Myth and reality: Employer sponsored training in Australia

Andy Smith and Stephen Billett

Abstract

In 1990, Australia implemented an employer training levy, the Training Guarantee Scheme. The Training Guarantee was abolished by the incoming Coalition federal government in 1996 after much negative publicity about its impact, particularly on small business. Recently, there have been calls to revive the notion of an employer training levy as a result of statistical evidence that employer expenditure training has declined since 1996. In this context, employer training expenditure has been taken as a proxy for employer commitment to training. This article considers the statistical evidence on employer training in Australia and concludes that the case against Australian employers is far from clear cut. Data from a variety of sources suggests strongly that Australian employers provide a similar level of training to their employees as employers in other developed countries. The paper proposes that it is the distribution of employer training expenditure that is important to long term skills formation rather than the total expenditure.

Introduction

Across the developed world, there has been a long and on-going debate about the role of employers in improving the overall skills levels of the national workforce. In most cases this debate is framed in terms of the failure of employers to increase the demand for higher levels of skills and so underinvest in the training of their workers (Keep and Payne, 2003). Governments in developed countries during the 1990s took measures to improve the provision of vocational education and training (VET) and to make their VET systems more responsive to the perceived needs of business and industry. In Australia, the
national training reforms of the 1990s have had a profound impact on the nature and operations of the VET system (Smith and Keating, 2003). However, critics have concluded that reforms to the supply side of the VET system will only have a limited impact on the skills levels of the workforce so long as the demand for higher levels of skill remains low. Employers have been roundly criticised for failing to create high skilled jobs which will increase the demand for skills and training and for shirking their responsibilities for training their workers. In Australia, much of the debate about employers’ failure to train has been based on interpretations of the statistical evidence of training expenditure and employer training practices collected by the Australian Bureau of Statistics.

Since 1989 the Australian Bureau of Statistics (ABS) has conducted five surveys of employer training expenditure (ABS, 1990a, 1991, 1994a, 1997a, 2003). The original survey conducted as a pilot in 1989 indicated that only 22 per cent of Australian employers carried out any form of training for their employees and that an average of 2.2 per cent of payroll costs was invested in training activities with employees receiving, on average, 22 hours of training per annum.

Table 1 shows the results from the first four Employer Training Expenditure Surveys (TES). The overall picture is one of an increase in total expenditure measured as a percentage of payroll to the mid-1990s followed by a decline from 2.9 percent of payroll in 1993 to 2.5 per cent in 1996.

Table 1: Employer Training Expenditure (July - September 1989-96)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Employers reporting training expenditure</td>
<td>22</td>
<td>24</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>% Payroll Spent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Sector</td>
<td>1.7</td>
<td>2.2</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Public Sector</td>
<td>3.3</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>2.2</td>
<td>2.6</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Average expenditure per employee (A$)</td>
<td>133</td>
<td>163</td>
<td>191</td>
<td>186</td>
</tr>
<tr>
<td>Average training hours per employee</td>
<td>5.5</td>
<td>5.9</td>
<td>5.6</td>
<td>4.9</td>
</tr>
</tbody>
</table>


In Australia, as in other countries, employer size correlates closely with the incidence of training in enterprises. In 1996, 88.3 per cent of large enterprises (100 or more employees) reported providing structured training compared to only 13.4 per cent of small enterprises (less than 20 employees). The 2002 data indicate an increase in the incidence of training in all size categories with 98 per cent of large organisations, 70 per cent of medium sized and 39 per cent of
small organisations reporting the provision of structured training (ABS, 2003).

Spending on training also varies considerably by sector and industry. In 1996, 
public sector organisations spent 3.2 per cent of payroll compared with their 
private sector counterparts who spent 2.3 per cent. However, the increase from 
1989 to 1996 was almost entirely accounted for by the private sector which 
modified its performance by over 30 per cent, whilst public sector spending as 
a percentage of payroll remained fairly static. Variation across industry sectors 
is also apparent, with air transport, mining and communications spending 
well over the average whilst manufacturing, retail and recreation and personal 
services spent considerably less than the average.

More recently, the Training Expenditure Survey has been discontinued and 
replaced with a new survey, the Training Practices and Expenditure Survey 
(TPES) (ABS, 2003). Unfortunately, the data in the new survey were collected on 
a different basis from that collected in the TPES, rendering direct comparisons 
impossible. The result for the TPES for 2002 shows an employer expenditure 
figure of 1.3% of payroll. This figure excludes the costs of wages and salaries and 
government training subsidies that were incorporated in the figures collected in 
the previous surveys. Estimates by the Australian Bureau of Statistics suggest 
that the new figure of 1.3% represents a somewhat higher expenditure than the 
1996 figure of 2.5%.

The most common explanation for the apparent decline in employer 
commitment to training between 1993 and 1996 was the suspension of the 
Training Guarantee training levy scheme in 1994 leading to its abolition upon 
the accession of the conservative Coalition federal government in 1996. The 
Training Guarantee Scheme (TGS) had been introduced in 1990 as part of the 
then Federal Labor government’s training reform program. The findings from 
the original 1989 TES data had been used as proof by the government that 
Australian employers were not spending enough on training their workers 
and needed to be forced into spending more. The Training Guarantee Act of 
1990 provided that all employers with a total payroll in excess of A$200,000 
spend a minimum of 1 per cent (rising to 1.5 per cent in 1991) of their total 
payroll costs on “structured” training for their workers. The scheme was highly 
unpopular with employers, especially amongst the small business community 
and assessments of the effectiveness of the TES in raising the level of training 
expenditure in Australia have suggested that the scheme failed to lift training 
provision for the majority of employees in any significant or lasting fashion 
(Teicher, 1995). Employers seem to have complied with the TES requirements 
but there is no evidence to show that the quality of training improved or that 
access to training especially for lower skilled workers increased.

Nevertheless, despite the rather negative assessments of the impact of the 
Training Guarantee and the apparent rise in training activity and expenditure 
since 1996, many commentators persist in using the TES data to underpin
their case for a revival of a training levy to compel employers to provide more training for workers. However, it is far from clear that this pessimistic view of the state of employer training in Australia is justified given the range of data now available on the incidence of enterprise training.

**Alternative perspectives on training expenditure**

The ABS conduct two other surveys which present data on employer training – the Employer Training Practices Survey (ABS, 1994b, 1997b) and the Survey of Education and Training Experience (ABS, 1990b, 1994c, 1998, 2002). The Survey of Education and Training Experience (SET) and its forerunners is a household survey sampling some 20,000 dwellings and collecting data on all individuals aged from 15 to 64 years for the previous year. The results from the 1997 SET show that in 1997, 80.2 per cent of workers reported receiving some form of training. On-the-job training was the most common form of training with 71.6 per cent of workers reporting that they received this type of training. The incidence of in-house training in organisations was far less with only 33 per cent of workers receiving this form of training. About 16 per cent of workers were studying for an educational qualification. However, like the figures on training expenditure, there is considerable variation between industries on the type of training received by employees. Employees in the utilities, communications or service industries were more likely to receive training than those in transport, manufacturing or agriculture. The results of the three surveys for employee training to 1997 are summarised in Table 2.

**Table 2 Individuals' Experience of training 1989-1997**

<table>
<thead>
<tr>
<th>Activity</th>
<th>1989</th>
<th>1993</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some training undertaken</td>
<td>79.0</td>
<td>85.8</td>
<td>80.2</td>
</tr>
<tr>
<td>Studied in previous calendar year</td>
<td>16.8</td>
<td>18.6</td>
<td>15.8</td>
</tr>
<tr>
<td>In-house training course</td>
<td>34.9</td>
<td>31.3</td>
<td>33.0</td>
</tr>
<tr>
<td>External training course</td>
<td>9.8</td>
<td>11.8</td>
<td>20.0</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>71.8</td>
<td>81.8</td>
<td>71.6</td>
</tr>
</tbody>
</table>

*Source ABS, (1998)*

The data from SET display some interesting contrasts with the TES data. The most obvious difference is that the reported incidence of training for individual workers is far higher than the TES data suggests. Over the 1990s, 80 per cent or more of workers have undertaken some training. Although the most common experience is of on-the-job training, over 30 per cent of workers reported...
receiving in-house training – very similar to the “structured” training definition used in the TES. Also, the pattern of provision has changed during the period 1989-1997 in different ways to the pattern of training expenditure from the TES. Whereas the overall incidence of training and of on-the-job training rose in the early 1990s and fell away later in the decade, reports of in-house or structured training increased since 1993 and participation in external training courses almost doubled during the period.

Data from 2001 (ABS, 2002), show that the incidence of employer sponsored training appears to be still increasing. The proportion of Australian workers undertaking work related training grew from 30 per cent of the workforce in 1993 to 45 per cent in 2001. 37 per cent of workers completed at least one work related training course in 2001 and the proportion of workers completing on-the-job training grew from 65 per cent in 1996 to 69 per cent in 2001. Despite the apparent decline in reported employer training expenditure since the mid 1990s, curiously, the majority of Australian workers claimed they were receiving some form of training from their employers and many were undertaking formal, off-the-job training in their firms. These figures complement the data for overall enrolments in the Australian vocational and education training (VET) system which show that the numbers undertaking a VET course have increased by almost 60 per cent in the last 10 years to over 1.7 million in 2002 to the point where over 12 per cent of the Australian population report undertaking a VET course each year (NCVER, 2003). In this way, the data from Australian households about the frequency of incidence of workplace training opportunities is consistent with trends in the population’s participation in VET. Moreover, this participation involves students from all age groups, not just those who are engaged in entry-level training. So, it is those within the workplace as much as those negotiating entry to the workplace who are participating in vocational education in increasing numbers. Importantly, the increasing incidence of in-house training contrasts sharply with the TES data showing a decline in expenditure on structured training over the same period. Despite the differences in definitions between in-house training in the SET and structured training in the TES, the SET data suggest that the provision of off-the-job training courses on the employers’ premises has increased since 1993.

More evidence of the widespread provision of industry training can be gained from the Employer Training Practices Survey (TPS). The TPS is a qualitative survey that gathers information on the type and extent of training provided by enterprises to their employees. Data are collected for a full year rather than for three months periods as is the case for the TES. Two Training Practices surveys have been carried out (ABS, 1994b, 1997) covering the years 1993 and 1996. In 2002, the Training Practices Survey was administered in combination with the Training Expenditure Survey in a new survey – the Training Expenditure and Practices Survey (ABS 2003). The Training Practices Survey was distributed to the same population as the TES so the data are comparable between the two
surveys. However, the data from the 2002 survey are not fully comparable with the previous years. The results from the 1997 TPS show that 61 per cent of all employers provided training to their employees during 1996. This increased to 81 per cent in the 2002 survey. 35 per cent provided structured training whilst 53 per cent provided unstructured training in 1996, increasing to 41 per cent and 79 per cent respectively in 2002.

As with training expenditure, the incidence of employer training in the TPS varies considerably with size. In 1996, 99 per cent of large enterprises reported providing training whilst 57 per cent of small employers claimed the same. The provision of structured training follows the same pattern with 93 per cent of large enterprises claimed to be providing structured training and 30 per cent of small enterprises. By 2002, this had increased to 98 per cent of large enterprises and 39 per cent of small enterprises. The TPS data also shows that the low incidence of training provision amongst small enterprises is concentrated in the micro-business end of the spectrum – those enterprises employing fewer than 5 people, including those businesses that have no employees and represent about half of all small businesses. The figures for small business from the 1996 survey are summarised in Table 3. However, it needs to be acknowledged that small business operators have consistently claimed that the orthodox provision of vocational education through taught courses fails to meet their needs (Coopers and Lybrand, 1994). Among their concerns is that small businesses are not smaller versions of large enterprises (Kempnich et al, 1999). Much of the vocational education provision in Australia seems to be directed towards large enterprises and their needs (Billett, Ehrich and Herron-Tinning 2003).

Table 3 Percentage of small business enterprises providing training 1996

<table>
<thead>
<tr>
<th>Type of training</th>
<th>1-4 employees</th>
<th>5-9 employees</th>
<th>10-19 employees</th>
<th>All small business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured training</td>
<td>20</td>
<td>43</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Unstructured training</td>
<td>38</td>
<td>65</td>
<td>78</td>
<td>49</td>
</tr>
<tr>
<td>All training</td>
<td>45</td>
<td>74</td>
<td>86</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: ABS (1997b)

Despite the similarity in the pattern of training provision, however, there is a remarkable difference in the incidence of training provided by the TES and the TPS. In almost every case, the incidence of structured training detected by the TPS appears to be about double that detected by the TES. 35 per cent of enterprises report providing structured training to their employees in the TPS.
compared to only 17.7 per cent of enterprises in the TES. 30 per cent of all small enterprises provided structured training in the TPS compared to 13.4 per cent in the TES. For larger enterprises, the figures are more comparable. Nevertheless, 99 per cent of enterprises provided structured training in the TPS compared with 88.3 per cent in the TES.

There are some differences between the two surveys that might account for some of these divergent findings. In particular, the TES provides data for only one quarter in the year whereas the TPS gathers data on training activity for the preceding 12 months. The TPS collects a broader range of data than the TES with the emphasis on qualitative data rather than the strictly defined quantitative data of the TES. Thus, the TPS may allow the collection of data on training activities that cannot be fitted into the strict definitional guidelines of the TES. Further evidence of the more inclusive approach of the TPS is provided by the slightly different definitions of structured training used in the two surveys. In both surveys the definition of structured training allows the inclusion of on-the-job training. However, in the TES on-the-job training is restricted to training “associated with the assessment of accredited competency-based skills”. This definition severely limits the amount of on-the-job training captured under the definition of structured training in the TES and may help to account for the lower incidence of structured training reported, particularly for small businesses which tend to exhibit lower levels of participation in structured VET programs. Thus, the TPS appears to be a better guide to the true level of structured training provided within enterprises.

What seems significant is that employees report higher levels of in-house training than do their employers. This may well be a product of the employers responding to surveys that constrain the reporting of training activity, because their definitions are more narrowly defined. However, it might be expected that employers would seek to amplify their efforts. Conversely, those in the workplace do not always acknowledge on the job training when a peer or supervisor provides it. So, there are at least two realities: the employers and employees. Employees may be providing a more comprehensive picture based upon their learning experiences. This presents itself as a useful way of transcending training provided through structured and credentialled courses, and those other kinds of learning experiences which individuals encounter in workplaces. Ultimately, perhaps, this is the most important measure, given its efficacy in developing workplace knowledge (Billett 2001).

Further support for a more optimistic view of the incidence of industry training in Australia is provided by the Business Longitudinal Survey (ABS, 1999). The Business Longitudinal Survey (BLS) is a composite of data gathered from a sample of business on the ABS business register. The BLS gathers data primarily on business and financial performance of enterprises but also includes some simple questions on the provision of training to employees. In 1997/98, the
BLS data indicated that 54 per cent of enterprises reported providing training to their employees and 23 per cent reported providing structured training. Whilst these figures fall between the data provided by the TES and TPS, it is important to note that the BLS collects data from enterprises with less than 200 employees. Thus, large enterprises are under represented in the sample. This would suggest that a higher rather than a lower estimate of industry training is warranted by the ABS data overall. Estimates of the number of employees receiving training from their employers in the period of the survey suggest that 68 per cent received on-the-job training whilst 46 per cent received structured training. These figures are broadly in line with those of the SET for on-the-job training. The numbers receiving structured training are higher than the number receiving in-house training in the SET. However, the definition of structured training in the BLS is broader than that of in-house training courses in the SET.

In sum, it has been proposed that there may well be a higher level of training than has been acknowledged hitherto, particular that taking place in large Australian enterprises. This is important because it suggests an interest in and commitment to skill development by employers that provides a positive platform on which to base policy. The TPS and the more recent TPES data indicates that there is interest and a willingness on the part of Australian enterprises to sponsor skill development. However, while the picture being painted may be more positive than anticipated, it is necessary to engage another kind of reality: that of comparisons with other countries, including those with whom we compete in the global marketplace.

International comparisons

In recent years, data showing an apparent decline in training expenditure and in the hours of training provided to employees of Australian enterprises in the wake of the abolition of the Training Guarantee Scheme has led to charges that employers are reducing their commitment to training and that policies need to devised to compel them to increase their investments in training (Hall, Buchanan and Considine, 2002). Similar calls have also been heard the UK where employers have been blamed for that country's apparent poor record on employer training (e.g. Keep and Payne, 2002).

However, it is by no means clear that Australian employers spend so much less than their counterparts in other developed nations as has been implied in the Australian debate so far. Figures from the European Union's Continuing Vocational Training Survey (CVTS II) show that Australia lies towards the top end of the normal range of employer training expenditure of about 0.6 to 1.7 per cent of payroll costs. Table 4 displays data from the most recent Training Expenditure and Practices Survey (ABS 2003) with data from CVTS II (European Communities, 2002) for the original 15 EU countries except Greece which was
very low at 0.4 per cent and the United Kingdom (see note to table). Whilst not strictly comparable, the data are very consistent in that they measure the direct, net training costs borne by employers.

Table 4 Percentage of wages and salaries spent by employers on employee training: Australia (2001-02) and selected EU countries (1999).

<table>
<thead>
<tr>
<th>Country</th>
<th>% total labour costs</th>
<th>Country</th>
<th>% total labour costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>1.7</td>
<td>France</td>
<td>1.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.7</td>
<td>Spain</td>
<td>1.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.6</td>
<td>Luxembourg</td>
<td>1.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.5</td>
<td>Germany</td>
<td>0.9</td>
</tr>
<tr>
<td>Australia</td>
<td>1.3</td>
<td>Austria</td>
<td>0.8</td>
</tr>
<tr>
<td>Finland</td>
<td>1.3</td>
<td>Portugal</td>
<td>0.7</td>
</tr>
<tr>
<td>Italy</td>
<td>1.2</td>
<td>Belgium</td>
<td>0.6</td>
</tr>
</tbody>
</table>


Note. Data on the United Kingdom has not been included in this table as due to the omission of indirect labour costs in the total labour cost data, the UK training costs figures are not comparable with the other countries in this table.

Although these figures are only broadly comparable, they still provide a basis to question the assumption that Australia lags well behind other developed nations in employer training expenditure are at least highly questionable and probably wrong. The data suggests that Australia lies towards the upper end of the normal range of employer expenditure on training of existing workers of between 0.6 and 1.7 per cent of payroll costs. It is interesting to note from this comparison that countries such as Germany that have been held up in the past as models for the Australian training system, fare less well when comparisons are based on the continuous training provided by employers than on the training provided for young people through the apprenticeship system. Also the comparison with France with its well-known training levy system is most noteworthy. Even this long-standing and enduring initiative appears to have generated a lower level of employer training expenditure than Australia. Similarly, the social charter approaches typical of countries such as Norway and Denmark suggest that mandated approaches such as employer training levies are less likely to produce the kinds of voluntary employer commitment to training that is characteristic of the Scandinavian countries.

In summary, it appears from the available data that a significant amount of training is being provided by Australian employers and that this level of
commitment compares favourably with many other countries. Some 80 per cent of Australian workers are receiving some form of training from their employers. Over 80 per cent of Australian employers are providing some form of training for their employees. Between one third and one half of Australian workers are taking part in formal, structured training in the workplace with 70 per cent of workers taking part in on-the-job training. Over 40 per cent of Australian employers are reported by their employees as providing structured training.

Separating the myth from the reality

Data from the surveys discussed above suggest that that the view that Australian employers perform poorly in the training and development of their employees is not well founded. Most Australians report receiving some form of training at work and a considerable proportion receive structured, off-the-job training. By international standards, Australian employers do not perform badly. By comparison with their European counterparts, Australian employers' expenditure on training ranks around the middle for developed countries and well above the new entrants to the EU. Claims in Australia that there has been a flight from training amongst employers in this country and that Australia ranks lowly amongst developed nations on training expenditure (Hall et al, 2003) do not reflect the reality of the data. It is also interesting to note that calls for the Australian government to re-introduce a levy along the lines of the Training Guarantee in order to increase training expenditure do not stand scrutiny in the light of this data. From Table 4 it is clear that countries such as France which has a long tradition of employer training levies perform no better than countries such as Austria, Denmark and Finland which do not operate levies.

The data surveyed in this article suggest that a policy focus on employer training expenditure would be ill-conceived. Evidence from reviews of the operation of the Training Guarantee suggest that this scheme provoked a resentful yet artful compliance response amongst employers rather than develop a true commitment to increased training provision (Velten, 1990; Pollock, 1991). Similar criticisms have been made of the operation of the French levy system (Giraud, 2002). Giraud shows that despite the operation of the French employer training levies since 1925, the distribution of training expenditure amongst different groups of workers is still as highly skewed as in other countries that do not operate a levy system. The skewed nature of the distribution of training expenditure appears to be a universal problem with studies in most developed countries showing that expenditure is distorted both by industry and by occupation. An analysis of the education and training experience data for Australia has shown that in terms of industry sector workers in air transport, mining and communications are more likely to receive employer sponsored training than those in construction, retail and personal services. In terms of occupational groups, workers in white-collar occupations and with a higher educational level and
working in larger organisations are more likely to receive employer sponsored training (McKenzie and Long, 1995). Thus, workers in smaller organisations, in blue-collar occupations and with a lower educational attainment level are at a significant risk of not receiving much employer sponsored training. Rather than a focus on overall expenditure on training amongst employers, a more suitable focus for policy would be on correcting the imbalances between groups of workers in their experience of employer training.

The skewed nature of the distribution of training opportunities also highlights another anomaly in training policy in Australia. As in many developed countries, the focus for much vocational education and training policy in the last 15 years has been on the provision of training opportunities for youth. Thus, in Australia, the policy focus for VET has been on the expansion of the training market and on the development of the apprenticeship and traineeship system (Robinson, 2001). In many ways, this focus on youth training has been very successful in Australia with the numbers of young people entering apprenticeships and traineeships and the VET system in general increasing very rapidly through the late 1990s (NCVER, 2003). However, policy on the training of existing and mature age workers has been lacking. Studies of the impact of demographic change on VET have shown that the greatest percentage increase in participation in VET have been in the older age groups aged over 45 years (Smith, 1999). Even in the apprenticeship and traineeship system, originally geared to youth entry level training, the highest proportional growth has been in workers aged over 45. This growth has been as a result of government subsidies that have enabled enterprises to register existing workers into traineeships and have thus encouraged the extension of accredited training to groups of workers that have not received such opportunities in the past. These developments, however, have been a by-product of the changes to training policy rather their focus and have been the subject of some controversy. Nevertheless, the data shows that employers are investing more heavily in the training of mature age and existing workers than previously, despite the lack of policy in this area and the lack of opportunities that have traditionally been available to them. The training of existing workers in clearly an area for policy formulation which would yield higher benefits to individuals and employers than a focus on increasing the overall quantum of training. Greater attention needs to be given to the reality of workers' experience of learning in the workplace, rather than myths about level of training expenditure in enterprises.

Conclusions

This paper has described the current state of employer sponsored training in Australia and its development over the 1990s. Long standing assumptions about the low training performance of Australian employers that have influenced Australian training policy in the past have been shown to have little
foundation in fact. By international standards, Australian employers appear to perform relatively well in comparison to employers in other developed nations. However, significant problems of under investment in training exist for certain groups of workers and in particular industries. Rather than a policy focus on increasing the overall level of investment in training by Australian employers, a more successful response may be to focus on policies that could widen opportunities to participate in training and increase the skill levels of existing and mature age workers in the Australian workforce.

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References


Smith, E and Keating, J (2003), From training reform to training packages. Social Science Press, Tuggerah Lakes.


(Footnotes)

1 The Training Practices Survey was also discontinued after the 1997 report and incorporated intro the Training Practices and Expenditure Survey for 2001. However, as with the TES, data from the TPES is not strictly comparable with the data from previous TPS.