, news print, trade journal) utilize community groups
Generally direct marketing by form of mail outs, fax streams, cold calling, telemarketing
Generally workshops with the schools and the VET people and promotional material from the NAC
Go to potential clients/ participate in workplace in programs in schools
Go to school expos, have a crocfest (like an expo) advertise, promote hosts with host awards
Go to schools, pre-vocational courses and industry promotions
I think I've spoken to just about every alliance club and rotary club/we have a promotional caravan/we do a lot of work speaking to schools/our caravan in fact goes to schools/we go on the radio, we do a lot of press release to newspapers and we have a lot of feet on the street I suppose
Info sessions, promotions, advertise, word of mouth
Info sessions, promotions, with industry sectors, cold calling
Launched careers units/go to schools advertising materials/ sponsor apprentices
Local newspapers, careers expo at school, direct contact with school advisors
Mail drops to employers, word of mouth, promotional activities/promote our service to employers using whatever means available, cannot be more specific than that

Table 11: Means Used by GTCs to Promote New Apprenticeships in the Community

Means or Activity Used
Marketing field officer/school presentations/career nights/training restaurant/all mediums of advertising
Marketing, advertising
Media advertising on television, radio, do school talks, talk to businesses – cold calling, meeting with business groups, eg chamber of commerce
Media both print and electronic, advertising, specialised radio programmes and TV interviews/conduct education and industry forums, participate in business expos and trade fairs/promote through sports sponsorship, network through memberships/we market significantly to individuals eg parents
Media release 4 per month, school visitation programme, industry associations public speaking programme
Media, careers day, etc/newspapers and radio/yes, local
Media, paper, radio, industry groups, schools and TAFE
Mostly field staff, school activities, community projects and career nights
Networks, community groups, personal representation
News paper, trade magazines, and radio / advertising and articles
Newsletter, we're sponsors for the Tasmanian state training authority awards. We support career development activities. We undertake promotions with existing members
Newsletters. Radio, cold canvassing, and introductions
Newsletters/industry publications
Newspaper advertising, media releases and promotional media promoter
Newspaper/expos-shows/service clubs/sponsorship/career nights
Nothing really
On the internet web page, radio, newspapers, journals, newsletters, word of mouth
Only job network and jobs pathways/that's all we do
Our full time staff member, the apprentice manager walks the beat/he's a salesman, so he doorknocks on all the businesses
Personal contact/face to face marketing
Personal contacts/newsletter/noticeboard ads
Presentations, and advertising, media articles, radio talk back, strategic alliances / presentations at schools, to business clubs, to key organizations / print media / the local paper, and a business magazine that comes out monthly / radio is on bay fm, and community radio
Print and radio media/ field officers/local promotions
Print media advertising, industry links eg over the years we have made strong connections with various enterprises that we know we can call on/cold calling
Print media, TV, radio
Promote in schools and TAFE face to face and printed brochure and through our high membership base
Promote rather advertise our services/promotional stands in shopping centres/school visitations/addressing service and rotary clubs
Radio and TV advertising, school visits, community profile
Radio, newspaper and cold canvassing/local newspapers
Radio, TV, school promotions, careers days, printed materials
Regular articles and adds in association magazines, and careers nights, and mail outs, we also attend expos and industry sponsored functions

School presentations and print media

Table 11: Means Used by GTCs to Promote New Apprenticeships in the Community

Means or Activity Used
School visit for careers days and things like that/industry news letter/direct mail outs/adds in editorial papers/radio and a web page on the internet
Schools and career expos
Schools, advertising, expos, guest speaking at community functions- rotary etc
Schools, papers, dept of education and training, RTOs, shopping centres, information sessions
Schools, newspapers
Site visits, cold canvassing, the papers/local papers, oh we do use some papers in Sydney as we have people there, but primarily local and the internet
Talk at schools, trade nights
Talks and careers days at schools/ job network/ RTO talks for govt funded training programs
Talks with schools and organisations and door knocking employers
Talks, displays, meetings/might be to employer groups/school talks we go out to sporting organisations, we go to careers markets/that's about it
The press, the internet, promotions at schools career expos
The school career nights
Through our bi-monthly journal, career expos, visits to colleges and high schools, through our NAC
Visits to high schools, attendances at TAFE open days and uni of western Sydney open days/do quite a lot of marketing directed at prospective hosts/face to face liaison, cold canvassing
Visits using field officers/just other contacts that we have during our other business activities
We attend school nights, and industry evenings
We do things like career days, speak at the schools, talk to host employers/ hand out promotional flyers and I even give out information on apprenticeships for goodwill
We don’t have a huge promotional budget, we capitalise on trade shows, and have a limited media budget which is most papers
We don't promote in our community, but we promote it to our members through newsletters/they join the housing industry, the group scheme's mainly for the housing industry association
We employ a full time canvassing person who essentially gets us RTO work
We go to the schools, to careers markets, to the jobs network advertising and through the industry association
We have a comprehensive media campaign with radio, TV and print media/we do mail drops, fly drops. Our CEO is a member of the Murray-mallee vocational committee and we do everyday cold canvassing direct face to face with employers/and plus we often do talks to industry groups and schools
We have career information sessions. They are at schools, industry forums, the whole lot/we have occasional editorials in the education section of the editorial newspaper we have here/through advertising/direct marketing through schools, and you can apply that to TAFE as well/have done the odd radio commercial, although they're pretty expensive/flyers and newsletters, and a magazine that goes out bimonthly with a section of group training in it/promotional videos/we usually make a big spectacle of graduation evenings and invite select people along/the biggest one is probably word of mouth. History, past experience and the good experiences apprentices and trainees have had with the scheme
We have cold canvassing of employers, field officers, television and radio advertising, attendance at school careers seminars/through our website
We just go to applicants and companies

Table 11: Means Used by GTCs to Promote New Apprenticeships in the Community

Means or Activity Used
We promote through school visits and we're tied up with job pathways scheme/advertising through radio and print/and a number of sponsorships
We use our field officers and sales people / they go out to schools, and career nights / we talk to career teachers at high schools / we also at times get articles put in news papers
We use TV, radio, information packets in a folder/quite often they're hand delivered as part of a meeting or appointment/general mail out, you know letter box drops and that sort of thing/field officers, they cold call and set up arrangement
We usually advertise in the local community papers/career days at schools
Website. Radio TV, print media
Well normally it's advertising, paper advertising/you know paper and brochures/local papers/ and just networking
Word of mouth involvement in community events and job network/ we have campaigns to attract host employers involving letters etc
Word of mouth, web, that's about it
Word of mouth. We've already got a strong database that we use. Radio and newspaper/ local papers
Word of mouth
Word of mouth/presentations/to prospective host employers/newspaper editorials and some advertising/in newspapers and radio
Work closely with the indigenous community organisations

Table 12: Selected 'Other' Screening procedures used by GTCs

Screening Procedure (No of GTCs.)
Applicants must complete a pre-vocational course (3)
Aptitude testing (5)
Behavioural event questioning technique
Check references/police record check
Drug and alcohol screening (2)
General knowledge test
Medical questionnaire
OH&S
Police clearances (3)
Referee checks (5)
Skills audit
TAFE results
Talk to town mentors and support networks
Trial through work placement and experience

Table 13: Screening Procedures Used by GTCs to Select New Apprentices

Screening Procedure*	No. of GTCs	%
1,2,6	8	6.15
1,2,5,6	7	5.38
1,2,3,5,6	6	4.62
1-6	6	4.62
1,2	6	4.62
1-3	5	3.58
1,2,4-6	5	3.58
1,2,4-6,8	4	3.08
1,2,4,6	4	3.08
2	3	2.31
1-3,6,9	3	2.31
1,2,6,7	3	2.31
1-3,6,8	3	2.31
1,2,6,8	3	2.31
1,2,5	3	2.31
1-9	2	1.54
1,2,8,9	2	1.54
1-4,9	2	1.54
1,2,6,9	2	1.54
1,2,4	2	1.54
1,2,5-7	2	1.54
1,2,6,8,9	2	1.54

* Key to Screening Procedures

1 = Use school results

2 = Personal interview

3 = Talk to parents of applicant

4 = Ask applicant to bring in any relevant practical work

5 = Give applicant a practical test

6 = Give applicant a literacy/numeracy test

7 = Give applicant a psychological test

8 = Give applicant a medical test

9 = Other

Table 14: Reason for Non-Completion of Training Contracts

Reason Reported*	No. of GTCs	%
5-7,10	5	3.85
4,10,11	5	3.85
4	4	3.08
10,12	3	2.31
4,10	3	2.31
10,11	3	2.31
1	3	2.31
3,4	2	1.54
12	2	1.54
2-5,10,11	2	1.54
2,4,8	2	1.54
10	2	1.54
2,5-7,10	2	1.54
7,10,11	2	1.54
2-7,9-11	2	1.54
11	2	1.54
3,4,10,11	2	1.54
2,11	2	1.54
2,3,5-7,10	2	1.54
7,10	2	1.54
4,7,11	2	1.54

* Key to Reason Reported

1 = Not known

2 = Transferred their contract of training to a host employer

3 = Transferred their contract of training to a non-host employer

4 = Found employment elsewhere

5 = Work/attendance of New Apprentices not up to standard required by host employers

6 = Work/attendance of New Apprentices not up to standard required by GT service

7 = Inadequate performance in off or on the job training

8 = New Apprentices resigned to undertake higher level education/training

9 = New Apprentices just didn't get on with staff/other students at Group Training service

10 = New apprentice decided he/she was not suited to the industry/job

11 = New Apprentices moved out of region

12 = Other

Table 15: Selected 'Other' reasons reported by GTCs for non-completion

Reason Given
A lot return to school
Down turn in business
Family or personal problems
Financial & family problems, & substance abuse
Health issues unable to work
Host employer offers better wages
Inappropriate candidates selected in first place
Lack of commitment from the apprentices
Lack of motivation/more money elsewhere
Not enough pay (3)
Sporting contracts / more money playing sport

Table 16: "Other" learning difficulties experienced by New Apprentices

Learning Difficulty
Attendance
Deemed to be slow
Desire/concentration
Dyslexia
Job ethics
Lack of application
Life skills and psychological
Work ethic training

Table 17: Main Learning Difficulties

Learning Difficulty*	No. of GTCs	%
1,2	41	44.08
1,2,3	22	24.65
2,3	5	5.37
3	5	5.37
1,2,3,5	3	3.22
1,2,3,4	3	3.22
1	2	2.15
1,2,4	2	2.15
1,2,5	1	1.07
2,3,5	1	1.07
3,4	1	1.07
1,3	1	1.07
5	1	1.07
3,5	1	1.07
1,2,3,4,5	1	1.07
1,3,5	1	1.07
2,3,4	1	1.07
1,4	1	1.07

* Key to Learning Difficulty

1 = Literacy

2 = Numeracy

3 = Theoretical aspects of training for the job

4 = Practical hand or machine skills

5 = Other

Table 18: "Other" difficulties New Apprentices have with host employers

Other Difficulties Reported
A lot of factors with younger ones affecting life
Attitude problems
Behavioural difficulties
Bullying, stealing
Communication, eg don't follow instructions
Cultural issues
Harassment from other students at TAFE & public transport
Hosts have unrealistic expectations
Incompatibility / the trades
Inexperience, first job out of school
Interfering personal problems, wage levels
Lack of understanding of employer expectations
Lifestyle issues
Not enough work to keep new apprentice busy
Poor attendance at trade school
Poor communication b/ween host & group training co
Poor hand skills and safety awareness
Social, family & economic situations
Trainees fail to show initiative
Transition from school/work ethic/expectations
Wages and assessment timing
Work ran out with host employer

Table 19: Difficulties New Apprentices Have With Host Employers

Difficulty*	No. of GTCs	%
2,3,5	18	13.85
2-5	16	12.31
2,3	14	10.77
3,5	12	9.23
1	8	6.15
6	7	5.38
3,4	6	4.62
2,3,4	5	3.85
4,5	4	3.08
2,6	4	3.08
5	4	3.08
3	4	3.08
2-6	4	3.08
4	4	3.08
3-5	3	2.31
2,3,5,6	3	2.31
2,4,5	2	1.54
2,4	2	1.54
2	2	1.54
2,5,6	2	1.54
2,5	2	1.54
2,4-6	1	0.77
2,3,6	1	0.77
3,6	1	0.77

* Key to Difficulty

1 = Have no difficulties with host employer

2 = Host employer reports poor attendance by New Apprentice

3 = Host employer reports poor work performance by the New Apprentice

4 = Inadequate supervision/instruction from the host employer

5 = Poor personal relations between host employer and New Apprentice

6 = Other

Table 20: How Difficulties New Apprentices Have With Host Employers Are Resolved by GTCs

Means Used to Resolve Difficulties
10% are dismissed and the remaining 90% are counselled, provided by me, if I feel it's a case for a social worker or phycologist then that service is provided
A field officer discusses it with the host employer and young person, we also get host employers to do a 6 monthly review of the young person and that helps us pick up and deal with the problems.
All sorts of different ways/it's as complex as a human being/they vary to the individual and the situation
Apprentices are given realistic explanations of what an apprenticeship is
Assessment and interviews/sit down with them and find out what the problems are, host and apprentice, then assess what is wrong and what action to take
Assessment reports, monitoring by field officers, and assistance
Assistance from specialist organisation
Basically just meeting with the employer and going through them on a case by case basis/it's so varied
Basically the manager deals with it/and we've got structured procedures in place
By communication, negotiation and mediation between field staff hosts and employees
By counselling/mediation between the host, apprentice and group training staff and TAFE./sometimes will resolve by passing on to another host, rotation.
By guiding apprentices or placing them with other hosts
By meetings with both host, apprentice and us and by mentoring
By visits to worksites, and with trainers and parents/guardians where useful
Complaints and grievances procedure
Conciliation, counselling
Consultation and mediation/a great deal of pastoral care is required for our clients as 75% of our clients are indigenous
Consultation from us between host and apprentice we act as mediators/0
Consultation
Consulting with all parties
Contact, mediation
Counselling between group training, host and new apprentice, if it cant be resolved the apprentice is shifted to another host
Counselling by field officer/rotate to new host/warnings if necessary
Counselling by field staff or external rotation
Counselling by GTA to apprentices and employers often in relation to the over expectations by employers
Counselling for both apprentice & host/move the apprentice to a more suitable location
Counselling of apprentice and host
Counselling, revise the training plan
Counselling and visits by the group training company representatives, and sometime we place them again with another host trainer, and sometimes we give them written warning / the new apprentice
Counselling of the trainees, and interviews with the host employers
Counselling and mediation
Counselling and support
Counselling either by GTC or employer

Counselling with host, apprentice etc

Table 20: How Difficulties New Apprentices Have With Host Employers Are Resolved by GTCs (Continued)

Means Used to Resolve Difficulties

Counselling, intense counselling, rotating of the employer

Counselling, mediation, rotation

Counselling, rotation and professional support

Counselling/ rotation/ termination depending on the problem

Counselling/ warning letters to apprentices/and remove apprentices from host employer

Counselling

Counselling/termination if necessary

Counselling/warning in respect of poor attendance/performance. Counselling and often rotation to another host employer in the case of poor personal relations

Direct mediation

Discussion, conflict resolution

Discussions between apprentice and our own people, or bring in specialist counsellors and moving to another host

Discussions between the parties and if this doesn't resolve the situation, then rotation

Field officer will visit and discuss issues between host and apprentice and the re-visit in a couple of weeks to see if situation has been resolved

Field support, monthly visits, constant contact

Field visits to host and apprentice, discussion with TAFE/RTO. Agreed plan developed to address issue and ongoing monitoring for progress

First off offer counselling to ascertain whether they would be ok placed elsewhere, then usually suspend contract

Firstly we call the host employer over the phone, if it cant be resolved that we send a field officer to speak to both the employer and new apprentice

Generally counselling and suspension/usually if they have a bit of a play up, they don't usually come back on because it's a peer group. See it's a community group, usually if they play up their peers don't want them back

Generally just conversation and informal dispute resolution

Getting the host employer to understand they are only 17 etc- negotiation, rotate apprentice

Go out and mediate between host and new apprentice to the point where will pick up apprentice and deliver him to work for example/monitoring and mediation counselling

Group training manager steps in and acts as mediator and just works with the issues which is better than

Have conference with apprentice and field staff independently and host independently, then bring them together and discuss problems raised at round table conference, if its learning problem have support system built in with provider offered for free/with positive drug users we offer counselling and any rehabilitation they may require/for people with psychological problems we have a mental health team support service for them with bulk billing/for physical rehabilitation we do a return to work plan for them, have OH&S plan for them, for Workcover injuries, we have Workcover plans

Informing and working with the host employer

Internal counselling

Issue warnings- let the apprentices know what our expectations are

Just a face to face meeting of all parties. Taking into account safety issues, EEO issues

Mediation and consultation

Table 20: How Difficulties New Apprentices Have With Host Employers Are Resolved by GTCs (Continued)

Means Used to Resolve Difficulties
Mediation between host and apprentice on site and if it can't be rectified we bring them in and if this doesn't work we will remove apprentice from site
Mediation mentor roles
Mediation, discipline, moving trainee to another host
Mediation, monitoring visits
Mediation/counselling/ withdraw from host employer
Mediation/counselling/rotation
Mediation/field officers mediate
Mentoring and mediating, spending time talking out problems, finding out what the real problem is
Mentoring by field officer
Move apprentice to another host employer
Negotiation, arbitration, transfer away from employer
Normal by counselling the apprentice, highlighting the importance to their career, it is not just a job they are building a career, and how critical it is to be reliable and punctual
Pastoral care reports every 8-12 weeks; regular contact and meetings
Pastoral care, counselling both internal and external and more training, rotation
Pastoral care/working with host business
Pastoral care, and if we cant resolve it with own field staff we referred it to department of employment and training
Performance and personal counselling by field officers and when necessary professionals to handle more serious problems
Perseverance and explanation of what a group training company is all about
Personal counselling and mediation processes facilitated by group training
Personal counselling
Personal intervention
Personal visits, mentoring by the field officer/talking with both the host and the new apprentice
Quality pastoral care programme
Really it comes down to the expertise and the close association the field staff build up with the host employers/but also there's that close relationship you build with the community. You're relying on the support of the school communities for example, to assist trainees get through their difficulties
Re-training
Rotation, counselling and training eg communication skills
Rotation, counselling, continuous pastoral care and mentoring
Rotation, discussions and more monitoring
Rotations/counselling/additional training
Sometimes with rotation, suspension or cancellation of their contracts
Special hand skills programs/ increased inductions/ safety training
The apprentice manager speaks to the host and sees what issues are involved and then speak to the apprentice/sometimes whoever training them, there are difficulties there. So it's just interviewing to see

who's at fault/we tend to use the system of the yellow cards, if they get three yellow cards they're out, or if they get a red card, they're out

Table 20: How Difficulties New Apprentices Have With Host Employers Are Resolved by GTCs (Continued)

Means Used to Resolve Difficulties
Through conflict resolution between us, host and apprentice, if beyond repair we move to another host employer, also consult with local government department
Through counselling/the field officers
Through negotiation and mediation really
Through negotiation and rotation / rotate them out to a new position
Through rotation and counselling
Trouble shoot, counselling mediation
Usually counselling with the new apprentice and discussions with the host as to exactly what they want from the apprentice/rotation, eg move them to another host
Usually I go out there and speak to the host employer and also speak to the apprentice. Usually there's two sides to every story so I mediate and if that breaks down we usually rotate them out o to other host employers
Visit from field officer to negotiate a solution
We always meet with the host employer and their supervisor and we do appraisals every three months so we pretty much know if something's going to happen/usually it's because the supervisor has poor supervisory skills
We bring them in and talk to them, and monitor them closer that before
We do a lot of mediation in the workplace. Going out talking to the host, sort of round table type stuff. We try to salvage it, if we can't we move the apprentice/either to another host employer or terminating the contract/we would generally rotate them to another host, but the social issues need to be dealt/if it's a drug problem then there's no point in just moving them to another employer, that's not the issue/we see if it's something we think we can control, otherwise we terminate
We do a lot of personal performance counselling
We don't provide external counselling but we do have a psychologist on staff, but we also have one person that monitors, so its through internal counselling and monitoring
We have a field officer whose specific role is to liaise with apprentice and host
We have a four-tiered counselling cum interview process/the first part is verbal. The second one is where we then have a formal interview with written appraisal which is recorded in their file/third is a more formal interview and strict adherence signed by the apprentice and all parties involved. The last point, if there's no improvement is we apply to cancel the contract and that involves 2 forms, it can either be a mutual cancellation or it goes to the committee to adjudicate and decide, but that rarely if ever happens/usually you get to about stage 2 and the issues are resolved
We intervene and talk to the apprentice directly, and the host employers, and also the RTOs and TAFE. We track how they are going at TAFE. Also we do field reports in the field with them
We resolve by going out and meeting hosts and apprentices face to face, if cant be sorted we withdraw apprentice from host
We send a field officer
We would negotiate with the TAFE, provide pastoral care or mentoring/we would find them a more suitable placement or they would be dismissed
Well that's with pastoral care, with our field officers working through issues. Sometimes we rotate them to other employers. Referring to other agencies if need be/it might be financial assistance or whatever the problem is

Well we go through a 4 step counselling and disciplinary procedure. So we do a verbal counselling, formal written letter, final warning and then you're on your bike

Well we move the person

Table 20: How Difficulties New Apprentices Have With Host Employers Are Resolved by GTCs (Continued)

Means Used to Resolve Difficulties

Well, we do 6 weekly site visits and we run remedial training for them, and depending on the problem it's either remedial training or counselling

Table 21: How GTCs Improve Host Employer Compliance With OH&S

Activities and Strategies Used
A form that the host businesses fill out- if there are any issues we go and talk to them
Assess all sites before they become a host employer/we also provide information on how they should be complying and in fact they sign a contract with us stating that they'll comply with our regulations
Assistance given to host employers to improve and develop OH&S policies and procedures
Before we place an apprentice with a host, we have a checklist that is completed by the host and training manager, any problems are resolved before the apprentice is moved in and it is revised every 12 months
By discussion with employer/referral to worksafe
By informing them we are doing them a service by monitoring occupational health and safety, not just checking up on them
Check list and on-going awareness
Conduct checks, we visit every 6 weeks/there's an extensive induction program that we run with both the apprentice and the employer
Consultation with host
Continual support / regular visitations / regular news letters / regular information bulletins
Continually assess the work site, provide info on how to meet their requirements
Continuing process of education/information
Counselling/audits and selection in the first instance
Education
Employ a consultant 1 day per week for 12 weeks to assist implementation of new systems improving areas such as host employer compliance.
Employed OH&S officer who monitors the sites
Have a number of audits that we conduct with hosts before the apprentice starts their placement
Have a safety and health checklist that the field officers complete on each visit; they offer advice where applicable and they refer members to OH&S advisor
Have an enterprise specific site audit tool, to ensure they comply
Have appointed an OH&S manager, who audits all of our host employers to make sure they are up to scratch. If they are not up to scratch we wont use them any more.
Have host days, where they are invited for an informal meal talk to them there, include Workcover and other industry specialists/field officer visits to host and apprentices and complete a checklist ongoing monitoring/timesheets have 6 questions on OH&S which are filled in weekly/do risk assessments prior to placing apprentices
Higher training awareness supervisors/ on-site supervision handbook
If I can identify a problem I try to put a training course in the way of the host employer, for example the work cover training course/we usually don't have a problem with the mines, they have a couple of great safety officers at their sites, it's mainly in the construction industry if there's a problem. If I find out about a new work cover training course, I always let the host employers know about them
Implement training and OH&S risk reduction program
Info provided and alliance with our own safety and health system
It's an opportunity to go out face to face and bring the issue up. Again I see it as part of our role/if it's bad enough we'll give the host concerns in writing otherwise if it's not addressed we may move the kid away
Mentoring by field officer again
Offer OH&S training to host employers, we do onsite job safety analysis, which makes the hosts more aware of issues

Table 21: How GTCs Improve Host Employer Compliance With OH&S

Activities and Strategies Used
Offer them a free audit, which a lot of them do accept. We do a risk analysis on their business and we usually give them a written report and they act on what they can
Our company will be providing training for all of our hosts and apprentices before they are allowed to take on an apprentice
Pointing out the employers legal obligations
Provide training courses, obviously we fund the trainees to do work cover and the other courses and we also give our host employers an opportunity to take part in those courses if they wish
Provide updated information and provide any relevant training that may be required, and pastoral visits
Refer to them to HIA in house OH&S services
Safety assessment with host employer and apprentice to find potential OH&S risks
Safety audits on site and during induction/we go through the safety videos with trainees, apprentices and staff
Safety inspection reports (annual) and provision of written support
Safety officer employed to monitor sites and host contractor compliance
Through own audits
Training and improved induction procedures
Usually in discussion and involvement with hosts to improve their OH&S awareness
We conduct initial OH&S checks and continue to monitor during traineeship
We do a lot of information dissemintaions. We send out books, work cover issues documents. A lot of educative stuff. We do sight audits and regular follow up, so every site visit with the apprentice, OH&S issues are raised. Try and come out with a very supportive angle/we put a lot of resources into our staff specifically for that purpose
We do a mini audit where we make recommendations to the host employer, before we place the apprentice we go back and check and if they are on the road to compliance then we place the apprentice otherwise we don't.
We do safety audits of the site. We offer to develop and improve OH&S at the host employers. We offer training to host employers and we train and retrain apprentices and trainees in OH&S
Working with the host and explaining the responsibilities of their workplace
Working with the host employer on an educational program
Workshops, info manuals, workplace inductions
Writing of host handbook & rewriting of hosts agreement highlighting this problem

Table 22: Career Guidance Offered by GTCs

Type of Guidance Offered
None – 7 GTCs
All trainees go through a careers options exercise in 2nd last month
6-8 weekly assessment visits at which time options for the future are also discussed
Always offered- let them know what they can do once they have completed their levels
Application of good sense and the chance to converse and provide opportunities to talk about what they can do, offer a support role/don't have one strategy for career guidance is just casual on an as needs basis, not structured into our brief.
Apprentices receive career guidance from day one, I'm not sure what you mean there/we give them a resume, we do constant off and on job assessments which our apprentices get a copy of/a few go on to further studies, but anyone who graduates from our scheme goes on to become a plumber or electrician or whatever we're doing. No one who goes through the program doesn't get work unless it's because they choose not to. In fact we have host employers lining up to get fourth year apprentices
As much as we are able to provide
As part of up front process we go into a fair amount of depth with them and where appropriate we make it on-going
Assess training- how we can help them achieve their career aspirations with new training programs
Assistance through MPA association to set up their own business, to complete advanced courses and further education
Assistance with identifying ongoing employment/training opportunities
At interview and vocational assessment on data base
Because we are such a young scheme we have not offered any yet, but we will be offering advice next year to final year apprentices
Booklets and talks
By discussion and questioning we endeavour to find the right trade for the applicant – most kids think that they want to be carp/plumbers as they see these trades on TV shows doing little work and having plenty of free time
By field officer and office staff
Career guidance commences at initial interview, if employed continues through a one weeks induction, further followed by a two week block of modules – safety and intro into tools for the industry/one week of mass upgrade and job assimilation
Career options in terms of where they can go from here. Setting up resumes and also
Career path trainee systems
Communication and relationship the field officers build up/you're providing that sort of advice with where they should be going and you're negotiating with your host employers with what's available and it might not just include traineeships, but further education also if the trainees want to build up their qualifications elsewhere
Constant career guidance and advise
Continual support / guidance to pathways learning / guidance to extension of present apprenticeship / guidance to a career at the end of apprenticeship
Counselling on graduation
Depending on their host employer. They'll be told whether they do or don't have an ongoing option of employment at the end of their trade. What they're doing is putting them on for 2 years and getting them through their training. We like to be upfront with our trainees, we let them know that they
Discussion and support from our workplace assessors
Discussion of career options and assistance with employment opportunities and advise on further education

Table 22: Career Guidance Offered by GTCs

Type of Guidance Offered

Do appraisals at 3, 6, 9 and 12 months so at 9 we investigate if the trainee can be offered a full time position and if not, we help them find work elsewhere

Don't recall offer career guidance, help with apprenticeship, but not once its finished

Don't have any formal career counsellors, but we offer an enormous amount of information to specific trades

During the apprenticeship constant review of training plan career options available and emerging employment trends/on completion of apprenticeship we discuss the employment options available and their advantages and disadvantages/all our field staff have relevant trade qualifications and recent work experience in their vocation

Extensive counselling, modelling, and small team leading opportunities

Extra studies and encourage them to nominate for awards

Face to face with designated area manager

Field officers are trained in specific areas and give ad hoc advice

Field officers provide guidance and information on the different employment agencies

Field staff give them a thorough understanding of what the training or apprenticeship is going to take them and what is required to do that, this is mainly pre employment

Field staff quarterly assessments/progress checks/training record books assessments/jobs pathways program

Firstly based towards keeping them employed with their host employer, if the desired outcome is not achieved then we work with them to find new employment

From our literacy and numeracy tests, if we think they are selecting trades that don't meet with the test results, we try to guide them to rethink their choice

From the skills audit

Full range

Future training courses, future employment

General information provided prior to commencement, what skills are required for the job

General, nothing specific that I can think of

Generally career advisors through the schools and we usually give a bit ourselves, depending on the project/it's just a big picture thing

Handled by the manager and all our staff, we've got 60 offices across Australia so we can provide a huge amount of opportunities for our apprentices and trainees

Have a 3 month pastoral care visitation programme and if having problems with learning difficulties we talk to them about that, if they are apprentices they have their careers mapped out for them

Have literature highlighting different vocations available, in brochure form/like our apprentices to do work experience in their chosen industry to ensure they understand what they are getting themselves in for, before they enter the apprenticeship

Have ongoing support throughout their training, have a designated monitor who looks after them the whole time/if we know that they are not going to remain with their host employer, then we help them find a new employer towards the end of the training time

Help them at the end of their career, how they get an ABN number, how they get a license if they're electrical and plumbing/ workers comp insurance for themselves and prepare a resume for them

Hospitality support and other competition work/retail- extra management training/member of QEA for 3rd and 4th year apprentices paid by the company to access mentors by builders

How to apply for future employment and how to obtain trade certificates

I am not sure, both the RTO and field officers

Table 22: Career Guidance Offered by GTCs

Type of Guidance Offered

In their induction they go through their career path and what options will be at the end of their training/towards the end of their training we arrange that they go and network with hosts that may take them on at the end of their apprenticeship

Induction sessions, we have people with knowledge of industries we try to paint a clear picture of the industries

Info from the dept of training, give them the options of where their training can take them

Informal counselling and we provide them with access to a software career choice system

Information

Initial interview and aptitude testing/apprentice rating and self appraisal

Interview programme, screening interviews

It's ongoing, it's part of their apprenticeship but we also have in place a completion package which is part of that, it hasn't been implemented yet, but there's a placement program for apprentices who have finished their apprenticeship

Job search component

Job search training, counselling, eg discussions with field staff and could be offered an external service such as sending them back to the service provider that we got the apprentice through/have a lot of programs that assist within our organisation

Liaising with host employers and also career guidance through the trade school

Limited as there is no revenue attached to any costs incurred if we were to undertake a structured career guidance

Lots of career guidance. Let's put it this way, we never hire kids in this scheme to be just apprentices and trainees, the whole thing is sold on a career path/ at the interview processes we have a fair input into describing clearly what's available in the manufacturing and engineering industry. We give pamphlets on scope and options in the industry/the apprenticeship is just the foundation to get started/we also include personal development programs like the duke of Edinburgh awards. We do a lot of leadership stuff. It's not just do your apprenticeship and do your trade, it's look at the big picture

Make them aware of the opportunities available to them in the trade they are in/ put them in touch with industry advisory boards

Make up a resume for the guys who are finishing and tell them what jobs are available/ I get a fax from employment national each week about the jobs that are available around the traps and also I've been to other mines to line up a few jobs for a couple of guys/ last year I found a job for every single person

Map out the career path. We only take them 5 years in advance

Mentoring by the field officer, they set them up with whatever they need

Mentoring on-going assistance, access to professional associations, encourage trial or further studies

Nothing specific, its mainly we give the opportunity for them to work in the area they want to, its mainly support rather than direction

Offer career counselling, we have a career guidance thing on our website/we have a youth career centre that our apprentices and any other young person can use

Offer guidance at every opportunity on a constant basis/ encourage to apply for positions

Offer in house small business training program/close association with masters builders assoc which we may advise them to do

Offer one on one interviews with people who are not sure what they want to do

Offer other areas that a trainee might progress to at the end of the traineeship/discuss what they've done for the last 12 months and what they might do for the future

Offer guidance & assistance at cost to organisation particularly when people leave before 3 months are up

Table 22: Career Guidance Offered by GTCs

Type of Guidance Offered

Offer training through master painters association which we run and are free to apprentices/it tells how to improve skills, costing of OH&S and computing courses

Offer very extended advice. We're actually a recruitment company primarily, so we offer role plays and interviews we give them dummy resumes, mock interviews. We will give them trial shifts. We've got quite a big network of employers /site visits and just general

On a casual, ad hoc basis when an issue comes up they can discuss it with field officers

On application, on induction, and intermediate briefings to review their career path options

On going guidance on what is involved in maintaining employment – industry specific

On-going counselling and monitoring by supervisor

Ongoing counselling/we monitor every apprentice at minimum 4 times a year, look at performance etc

Ongoing happens all the time, site visits and career options are offered all the time.

Only in the course of the traineeship don't have career advice as separate component

Only what discussions take place with field officer

Other training to receive further enhancements in the industry

Pastoral care, links to schools industries and associations

Pre-employment counselling/advice. During employment regular advice or direction of training, what areas to focus on as individual interests and abilities develop

Program called zoom about careers in manufacturing

Program jig cal- identifying the type of work best suited to them /via job network

Progressing to another level of traineeship, retaining their employment where they are

Recommend they do diplomas in engineering or management, or other advanced courses

Resume advice/vacancy leads

School liaison officers

Take them through the standard apprenticeship

The group training company provided in-depth career guidance over the 4 years for apprentices, and 1 year for trainees, and also we give them guidance on starting their own business

Through job network we run a JPP program

Through mentoring with the coordinators, we call them coordinators, but other people may call them field staff and also monitoring staff

Through mentors and the field officer

Throughout their training period we work with them in regards to their professional development, on exit we provide them with help with references, resumes and representation and advocacy with prospective employers

Training and development programs/ on the job discussion/ pre-employment discussion- interviews

Training package pathway and go through it with them

Try to keep them in the industry. If they decide they want to leave then we give them career guidance, we look at other similar industries. Essentially it's about keeping them in the job once they're in and if they decide they don't want to continue, then we give them career guidance

We actually do interviews, we give them a personal interview and offer them career guidance if needed

We advise them of future job prospects, trade qualifications and how they can move through the industry

We have industry specific people come to us knowing what they want to do. We don't have to push them. We want boys that want to be good at what we got.

Table 22: Career Guidance Offered by GTCs

Type of Guidance Offered

We are involved in a lot of structured employment programs and post employment training opportunities/help with job placements

We assist our trainees if ongoing positions with host employer are not available, by registering them with other recruitment arms of our association

We continually reinforce career paths through callbacks, articles examples of industry leaders

We discuss extensively to determine career path before an apprenticeship is started/for business traineeships we will give possible candidates work experience under CDP (funding) to ensure that they are undertaking the right traineeship

We do a lot of post-trade courses, and we have counselling sessions, especially in the fourth year, we try to give them counselling and determine in which particular area they want to qualify in and try to make sure they're placed with a host employer in that area at completion so they're happy with where they're placed

We don't have specific career advice, but it is covered in field visits and monitoring

We don't offer formal career guidance but upon register we assist them to make informed choices- a one to one interview where we look at the training packages available in the industry they are showing preference for

We give personal back up here, if they are having difficulties we have added training sessions (eg catch up classes)/one on one with our consultants

We have a number of course through HIA/ business management, OH&S, making sure people are ready from 3rd year / building up their tool kit, and talking to them about what they need to do to get their trade license

We have a one week induction, we tell them in that where we can go in the industry, and at the fourth year we talk to them again about where they want to go after that

We have career counsellors on staff/ so they see them on an ongoing basis

We, before they're signed on they go through a complete induction and a training induction. They're actually allocated a particular training consultant for the year and if they want to change industries or do some further education or anything like that they're advised on what to do, so we have a very extensive career guidance program with our staff

We've got a job network division, so we have in-house employment services/ support with update of resumes, simple things like that

What we do is we show them a career path, we show them through all areas of the industry we train them in/we give them guidance of salary expectations, grooming, presentation, office etiquette

Whatever is required, always on a case by case basis

When they finish we try to find them work if they want to relocate, to get their career path happening

When we do selection exercises we assess their suitability and discuss at time, pastoral care, at exist interviews we discuss where they are going and what to do from here

Work with a career services officer, whose support is available to all apprentices, ongoing/for a few months leading up to the end of their apprenticeship, we try to find them a position, pastoral care

THE STRUCTURE AND FUNCTION OF GROUP TRAINING COMPANIES IN AUSTRALIA

APPENDIX B

Analysis of Age : Pre versus Post 1991

ANALYSIS OF A1, PREPOST 1991

Table 1 A1 by A7

Frequency / Percent / Row Pct / Col Pct	1	2	3	Total
1970 - 1990	18	15	3	71
	15.25	12.71	2.54	60.17
	25.35	21.13	4.23	
	62.07	53.57	33.33	
1991 - 2001	11	13	6	47
	9.32	11.02	5.08	39.83
	23.40	27.66	12.77	
	37.93	46.43	66.67	
Total	29	28	9	118
	24.58	23.73	7.63	100.00

Table 1 - (Continued)

Frequency / Percent / Row Pct / Col Pct	4	5	Other or, Combination	Total
1970 - 1990	2	7	26	71
	1.69	5.93	22.03	60.17
	2.82	9.86	36.62	
	28.57	100.00	68.42	
1991 - 2001	5	0	12	47
	4.24	0.00	10.17	39.83
	10.64	0.00	25.53	
	71.43	0.00	31.58	
Total	7	7	38	118
	5.93	5.93	32.20	100.00

Table 2 Statistics for A1 by A7

Statistic	DF	Value	Prob
Chi-Square	5	11.8865	0.0364
Likelihood Ratio Chi-Square	5	14.2670	0.0140
Phi Coefficient		0.3174	
Contingency Coefficient		0.3025	
Cramer's V		0.3174	

WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 118

TTEST for E1 by A1

Table 3 - Means and Confidence Intervals for E1 by A1

Variable	A1	N	Lower CL Mean	Mean	Upper CL Mean
E1	1970 - 1990	70	182.55	235.33	288.1
E1	1991 - 2001	46	54.63	90.326	126.02
E1	Diff (1-2)		74.304	145	215.7

Table 4 Std Dev and Confidence Intervals for E1 by A1

Variable	A1	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
E1	1970 - 1990	189.78	221.34	265.58	26.455
E1	1991 - 2001	99.701	120.2	151.4	17.723
E1	Diff (1-2)	166.47	188.03	216.06	35.688

Table 5 Minimum and Maximum Values for E1 by A1

Variable	A1	Minimum	Maximum
E1	1970 - 1990	9	1600
E1	1991 - 2001	2	500
E1	Diff (1-2)		

Table 6 - T-Tests for E1

Variable	Method	Variances	DF	t Value	Pr > |t|
E1	Pooled	Equal	114	4.06	<.0001
E1	Satterthwaite	Unequal	111	4.55	<.0001

Table 7 - Wilcoxon Two-Sample Test

Statistic	1714.0000
Normal Approximation	
Z	-5.5118
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001
t Approximation	
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001

Z includes a continuity correction of 0.5.

Table 8 - A1 by Firm Size 1-5

Frequency Percent Row Pct Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1970 - 1990	19 16.10 26.76 61.29	13 11.02 18.31 59.09	39 33.05 54.93 60.00	71 60.17
1991 - 2001	12 10.17 25.53 38.71	9 7.63 19.15 40.91	26 22.03 55.32 40.00	47 39.83
Total	31 26.27	22 18.64	65 55.08	118 100.00

Table 9 - Statistics for Table of A1 by Firm Size 1-5

Statistic	DF	Value	Prob
Chi-Square	2	0.0277	0.9862
Likelihood Ratio Chi-Square	2	0.0277	0.9862
Phi Coefficient		0.0153	
Contingency Coefficient		0.0153	
Cramer's V		0.0153	

Sample Size = 118

Table 10 - A1 by Firm Size 6-20

Frequency Percent Row Pct Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1970 - 1990	18 15.25 25.35 58.06	21 17.80 29.58 60.00	32 27.12 45.07 61.54	71 60.17
1991 - 2001	13 11.02 27.66 41.94	14 11.86 29.79 40.00	20 16.95 42.55 38.46	47 39.83
Total	31 26.27	35 29.66	52 44.07	118 100.00

Table 11 - Statistics for Table of A1 by Firm Size 6-20

Statistic	DF	Value	Prob
Chi-Square	2	0.0984	0.9520
Likelihood Ratio Chi-Square	2	0.0982	0.9521
Phi Coefficient		0.0289	
Contingency Coefficient		0.0289	
Cramer's V		0.0289	

Sample Size = 118

Table 12 - A1 by Firm Size 21-50

Frequency , Percent , Row Pct , Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1970 - 1990	26	31	14	71
	22.03	26.27	11.86	60.17
	36.62	43.66	19.72	
	59.09	59.62	63.64	
1991 - 2001	18	21	8	47
	15.25	17.80	6.78	39.83
	38.30	44.68	17.02	
	40.91	40.38	36.36	
Total	44	52	22	118
	37.29	44.07	18.64	100.00

Table 13 - Statistics for Table of A1 by Firm Size 21-50

Statistic	DF	Value	Prob
Chi-Square	2	0.1384	0.9332
Likelihood Ratio Chi-Square	2	0.1395	0.9326
Phi Coefficient		0.0342	
Contingency Coefficient		0.0342	
Cramer's V		0.0342	

Sample Size = 118

Table 14 - A1 by Firm Size 51-100

Frequency / Percent / Row Pct / Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1970 - 1990	31	37	3	71
	26.27	31.36	2.54	60.17
	43.66	52.11	4.23	
	51.67	72.55	42.86	
1991 - 2001	29	14	4	47
	24.58	11.86	3.39	39.83
	61.70	29.79	8.51	
	48.33	27.45	57.14	
Total	60	51	7	118
	50.85	43.22	5.93	100.00

Table 15 - Statistics for Table of A1 by Firm Size 51-100

Statistic	DF	Value	Prob
Chi-Square	2	5.9467	0.0511
Likelihood Ratio Chi-Square	2	6.0508	0.0485
Phi Coefficient		0.2245	
Contingency Coefficient		0.2190	
Cramer's V		0.2245	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 118

Table 16 - A1 by Firm Size 100+

Frequency / Percent / Row Pct / Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1970 - 1990	35	30	6	71
	29.66	25.42	5.08	60.17
	49.30	42.25	8.45	
	57.38	68.18	46.15	
1991 - 2001	26	14	7	47
	22.03	11.86	5.93	39.83
	55.32	29.79	14.89	
	42.62	31.82	53.85	
Total	61	44	13	118
	51.69	37.29	11.02	100.00

Table 17 - Statistics for Table of A1 by Firm Size 100+

Statistic	DF	Value	Prob
Chi-Square	2	2.4427	0.2948
Likelihood Ratio Chi-Square	2	2.4479	0.2941
Phi Coefficient		0.1439	
Contingency Coefficient		0.1424	
Cramer's V		0.1439	

Sample Size = 118

Table 18 - A1 by E4

Frequency Percent Row Pct Col Pct	1	2	Total
1970 - 1990	54 45.76 76.06 72.00	17 14.41 23.94 39.53	71 60.17
1991 - 2001	21 17.80 44.68 28.00	26 22.03 55.32 60.47	47 39.83
Total	75 63.56	43 36.44	118 100.00

Table 19 - Statistics for Table of A1 by E4

Statistic	DF	Value	Prob
Chi-Square	1	12.0196	0.0005
Likelihood Ratio Chi-Square	1	12.0112	0.0005
Continuity Adj. Chi-Square	1	10.7031	0.0011
Phi Coefficient		0.3192	
Contingency Coefficient		0.3040	
Cramer's V		0.3192	

Table 20 - A1 by Prevocational Courses

Frequency , Percent , Row Pct , Col Pct	1	2	3	Total
1970 - 1990	18	3	15	69
	17.65	2.94	14.71	67.65
	26.09	4.35	21.74	
	72.00	75.00	78.95	
1991 - 2001	7	1	4	33
	6.86	0.98	3.92	32.35
	21.21	3.03	12.12	
	28.00	25.00	21.05	
Total	25	4	19	102
	24.51	3.92	18.63	100.00

Table 20 - (Continued)

Frequency , Percent , Row Pct , Col Pct	4	5	Total
1970 - 1990	27	6	69
	26.47	5.88	67.65
	39.13	8.70	
	65.85	46.15	
1991 - 2001	14	7	33
	13.73	6.86	32.35
	42.42	21.21	
	34.15	53.85	
Total	41	13	102
	40.20	12.75	100.00

Frequency Missing = 16

Table 21 - Statistics for Table of A1 by Prevocational Courses

Statistic	DF	Value	Prob
Chi-Square	4	4.2281	0.3760
Likelihood Ratio Chi-Square	4	4.1261	0.3892
Phi Coefficient		0.2036	
Contingency Coefficient		0.1995	
Cramer's V		0.2036	

WARNING: 30% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 102
Frequency Missing = 16

WARNING: 14% of the data are missing.

Table 22 - A1 by Employ Out of Trade Apprentices

Frequency Percent Row Pct Col Pct	1	2	3	Total
1970 - 1990	14 14.14 20.59 63.64	10 10.10 14.71 83.33	19 19.19 27.94 65.52	68 68.69
1991 - 2001	8 8.08 25.81 36.36	2 2.02 6.45 16.67	10 10.10 32.26 34.48	31 31.31
Total	22 22.22	12 12.12	29 29.29	99 100.00

Table 22 (Continued)

Frequency Percent Row Pct Col Pct	4	5	Total
1970 - 1990	17 17.17 25.00 62.96	8 8.08 11.76 88.89	68 68.69
1991 - 2001	10 10.10 32.26 37.04	1 1.01 3.23 11.11	31 31.31
Total	27 27.27	9 9.09	99 100.00

Frequency Missing = 19

Table 23 - Statistics for Table of A1 by Employ Out of Trade Apptces

Statistic	DF	Value	Prob
Chi-Square	4	3.7123	0.4463
Likelihood Ratio Chi-Square	4	4.1828	0.3818
Phi Coefficient		0.1936	
Contingency Coefficient		0.1901	
Cramer's V		0.1936	

Effective Sample Size = 99
Frequency Missing = 19

WARNING: 16% of the data are missing.

Table 24 - A1 by From Schools

Frequency Percent Row Pct Col Pct	1	2	3	Total
1970 - 1990	25	8	17	69
	25.00	8.00	17.00	69.00
	36.23	11.59	24.64	
	78.13	42.11	70.83	
1991 - 2001	7	11	7	31
	7.00	11.00	7.00	31.00
	22.58	35.48	22.58	
	21.88	57.89	29.17	
Total	32	19	24	100
	32.00	19.00	24.00	100.00

Table 24 (continued)

Frequency Percent Row Pct Col Pct	4	5	Total
1970 - 1990	18	1	69
	18.00	1.00	69.00
	26.09	1.45	
	78.26	50.00	
1991 - 2001	5	1	31
	5.00	1.00	31.00
	16.13	3.23	
	21.74	50.00	
Total	23	2	100
	23.00	2.00	100.00

Frequency Missing = 18

Table 25 - Statistics for Table of A1 by From Schools

Statistic	DF	Value	Prob
Chi-Square	4	8.9682	0.0619
Likelihood Ratio Chi-Square	4	8.5035	0.0748
Phi Coefficient		0.2995	
Contingency Coefficient		0.2869	
Cramer's V		0.2995	

Effective Sample Size = 100
Frequency Missing = 18

WARNING: 15% of the data are missing.

Table 26 - A1 by Applies Directly to GTC

Frequency , Percent , Row Pct , Col Pct	1	2	3	Total
1970 - 1990	6	34	16	66
	6.25	35.42	16.67	68.75
	9.09	51.52	24.24	
	42.86	73.91	72.73	
1991 - 2001	8	12	6	30
	8.33	12.50	6.25	31.25
	26.67	40.00	20.00	
	57.14	26.09	27.27	
Total	14	46	22	96
	14.58	47.92	22.92	100.00

Table 26 - (Continued)

Frequency , Percent , Row Pct , Col Pct	4	5	Total
1970 - 1990	6	4	66
	6.25	4.17	68.75
	9.09	6.06	
	75.00	66.67	
1991 - 2001	2	2	30
	2.08	2.08	31.25
	6.67	6.67	
	25.00	33.33	
Total	8	6	96
	8.33	6.25	100.00

Frequency Missing = 22

Table 27 - Statistics for Table of A1 by Applies Directly to GTC

Statistic	DF	Value	Prob
Chi-Square	4	5.2591	0.2617
Likelihood Ratio Chi-Square	4	4.9050	0.2972
Phi Coefficient		0.2341	
Contingency Coefficient		0.2279	
Cramer's V		0.2341	

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 96
Frequency Missing = 22

WARNING: 19% of the data are missing.

Table 28 - A1 by Other

Frequency Percent Row Pct Col Pct	1	2	3	Total
1970 - 1990	5 7.46 11.90 83.33	12 17.91 28.57 75.00	0 0.00 0.00 0.00	42 62.69
1991 - 2001	1 1.49 4.00 16.67	4 5.97 16.00 25.00	4 5.97 16.00 100.00	25 37.31
Total	6 8.96	16 23.88	4 5.97	67 100.00

Table 28 - (Continued)

Frequency Percent Row Pct Col Pct	4	5	Total
1970 - 1990	1 1.49 2.38 33.33	24 35.82 57.14 63.16	42 62.69
1991 - 2001	2 2.99 8.00 66.67	14 20.90 56.00 36.84	25 37.31
Total	3 4.48	38 56.72	67 100.00

Frequency Missing = 51

Table 29 - Statistics for Table of A1 by Other

Statistic	DF	Value	Prob
Chi-Square	4	9.9593	0.0411
Likelihood Ratio Chi-Square	4	11.2839	0.0236
Phi Coefficient		0.3855	
Contingency Coefficient		0.3597	
Cramer's V		0.3855	

WARNING: 60% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 67
Frequency Missing = 51

WARNING: 43% of the data are missing.

Table 30 - A1 by H6

Frequency / Percent / Row Pct / Col Pct	1	2	Total
1970 - 1990	59	11	70
	50.43	9.40	59.83
	84.29	15.71	
	69.41	34.38	
1991 - 2001	26	21	47
	22.22	17.95	40.17
	55.32	44.68	
	30.59	65.63	
Total	85	32	117
	72.65	27.35	100.00

Frequency Missing = 1

Table 31 - Statistics for Table of A1 by H6

Statistic	DF	Value	Prob
Chi-Square	1	11.8743	0.0006
Likelihood Ratio Chi-Square	1	11.7818	0.0006
Continuity Adj. Chi-Square	1	10.4612	0.0012
Mantel-Haenszel Chi-Square	1	11.7728	0.0006
Phi Coefficient		0.3186	
Contingency Coefficient		0.3035	
Cramer's V		0.3186	

Table 32 - A1 by H7

A1(A1) H7(H7)

Frequency / Percent / Row Pct / Col Pct	1	2	Total
1970 - 1990	32	38	70
	27.59	32.76	60.34
	45.71	54.29	
	71.11	53.52	
1991 - 2001	13	33	46
	11.21	28.45	39.66
	28.26	71.74	
	28.89	46.48	
Total	45	71	116
	38.79	61.21	100.00

Frequency Missing = 2

Table 33 - Statistics for Table of A1 by H7

Statistic	DF	Value	Prob
Chi-Square	1	3.5613	0.0591
Likelihood Ratio Chi-Square	1	3.6302	0.0567
Continuity Adj. Chi-Square	1	2.8641	0.0906
Mantel-Haenszel Chi-Square	1	3.5306	0.0602
Phi Coefficient		0.1752	
Contingency Coefficient		0.1726	
Cramer's V		0.1752	

TTEST for ssratio by A1

Table 34 - Means and Confidence Limits for Student:Staff Ratio

Variable	A1	N	Lower CL Mean	Mean	Upper CL Mean
ssratio	1970 - 1990	71	22.852	25.575	28.298
ssratio	1991 - 2001	46	17.105	21.073	25.041
ssratio	Diff (1-2)		-0.096	4.5022	9.1004

Table 35 - Std. Dev and Confidence Limits for Student:Staff Ratio

Variable	A1	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
ssratio	1970 - 1990	9.8737	11.504	13.784	1.3653
ssratio	1991 - 2001	11.084	13.363	16.831	1.9702
ssratio	Diff (1-2)	10.864	12.265	14.084	2.3214

Table 36 - Maximum and Minimum Values for Student:Staff Ratio

Variable	A1	Minimum	Maximum
ssratio	1970 - 1990	4.8649	62.667
ssratio	1991 - 2001	2	60
ssratio	Diff (1-2)		

Table 37 - T-Tests for Student:Staff Ratio

Variable	Method	Variances	DF	t Value	Pr > |t|
ssratio	Pooled	Equal	115	1.94	0.0549
ssratio	Satterthwaite	Unequal	85.9	1.88	0.0637

Table 38 - Wilcoxon Two-Sample Test

Statistic	2355.0000
Normal Approximation	
Z	-2.0005
One-Sided Pr < Z	0.0227
Two-Sided Pr > |Z|	0.0454
t Approximation	
One-Sided Pr < Z	0.0239
Two-Sided Pr > |Z|	0.0478

Z includes a continuity correction of 0.5.

THE STRUCTURE AND FUNCTION OF GROUP TRAINING COMPANIES IN AUSTRALIA

APPENDIX C

Analysis of Receiving Joint Policy Funds

ANALYSIS OF A6

Table 1 - A6 by A7

A6(A6) A7(A7)

Frequency, Percent, Row Pct, Col Pct	1	2	3	Total
1	20 16.95 23.53 68.97	20 16.95 23.53 71.43	6 5.08 7.06 66.67	85 72.03
2	9 7.63 27.27 31.03	8 6.78 24.24 28.57	3 2.54 9.09 33.33	33 27.97
Total	29 24.58	28 23.73	9 7.63	118 100.00

Table 1- (Continued)

Frequency, Percent, Row Pct, Col Pct	4	5	Other or, Combina, tion	Total
1	3 2.54 3.53 42.86	6 5.08 7.06 85.71	30 25.42 35.29 78.95	85 72.03
2	4 3.39 12.12 57.14	1 0.85 3.03 14.29	8 6.78 24.24 21.05	33 27.97
Total	7 5.93	7 5.93	38 32.20	118 100.00

TABLE 2 - Statistics for Table of A6 by A7

Statistic	DF	Value	Prob
Chi-Square	5	4.7793	0.4434
Likelihood Ratio Chi-Square	5	4.5612	0.4717
Phi Coefficient		0.2013	
Contingency Coefficient		0.1973	
Cramer's V		0.2013	

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Sample Size = 118

The TTEST for E1 by A6

Table 3 - Means and Confidence Intervals for E1 by A6

Variable	A6	N	Lower CL Mean	Mean	Upper CL Mean
E1	1	83	164.99	199.18	233.37
E1	2	33	25.598	124.12	222.64
E1	Diff (1-2)		-5.767	75.06	155.89

Table 4 - Std Dev and Confidence Intervals for E1 by A6

Variable	A6	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
E1	1	135.85	156.59	184.85	17.188
E1	2	223.45	277.85	367.52	48.368
E1	Diff (1-2)	175.53	198.26	227.81	40.801

Table 5 - Minimum and Maximum Values for E1 by A6

Variable	A6	Minimum	Maximum
E1	1	2	750
E1	2	4	1600
E1	Diff (1-2)		

Table 6 - T-Tests for E1

Variable	Method	Variances	DF	t Value	Pr > |t|
E1	Pooled	Equal	114	1.84	0.0684
E1	Satterthwaite	Unequal	40.3	1.46	0.1514

Table 7 - Wilcoxon Two-Sample Test

Statistic	1285.5000
Normal Approximation	
Z	-3.9444
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001
t Approximation	
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	0.0001

Z includes a continuity correction of 0.5.

Table 8 - A6 by Firm Size 1-5

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1	20	21	44	85
	16.95	17.80	37.29	72.03
	23.53	24.71	51.76	
	64.52	95.45	67.69	
2	11	1	21	33
	9.32	0.85	17.80	27.97
	33.33	3.03	63.64	
	35.48	4.55	32.31	
Total	31	22	65	118
	26.27	18.64	55.08	100.00

Table 9 - Statistics for Table of A6 by Firm Size 1-5

Statistic	DF	Value	Prob
Chi-Square	2	7.4682	0.0239
Likelihood Ratio Chi-Square	2	9.6095	0.0082
Phi Coefficient		0.2516	
Contingency Coefficient		0.2440	
Cramer's V		0.2516	

Sample Size = 118

Table 10 - A6 by Firm Size 6-20

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1	22	23	40	85
	18.64	19.49	33.90	72.03
	25.88	27.06	47.06	
	70.97	65.71	76.92	
2	9	12	12	33
	7.63	10.17	10.17	27.97
	27.27	36.36	36.36	
	29.03	34.29	23.08	
Total	31	35	52	118
	26.27	29.66	44.07	100.00

Table 11 - Statistics for Table of A6 by Firm Size 6-20

Statistic	DF	Value	Prob
Chi-Square	2	1.3284	0.5147
Likelihood Ratio Chi-Square	2	1.3250	0.5156
Phi Coefficient		0.1061	
Contingency Coefficient		0.1055	
Cramer's V		0.1061	

Sample Size = 118

Table 12 - A6 by Firm Size 21-50

Frequency, Percent , Row Pct , Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1	31 26.27 36.47 70.45	36 30.51 42.35 69.23	18 15.25 21.18 81.82	85 72.03
2	13 11.02 39.39 29.55	16 13.56 48.48 30.77	4 3.39 12.12 18.18	33 27.97
Total	44 37.29	52 44.07	22 18.64	118 100.00

Table 13 - Statistics for Table of A6 by Firm Size 21-50

Statistic	DF	Value	Prob
Chi-Square	2	1.3028	0.5213
Likelihood Ratio Chi-Square	2	1.3933	0.4983
Phi Coefficient		0.1051	
Contingency Coefficient		0.1045	
Cramer's V		0.1051	

Sample Size = 118

Table 14 - A6 by Firm Size 51-100

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1	39	42	4	85
	33.05	35.59	3.39	72.03
	45.88	49.41	4.71	
	65.00	82.35	57.14	
2	21	9	3	33
	17.80	7.63	2.54	27.97
	63.64	27.27	9.09	
	35.00	17.65	42.86	
Total	60	51	7	118
	50.85	43.22	5.93	100.00

Table 15 - Statistics for Table of A6 by Firm Size 51-100

Statistic	DF	Value	Prob
Chi-Square	2	4.9398	0.0846
Likelihood Ratio Chi-Square	2	5.0751	0.0791
Phi Coefficient		0.2046	
Contingency Coefficient		0.2005	
Cramer's V		0.2046	

Sample Size = 118

Table 16 - A6 by Firm Size 100+

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
1	42	35	8	85
	35.59	29.66	6.78	72.03
	49.41	41.18	9.41	
	68.85	79.55	61.54	
2	19	9	5	33
	16.10	7.63	4.24	27.97
	57.58	27.27	15.15	
	31.15	20.45	38.46	
Total	61	44	13	118
	51.69	37.29	11.02	100.00

Table 17 - Statistics for Table of A6 by Firm Size 100+

Statistic	DF	Value	Prob
Chi-Square	2	2.2497	0.3247
Likelihood Ratio Chi-Square	2	2.2802	0.3198
Phi Coefficient		0.1381	
Contingency Coefficient		0.1368	
Cramer's V		0.1381	

Sample Size = 118

Table 18 - A6 by E4

Frequency, Percent, Row Pct, Col Pct	1	2	Total
1	56	29	85
	47.46	24.58	72.03
	65.88	34.12	
	74.67	67.44	
2	19	14	33
	16.10	11.86	27.97
	57.58	42.42	
	25.33	32.56	
Total	75	43	118
	63.56	36.44	100.00

Table 19 - Statistics for Table of A6 by E4

Statistic	DF	Value	Prob
Chi-Square	1	0.7082	0.4001
Likelihood Ratio Chi-Square	1	0.6998	0.4029
Continuity Adj. Chi-Square	1	0.3949	0.5297
Phi Coefficient		0.0775	
Contingency Coefficient		0.0772	
Cramer's V		0.0775	

Sample Size = 118

Table 20 - A6 by Prevocational Courses

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
1	17	4	18	30	8	77
	16.67	3.92	17.65	29.41	7.84	75.49
	22.08	5.19	23.38	38.96	10.39	
	68.00	100.00	94.74	73.17	61.54	
2	8	0	1	11	5	25
	7.84	0.00	0.98	10.78	4.90	24.51
	32.00	0.00	4.00	44.00	20.00	
	32.00	0.00	5.26	26.83	38.46	
Total	25	4	19	41	13	102
	24.51	3.92	18.63	40.20	12.75	100.00

Frequency Missing = 16

Table 21 - Statistics for Table of A6 by Prevocational Courses

Statistic	DF	Value	Prob
Chi-Square	4	7.3475	0.1186
Likelihood Ratio Chi-Square	4	9.4152	0.0515
Phi Coefficient		0.2684	
Contingency Coefficient		0.2592	
Cramer's V		0.2684	

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 102
Frequency Missing = 16

WARNING: 14% of the data are missing.

Table 22 - A6 by Out of Trade Apptces

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
1	17	10	21	20	8	76
	17.17	10.10	21.21	20.20	8.08	76.77
	22.37	13.16	27.63	26.32	10.53	
	77.27	83.33	72.41	74.07	88.89	
2	5	2	8	7	1	23
	5.05	2.02	8.08	7.07	1.01	23.23
	21.74	8.70	34.78	30.43	4.35	
	22.73	16.67	27.59	25.93	11.11	
Total	22	12	29	27	9	99
	22.22	12.12	29.29	27.27	9.09	100.00

Frequency Missing = 19

Table 23 - Statistics for Table of A6 by Out of Trade Apptces

Statistic	DF	Value	Prob
Chi-Square	4	1.4527	0.8350
Likelihood Ratio Chi-Square	4	1.5895	0.8107
Phi Coefficient		0.1211	
Contingency Coefficient		0.1203	
Cramer's V		0.1211	

Effective Sample Size = 99
Frequency Missing = 19

WARNING: 16% of the data are missing.

Table 24 - A6 by From Schools

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
1	27	9	19	20	2	77
	27.00	9.00	19.00	20.00	2.00	77.00
	35.06	11.69	24.68	25.97	2.60	
	84.38	47.37	79.17	86.96	100.00	
2	5	10	5	3	0	23
	5.00	10.00	5.00	3.00	0.00	23.00
	21.74	43.48	21.74	13.04	0.00	
	15.63	52.63	20.83	13.04	0.00	
Total	32	19	24	23	2	100
	32.00	19.00	24.00	23.00	2.00	100.00

Frequency Missing = 18

Table 25 - Statistics for Table of A6 by From Schools

Statistic	DF	Value	Prob
Chi-Square	4	12.3511	0.0149
Likelihood Ratio Chi-Square	4	11.4555	0.0219
Phi Coefficient		0.3514	
Contingency Coefficient		0.3316	
Cramer's V		0.3514	

WARNING: 30% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 100
Frequency Missing = 18

WARNING: 15% of the data are missing.

Table 26 - A6 by Applies Directly to GTC

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
1	9	38	16	6	4	73
	9.38	39.58	16.67	6.25	4.17	76.04
	12.33	52.05	21.92	8.22	5.48	
	64.29	82.61	72.73	75.00	66.67	
2	5	8	6	2	2	23
	5.21	8.33	6.25	2.08	2.08	23.96
	21.74	34.78	26.09	8.70	8.70	
	35.71	17.39	27.27	25.00	33.33	
Total	14	46	22	8	6	96
	14.58	47.92	22.92	8.33	6.25	100.00

Frequency Missing = 22

Table 27 - Statistics for Table of A6 by Applies Directly to GTC

Statistic	DF	Value	Prob
Chi-Square	4	2.5778	0.6308
Likelihood Ratio Chi-Square	4	2.5410	0.6373
Phi Coefficient		0.1639	
Contingency Coefficient		0.1617	
Cramer's V		0.1639	

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 96
Frequency Missing = 22

WARNING: 19% of the data are missing.

Table 28 - A6 by Other

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
1	6	13	1	1	31	52
	8.96	19.40	1.49	1.49	46.27	77.61
	11.54	25.00	1.92	1.92	59.62	
	100.00	81.25	25.00	33.33	81.58	
2	0	3	3	2	7	15
	0.00	4.48	4.48	2.99	10.45	22.39
	0.00	20.00	20.00	13.33	46.67	
	0.00	18.75	75.00	66.67	18.42	
Total	6	16	4	3	38	67
	8.96	23.88	5.97	4.48	56.72	100.00

Frequency Missing = 51

Table 29 - Statistics for Table of A6 by Other

Statistic	DF	Value	Prob
Chi-Square	4	11.9540	0.0177
Likelihood Ratio Chi-Square	4	11.1911	0.0245
Phi Coefficient		0.4224	
Contingency Coefficient		0.3891	
Cramer's V		0.4224	

WARNING: 70% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 67
Frequency Missing = 51

WARNING: 43% of the data are missing.

Table 30 - A6 by H6

Frequency, Percent, Row Pct, Col Pct	1	2	Total
1	66	18	84
	56.41	15.38	71.79
	78.57	21.43	
	77.65	56.25	
2	19	14	33
	16.24	11.97	28.21
	57.58	42.42	
	22.35	43.75	
Total	85	32	117
	72.65	27.35	100.00

Frequency Missing = 1

Table 31 - Statistics for Table of A6 by H6

Statistic	DF	Value	Prob
Chi-Square	1	5.2562	0.0219
Likelihood Ratio Chi-Square	1	5.0143	0.0251
Continuity Adj. Chi-Square	1	4.2526	0.0392
Phi Coefficient		0.2120	
Contingency Coefficient		0.2073	
Cramer's V		0.2120	

Table 32 - A6 by H7

Frequency, Percent , Row Pct , Col Pct	1	2	Total
1	32 27.59 38.10 71.11	52 44.83 61.90 73.24	84 72.41
2	13 11.21 40.63 28.89	19 16.38 59.38 26.76	32 27.59
Total	45 38.79	71 61.21	116 100.00

Frequency Missing = 2

Table 33 - Statistics for Table of A6 by H7

Statistic	DF	Value	Prob
Chi-Square	1	0.0625	0.8027
Likelihood Ratio Chi-Square	1	0.0622	0.8030
Continuity Adj. Chi-Square	1	0.0014	0.9707
Phi Coefficient		-0.0232	
Contingency Coefficient		0.0232	
Cramer's V		-0.0232	

The TTEST for A6 by Student to Staff RAtio

Table 34 - Means & Confidence Intervals: A6 by Student:Staff Ratio

Variable	A6	N	Lower CL Mean	Mean	Upper CL Mean
ssratio	1	84	21.458	24.1	26.743
ssratio	2	33	18.392	23.054	27.716
ssratio	Diff (1-2)		-4.022	1.0463	6.1148

Table 35 - Std Dev & Confidence Intervals: A6 by Student:Staff Ratio

Variable	A6	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
ssratio	1	10.573	12.177	14.359	1.3286
ssratio	2	10.574	13.148	17.391	2.2888
ssratio	Diff (1-2)	11.032	12.455	14.302	2.5588

Table 36 - Minimum and Maximum Values: A6 by Student:Staff Ratio

Variable	A6	Minimum	Maximum
ssratio	1	2	62.667
ssratio	2	2.5	60
ssratio	Diff (1-2)		

Table 37 - T-Tests for Student:Staff Ratio

Variable	Method	Variances	DF	t Value	Pr > |t|
ssratio	Pooled	Equal	115	0.41	0.6834
ssratio	Satterthwaite	Unequal	54.8	0.40	0.6941

Table 38 - Wilcoxon Two-Sample Test

Statistic	1848.0000
Normal Approximation	
Z	-0.5966
One-Sided Pr < Z	0.2754
Two-Sided Pr > |Z|	0.5508
t Approximation	
One-Sided Pr < Z	0.2760
Two-Sided Pr > |Z|	0.5519

Z includes a continuity correction of 0.5.

THE STRUCTURE AND FUNCTION OF GROUP TRAINING COMPANIES IN AUSTRALIA

APPENDIX D

Analysis of GTC Size

ANALYSIS OF C1

Table 1 - C1 by A7

C1(C1) A7(A7)

Frequency, Percent, Row Pct, Col Pct	1	2	3	Total
0-100	5	11	2	36
	4.27	9.40	1.71	30.77
	13.89	30.56	5.56	
	17.86	39.29	22.22	
101-300	10	12	3	40
	8.55	10.26	2.56	34.19
	25.00	30.00	7.50	
	35.71	42.86	33.33	
301+	13	5	4	41
	11.11	4.27	3.42	35.04
	31.71	12.20	9.76	
	46.43	17.86	44.44	
Total	28	28	9	117
	23.93	23.93	7.69	100.00

Table 1 - (Continued)

Frequency, Percent, Row Pct, Col Pct	4	5	Other or Combination	Total
0-100	4	0	14	36
	3.42	0.00	11.97	30.77
	11.11	0.00	38.89	
	57.14	0.00	36.84	
101-300	1	2	12	40
	0.85	1.71	10.26	34.19
	2.50	5.00	30.00	
	14.29	28.57	31.58	
301+	2	5	12	41
	1.71	4.27	10.26	35.04
	4.88	12.20	29.27	
	28.57	71.43	31.58	
Total	7	7	38	117
	5.98	5.98	32.48	100.00

Frequency Missing = 1

Table 2 - Statistics for Table of C1 by A7

Statistic	DF	Value	Prob
Chi-Square	10	14.6515	0.1453
Likelihood Ratio Chi-Square	10	16.6873	0.0816
Phi Coefficient		0.3539	
Contingency Coefficient		0.3336	
Cramer's V		0.2502	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 117
Frequency Missing = 1

ANOVA for E1 by C1

The ANOVA Procedure

Class Level Information

Class	Levels	Values
C1	3	0-100 101-300 301+

Number of observations 118

Table 3 - ANOVA Procedure for E1 by C1

Dependent Variable: E1 E1

Source	DF	Sum of Squares	Mean Square
Model	2	2085967.055	1042983.528
Error	113	2528155.496	22373.057
Corrected Total	115	4614122.552	

Source	F Value	Pr > F
Model	46.62	<.0001

R-Square	Coeff Var	Root MSE	E1 Mean
0.452083	84.11308	149.5763	177.8276

Source	DF	Anova SS	Mean Square
C1	2	2085967.055	1042983.528

Source	F Value	Pr > F
C1	46.62	<.0001

Table 4 - The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable E1
Classified by Variable C1

C1	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
0-100	36	717.00	2106.00	167.550910	19.916667
101-300	39	2265.50	2281.50	171.091413	58.089744
301+	41	3803.50	2398.50	173.130310	92.768293

Average scores were used for ties.

- Kruskal-Wallis Test

Chi-Square	89.9823
DF	2
Pr > Chi-Square	<.0001

Table 5 - C1 by Firm Size 1-5

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
0-100	13	5	18	36
	11.11	4.27	15.38	30.77
	36.11	13.89	50.00	
	41.94	22.73	28.13	
101-300	9	8	23	40
	7.69	6.84	19.66	34.19
	22.50	20.00	57.50	
	29.03	36.36	35.94	
301+	9	9	23	41
	7.69	7.69	19.66	35.04
	21.95	21.95	56.10	
	29.03	40.91	35.94	
Total	31	22	64	117
	26.50	18.80	54.70	100.00

Frequency Missing = 1

Table 6 - Statistics for Table of C1 by Firm Size 1-5

Statistic	DF	Value	Prob
Chi-Square	4	2.7431	0.6017
Likelihood Ratio Chi-Square	4	2.6851	0.6118
Phi Coefficient		0.1531	
Contingency Coefficient		0.1514	
Cramer's V		0.1083	

Effective Sample Size = 117
Frequency Missing = 1

Table 7 - C1 by Firm Size 6-20

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
0-100	13	11	12	36
	11.11	9.40	10.26	30.77
	36.11	30.56	33.33	
	41.94	31.43	23.53	
101-300	10	15	15	40
	8.55	12.82	12.82	34.19
	25.00	37.50	37.50	
	32.26	42.86	29.41	
301+	8	9	24	41
	6.84	7.69	20.51	35.04
	19.51	21.95	58.54	
	25.81	25.71	47.06	
Total	31	35	51	117
	26.50	29.91	43.59	100.00

Frequency Missing = 1

Table 8 - Statistics for Table of C1 by Firm Size 6-20

Statistic	DF	Value	Prob
Chi-Square	4	6.9986	0.1360
Likelihood Ratio Chi-Square	4	6.8668	0.1431
Phi Coefficient		0.2446	
Contingency Coefficient		0.2376	
Cramer's V		0.1729	

Effective Sample Size = 117
Frequency Missing = 1

Table 9 - C1 by Firm Size 21-50

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
0-100	19 16.24 52.78 43.18	14 11.97 38.89 26.92	3 2.56 8.33 14.29	36 30.77
101-300	16 13.68 40.00 36.36	18 15.38 45.00 34.62	6 5.13 15.00 28.57	40 34.19
301+	9 7.69 21.95 20.45	20 17.09 48.78 38.46	12 10.26 29.27 57.14	41 35.04
Total	44 37.61	52 44.44	21 17.95	117 100.00

Frequency Missing = 1

Table 10 - Statistics for Table of C1 by Firm Size 21-50

Statistic	DF	Value	Prob
Chi-Square	4	10.3376	0.0351
Likelihood Ratio Chi-Square	4	10.5725	0.0318
Phi Coefficient		0.2972	
Contingency Coefficient		0.2849	
Cramer's V		0.2102	

Effective Sample Size = 117
Frequency Missing = 1

Table 11 - C1 by Firm Size 51-100

Frequency, Percent, Row Pct, Col Pct	0%	1% - 20%	21% - 10, 0%	Total
0-100	23	8	5	36
	19.66	6.84	4.27	30.77
	63.89	22.22	13.89	
	38.98	15.69	71.43	
101-300	20	18	2	40
	17.09	15.38	1.71	34.19
	50.00	45.00	5.00	
	33.90	35.29	28.57	
301+	16	25	0	41
	13.68	21.37	0.00	35.04
	39.02	60.98	0.00	
	27.12	49.02	0.00	
Total	59	51	7	117
	50.43	43.59	5.98	100.00

Frequency Missing = 1

Table 12 - Statistics for Table of C1 by Firm Size 51-100

Statistic	DF	Value	Prob
Chi-Square	4	15.2630	0.0042
Likelihood Ratio Chi-Square	4	17.1938	0.0018
Phi Coefficient		0.3612	
Contingency Coefficient		0.3397	
Cramer's V		0.2554	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 117
Frequency Missing = 1

Table 13 - C1 by Firm Size 100+

Frequency, Percent , Row Pct , Col Pct	0%	1% - 20%	21% - 10, 0%	Total
0-100	22 18.80 61.11 36.67	6 5.13 16.67 13.64	8 6.84 22.22 61.54	36 30.77
101-300	23 19.66 57.50 38.33	14 11.97 35.00 31.82	3 2.56 7.50 23.08	40 34.19
301+	15 12.82 36.59 25.00	24 20.51 58.54 54.55	2 1.71 4.88 15.38	41 35.04
Total	60 51.28	44 37.61	13 11.11	117 100.00

Frequency Missing = 1

Table 14 - Statistics for Table of C1 by Firm Size 100+

Statistic	DF	Value	Prob
Chi-Square	4	17.6553	0.0014
Likelihood Ratio Chi-Square	4	17.7501	0.0014
Phi Coefficient		0.3885	
Contingency Coefficient		0.3621	
Cramer's V		0.2747	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 117
Frequency Missing = 1

Table 15 - C1 by E4

C1(C1)	E4(E4)		
Frequency, Percent, Row Pct, Col Pct	1	2	Total
0-100	15	21	36
	12.82	17.95	30.77
	41.67	58.33	
	20.00	50.00	
101-300	31	9	40
	26.50	7.69	34.19
	77.50	22.50	
	41.33	21.43	
301+	29	12	41
	24.79	10.26	35.04
	70.73	29.27	
	38.67	28.57	
Total	75	42	117
	64.10	35.90	100.00

Frequency Missing = 1

Table 16 - Statistics for Table of C1 by E4

Statistic	DF	Value	Prob
Chi-Square	2	11.7781	0.0028
Likelihood Ratio Chi-Square	2	11.6342	0.0030
Phi Coefficient		0.3173	
Contingency Coefficient		0.3024	
Cramer's V		0.3173	

Effective Sample Size = 117
Frequency Missing = 1

Table 17 - C1 by Prevocational Courses

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
0-100	3	0	4	12	5	24
	2.97	0.00	3.96	11.88	4.95	23.76
	12.50	0.00	16.67	50.00	20.83	
	12.00	0.00	21.05	29.27	41.67	
101-300	10	3	8	14	2	37
	9.90	2.97	7.92	13.86	1.98	36.63
	27.03	8.11	21.62	37.84	5.41	
	40.00	75.00	42.11	34.15	16.67	
301+	12	1	7	15	5	40
	11.88	0.99	6.93	14.85	4.95	39.60
	30.00	2.50	17.50	37.50	12.50	
	48.00	25.00	36.84	36.59	41.67	
Total	25	4	19	41	12	101
	24.75	3.96	18.81	40.59	11.88	100.00

Frequency Missing = 17

Table 18 - Statistics for Table of C1 by Prevocational Courses

Statistic	DF	Value	Prob
Chi-Square	8	8.6260	0.3748
Likelihood Ratio Chi-Square	8	9.5272	0.2998
Phi Coefficient		0.2922	
Contingency Coefficient		0.2805	
Cramer's V		0.2066	

WARNING: 47% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 101
Frequency Missing = 17

WARNING: 14% of the data are missing.

Table 19 - C1 by Out of Trade Apptce

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
0-100	6	3	4	6	3	22
	6.12	3.06	4.08	6.12	3.06	22.45
	27.27	13.64	18.18	27.27	13.64	
	27.27	25.00	14.29	22.22	33.33	
101-300	8	4	9	13	3	37
	8.16	4.08	9.18	13.27	3.06	37.76
	21.62	10.81	24.32	35.14	8.11	
	36.36	33.33	32.14	48.15	33.33	
301+	8	5	15	8	3	39
	8.16	5.10	15.31	8.16	3.06	39.80
	20.51	12.82	38.46	20.51	7.69	
	36.36	41.67	53.57	29.63	33.33	
Total	22	12	28	27	9	98
	22.45	12.24	28.57	27.55	9.18	100.00

Frequency Missing = 20

Table 20 - Statistics for Table of C1 by Out of Trade Apptce

Statistic	DF	Value	Prob
Chi-Square	8	4.9021	0.7680
Likelihood Ratio Chi-Square	8	4.8471	0.7738
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.1581	

WARNING: 47% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 98
Frequency Missing = 20

WARNING: 17% of the data are missing.

Table 21 - C1 by From Schools

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
0-100	6	7	5	3	1	22
	6.06	7.07	5.05	3.03	1.01	22.22
	27.27	31.82	22.73	13.64	4.55	
	18.75	36.84	20.83	13.64	50.00	
101-300	15	3	11	8	0	37
	15.15	3.03	11.11	8.08	0.00	37.37
	40.54	8.11	29.73	21.62	0.00	
	46.88	15.79	45.83	36.36	0.00	
301+	11	9	8	11	1	40
	11.11	9.09	8.08	11.11	1.01	40.40
	27.50	22.50	20.00	27.50	2.50	
	34.38	47.37	33.33	50.00	50.00	
Total	32	19	24	22	2	99
	32.32	19.19	24.24	22.22	2.02	100.00

Frequency Missing = 19

Table 22 - Statistics for Table of C1 by From Schools

Statistic	DF	Value	Prob
Chi-Square	8	9.1605	0.3289
Likelihood Ratio Chi-Square	8	10.1051	0.2577
Phi Coefficient		0.3042	
Contingency Coefficient		0.2910	
Cramer's V		0.2151	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 99
Frequency Missing = 19

WARNING: 16% of the data are missing.

Table 23 - C1 by Applies Directly to GTC

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
0-100	5	9	5	1	2	22
	5.26	9.47	5.26	1.05	2.11	23.16
	22.73	40.91	22.73	4.55	9.09	
	35.71	20.00	22.73	12.50	33.33	
101-300	2	23	8	2	1	36
	2.11	24.21	8.42	2.11	1.05	37.89
	5.56	63.89	22.22	5.56	2.78	
	14.29	51.11	36.36	25.00	16.67	
301+	7	13	9	5	3	37
	7.37	13.68	9.47	5.26	3.16	38.95
	18.92	35.14	24.32	13.51	8.11	
	50.00	28.89	40.91	62.50	50.00	
Total	14	45	22	8	6	95
	14.74	47.37	23.16	8.42	6.32	100.00

Frequency Missing = 23

Table 24 - Statistics for Table of C1 by Applies Directly to GTC

Statistic	DF	Value	Prob
Chi-Square	8	9.9784	0.2665
Likelihood Ratio Chi-Square	8	10.4661	0.2338
Phi Coefficient		0.3241	
Contingency Coefficient		0.3083	
Cramer's V		0.2292	

WARNING: 47% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 95
Frequency Missing = 23

WARNING: 19% of the data are missing.

Table 25 - C1 by Other

Frequency, Percent, Row Pct, Col Pct	1	2	3	4	5	Total
0-100	2	3	4	2	7	18
	3.03	4.55	6.06	3.03	10.61	27.27
	11.11	16.67	22.22	11.11	38.89	
	40.00	18.75	100.00	66.67	18.42	
101-300	2	4	0	0	17	23
	3.03	6.06	0.00	0.00	25.76	34.85
	8.70	17.39	0.00	0.00	73.91	
	40.00	25.00	0.00	0.00	44.74	
301+	1	9	0	1	14	25
	1.52	13.64	0.00	1.52	21.21	37.88
	4.00	36.00	0.00	4.00	56.00	
	20.00	56.25	0.00	33.33	36.84	
Total	5	16	4	3	38	66
	7.58	24.24	6.06	4.55	57.58	100.00

Frequency Missing = 52

Table 26 - Statistics for Table of C1 by Other

Statistic	DF	Value	Prob
Chi-Square	8	18.6583	0.0168
Likelihood Ratio Chi-Square	8	18.9545	0.0151
Phi Coefficient		0.5317	
Contingency Coefficient		0.4695	
Cramer's V		0.3760	

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Effective Sample Size = 66
Frequency Missing = 52

WARNING: 44% of the data are missing.

Table 27 - C1 by H6

Frequency, Percent, Row Pct, Col Pct	1	2	Total
0-100	19	17	36
	16.38	14.66	31.03
	52.78	47.22	
	22.62	53.13	
101-300	30	10	40
	25.86	8.62	34.48
	75.00	25.00	
	35.71	31.25	
301+	35	5	40
	30.17	4.31	34.48
	87.50	12.50	
	41.67	15.63	
Total	84	32	116
	72.41	27.59	100.00

Frequency Missing = 2

Table 28 - Statistics for Table of C1 by H6

Statistic	DF	Value	Prob
Chi-Square	2	11.6398	0.0030
Likelihood Ratio Chi-Square	2	11.7248	0.0028
Phi Coefficient		0.3168	
Contingency Coefficient		0.3020	
Cramer's V		0.3168	

Effective Sample Size = 116
Frequency Missing = 2

Table 29 - C1 by H7

C1(C1)	H7(H7)		
Frequency, Percent, Row Pct, Col Pct	1	2	Total
0-100	6	29	35
	5.22	25.22	30.43
	17.14	82.86	
	13.33	41.43	
101-300	21	19	40
	18.26	16.52	34.78
	52.50	47.50	
	46.67	27.14	
301+	18	22	40
	15.65	19.13	34.78
	45.00	55.00	
	40.00	31.43	
Total	45	70	115
	39.13	60.87	100.00

Frequency Missing = 3

Table 30 - Statistics for Table of C1 by H7

Statistic	DF	Value	Prob
Chi-Square	2	10.6844	0.0048
Likelihood Ratio Chi-Square	2	11.4725	0.0032
Phi Coefficient		0.3048	
Contingency Coefficient		0.2916	
Cramer's V		0.3048	

Effective Sample Size = 115
Frequency Missing = 3

ANOVA for Student to Staff Ratio by C1

Class Level Information

Class	Levels	Values
C1	3	0-100 101-300 301+

Number of observations 118

NOTE: Due to missing values, only 117 observations can be used in this analysis.

Table 31 - The ANOVA Procedure for Student to Staff Ratio by C1

Dependent Variable: ssratio

Source	DF	Sum of Squares	Mean Square
Model	2	1485.07350	742.53675
Error	114	16379.80054	143.68246
Corrected Total	116	17864.87404	

Source	F Value	Pr > F
Model	5.17	0.0071
Error		
Corrected Total		

R-Square	Coeff Var	Root MSE	ssratio Mean
0.083128	50.35374	11.98676	23.80511

Source	DF	Anova SS	Mean Square
C1	2	1485.073496	742.536748

Source	F Value	Pr > F
C1	5.17	0.0071

Table 32 - The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable ssratio
Classified by Variable C1

C1	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
0-100	36	1500.50	2124.0	169.330183	41.680556
101-300	40	2505.00	2360.0	174.026737	62.625000
301+	41	2897.50	2419.0	175.040821	70.670732

Average scores were used for ties.

Kruskal-Wallis Test

Chi-Square	14.6975
DF	2
Pr > Chi-Square	0.0006

THE STRUCTURE AND FUNCTION OF GROUP TRAINING COMPANIES IN AUSTRALIA

APPENDIX E

Analysis of Age : Pre versus Post 1991

By

A6 : Receive Joint Policy Funds

By

C1 : Size of GTC

Table 1 - A1 by A6

Frequency Percent Row Pct Col Pct	1	2	Total
1970 - 1990	65 55.08 91.55 76.47	6 5.08 8.45 18.18	71 60.17
1991 - 2001	20 16.95 42.55 23.53	27 22.88 57.45 81.82	47 39.83
Total	85 72.03	33 27.97	118 100.00

Table 2 - Statistics for Table of A1 by A6

Statistic	DF	Value	Prob
Chi-Square	1	33.6999	<.0001
Likelihood Ratio Chi-Square	1	34.6229	<.0001
Continuity Adj. Chi-Square	1	31.3116	<.0001
Mantel-Haenszel Chi-Square	1	33.4143	<.0001
Phi Coefficient		0.5344	
Contingency Coefficient		0.4713	
Cramer's V		0.5344	

TTEST for C1 by A1

Table 3 - Means and Confidence Intervals for C1 by A1

Variable	A1	N	Lower CL Mean	Mean	Upper CL Mean
C1	1970 - 1990	71	300.08	360.37	420.66
C1	1991 - 2001	46	88.507	130.04	171.58
C1	Diff (1-2)		148.92	230.32	311.73

Table 4 - Std Dev and Confidence Intervals for C1 by A1

Variable	A1	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
C1	1970 - 1990	218.62	254.71	305.2	30.229
C1	1991 - 2001	116.01	139.87	176.17	20.623
C1	Diff (1-2)	192.33	217.13	249.34	41.097

Table 5 - Minimum and Maximum Values for C1 by A1

Variable	A1	Minimum	Maximum
C1	1970 - 1990	32	1004
C1	1991 - 2001	2	526
C1	Diff (1-2)		

Table 6 - T-Test for C1 by A1

Variable	Method	Variances	DF	t Value	Pr > |t|
C1	Pooled	Equal	115	5.60	<.0001
C1	Satterthwaite	Unequal	112	6.29	<.0001

Table 7 - Wilcoxon Two-Sample Test for C1 by A1

Statistic	1668.0000
Normal Approximation	
Z	-5.8342
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001
t Approximation	
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001

Z includes a continuity correction of 0.5.

TTEST for C1 by A6

Table 8 - Means and Confidence Intervals for C1 by A6

Variable	A6	N	Lower CL Mean	Mean	Upper CL Mean
C1	1	84	266.51	320.95	375.39
C1	2	33	80.14	139.64	199.13
C1	Diff (1-2)		87.409	181.32	275.22

Table 9 - Std Dev and Confidence Intervals for C1 by A6

Variable	A6	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
C1	1	217.81	250.85	295.8	27.37
C1	2	134.94	167.79	221.94	29.209
C1	Diff (1-2)	204.4	230.76	264.98	47.409

Table 10 - Minimum and Maximum Values for C1 by A6

Variable	A6	Minimum	Maximum
C1	1	2	1004
C1	2	5	856
C1	Diff (1-2)		

Table 11 - T-Test for C1 by A6

Variable	Method	Variances	DF	t Value	Pr > |t|
C1	Pooled	Equal	115	3.82	0.0002
C1	Satterthwaite	Unequal	87	4.53	<.0001

Table 12 - Wilcoxon Two-Sample Test for C1 by A6

Statistic	1243.5000
Normal Approximation	
Z	-4.2582
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001
t Approximation	
One-Sided Pr < Z	<.0001
Two-Sided Pr > |Z|	<.0001

Z includes a continuity correction of 0.5.