Outcomes for apprentices and trainees in Australian small-enterprises

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INTRODUCTION

This paper presents an overview of some important issues relating to the Australian apprentice and traineeship system. It also examines research that is currently being undertaken to provide a more comprehensive understanding of employment-based training. The paper describes the research objectives, research methodology and some preliminary results from a study of new apprentice training in Australian small-enterprises.

The principal objectives of this paper are:

• to examine the objectives of the apprenticeship and traineeship system as they relate to Australian small-enterprises;

• to examine the effects small-enterprises have had on the apprenticeship and traineeship system; and

• to present methods suitable for deriving results from analyses of available apprentice and trainee data.

This paper outlines the approach that will be taken to research the outcomes for apprentices and trainees in Australian small-enterprises.

THE ISSUES

Apprenticeships and traineeships

The apprenticeship and traineeship system was designed ‘to improve the effectiveness of skill formation in Australia and to improve the employment prospects for young people’ (Portfolio Budget Statements 1999 - 2000 Employment Training and Youth Affairs Portfolio, Budget Related Paper No.1.5). A report into the quality of the Queensland employment-based training system suggested employment-based training has come to serve multiple objectives including:

...initial training for young people; an employment program; a training and skill recognition scheme for existing workers; and in many cases a de facto source of wages subsidies to firms (Schofield, 1999, p.iv).

The objectives of Queensland employment-based training suggested by Schofield (1999) serve to highlight the difference between the objectives of the system as they relate to the individual and the enterprise.

Apprenticeships and traineeships are now available in a wide range of occupations and industries. The potential for employment-based training has been expanded well beyond the traditional realms of the trades. In 1999 there were approximately 100 vocations in which an apprenticeship or traineeship could be undertaken.

Analysis of data from the national Contracts-of-Training database reveals that between 1996 and 1999 there were more than 30 additional occupations in which apprenticeships and traineeships were undertaken. In addition to the expansion of occupational and vocational coverage, there has also been a well-documented expansion in the numbers of people undertaking apprenticeships and traineeships since the mid 1990s. NCVER (1999, p.11) found between 1995 and 1998 there was ‘generally a very strong growth’ in numbers of apprentices and trainees. NCVER reported that in 1998 there were over 200 000 people undertaking a contract-of-training.
Research

Despite the continuing problem of shortages of skilled workers in most western countries, very little is known about the key determinants of apprentice intake (Merrilees, 1983, p.1).

Analysis of apprentice and trainee data collected by the NCVER (1999) found that in 1998 private sector employers and group training companies were responsible for the majority of Australian apprentices and trainee commencements. These two employer types accounted for 92.6 per cent of total apprentice and trainee commencements. Private sector commencements in 1998 were almost 103,000 while commencements with group training companies were over 21,000. Due to the dominance of private sector employers in the employment of apprentices and trainees, it is important that research, focussing on these enterprises, be conducted to provide a better understanding of the characteristics of firms that employ apprentices and trainees.

THE GROWTH OF SMALL-ENTERPRISES AND EMPLOYMENT OPPORTUNITIES

To classify the size of the enterprise a statistical definition of small, medium and large enterprises must be applied. It was originally intended that this project would consider both small and medium-size enterprises (SMEs). However, the terms ‘small-enterprise’ and ‘small and medium-sized enterprises’ are both elusive concepts. Depending on the institutional or historical context major criteria for defining the size of enterprises include, legal status, ownership status, the distinction between the operation of an enterprise at a craft or industrial level, or the industry in which a firm operates. Confusion over the definition is sometimes compounded by the introduction of separate establishments or workplaces of the same enterprise. In the context of economic policy, the concept of small-enterprises usually refers to the size of the legal entity. Therefore, the focus of this research will be on the employment size of the enterprise, not the workplace.

The Australian Bureau of Statistics (ABS), (ABS 1998) defines small-enterprises as those which employ less than 20 people. This definition also includes enterprises regarded as micro businesses, those employing less than five people. Medium-sized enterprises however are considerably larger and are defined as those enterprises employing more than 20 but less than 200 people.

In a study of the structure of Australian business, the Department of Employment Workplace Relations and Small Business (1999) found that approximately one million enterprises, 95 per cent, of the 1,051,900 enterprises in Australia were private-sector ‘small-enterprises’. These figures for small-enterprises were calculated using the ABS definition of those enterprises employing less than 20 employees. The focus of this research will be enterprises employing less than 20 people.

The emergence of the small-enterprise

In the early 1980s the concept of small-enterprises providing the key to economic regeneration and employment provision and employment creation may have appeared incongruous. Large-scale units of production and employment organised into vertically integrated multi-national corporations were the dominant model used to promote economic and social development.

The Organisation for Economic Cooperation and Development (OECD) noted as early as 1985 that there was a tendency towards the concentration of workers in small-enterprises in several of its member states, even having accounted for shifts in industrial structure and sectoral composition. The OECD also found that ‘small firms have been particularly important in net job growth over the past 10 or 15 years’ (OECD, 1985, p.80).

Changes to the size and structure of employment units have the potential of substantial implications for labour standards, the nature and quality of work, and terms of employment.

Birch (1979) focussed the attention of researchers to the employment roles being played by small firms when he claimed that small-enterprises created a disproportionate share of new jobs in the United States.

The Department of Employment, Workplace Relations and Small Business (1999) report that in 1996-97 there were more than one million enterprises in operation in Australia. Private small-enterprise employment accounted for 42 per cent, while private medium and large businesses employment accounted for 40 per cent.
The ABS (1998) in an analysis of contributions to employment generation found that in 1996-97 small-enterprises contributed 508,000 positions, or 53 per cent of total job generation and 265,000 positions or 50 per cent of total job destruction. A Productivity Commission report (Small business employment) also found that between 1983-84 and 1994-95 Australian firms with less than 20 employees accounted for 53 per cent of new employment (Productivity Commission, 1996). Whether this employment creation was because of the expansion of opportunities in small-enterprises or downsizing and category-shifting of medium and large enterprises remains open for debate.

The Productivity Commission (1996) identifies several factors that have influenced the expansion of employment in small-enterprises including:

- the contraction in the share of public employment;
- increases in the sectoral employment share of services; and
- reduction in the average manufacturing firm size.

In a related study examining the changing nature of work and its implications for VET in Australia it was reported:

The scale [size] of the enterprise...in which employment is found has changed...Self employment grew by 255,000 people between 1986 and 1993; the number of employees working for firms employing fewer than 20 people increased from 1,271,000 to 1,509,000 over the same period, while enterprises employing more than 100 people shed some 7000 jobs (Waterhouse et al. 1999, p.8).

Waterhouse et al. (1999) attribute the growing importance of small-enterprises to shifts in Australia’s industrial composition. Significant changes that have affected the employment composition include the downsizing and privatisation of public utilities and contractions in manufacturing employment.

Apprentices and trainees in small-enterprises

The new apprenticeship system incorporating both apprenticeships and traineeships has emerged from Australia’s traditional apprenticeship system. The traditional apprentice and traineeship system was developed to serve the needs of large-enterprises, and trade-based employment. The large-enterprise focus of Australia’s apprentice and traineeship system has meant that the employment-based training of firms other than large-enterprises has generally been overlooked. The question is therefore, are enterprises other than large-enterprises utilising the apprenticeship and traineeship system?

If we assume that apprenticeship and traineeship commencements are distributed evenly across all enterprises, and the percentage distribution of enterprises for 1998 equals that for 1995-96, then in 1998, 88 per cent (117,700) of all apprentice and trainee commencements are attributed to small-enterprises. An objective of this research is to look in detail to determine how apprenticeship and traineeship commencements are distributed across types of enterprises, industries etc.

In his study of learning in small businesses Kearns (1995, cited in NCVER 1998) concluded that there was a tendency for small-enterprises to see training as a cost, not an investment. This conclusion suggests that the extent of training, including employment-based training, for small-enterprises could be expected to be relatively low. If the 1998 figure calculated for small-enterprise apprentice and trainee commencements are accurate, then it is clear that Kearns’ (1995) perception of small-enterprise attitudes to training, at least as far as employment-based training is concerned, is not supported by the available data.

The increasingly important role in employment played by small-enterprises and the flexibility introduced with the new apprenticeship system makes it of interest to examine the characteristics of employment-based training in small-enterprises.

It is assumed those employment opportunities and conditions found in small-enterprises differ from those in medium and large-enterprises. The Productivity Commission (1996) found part-time employment is more prevalent in large-enterprises than in small-enterprises. Labour turnover tends to be higher in small-enterprises; small-enterprises tend to expend less on staff training than large-enterprises; and casual employment (i.e. employees not entitled to paid sick leave) is more prevalent
in small-enterprises. Employees in small-enterprises also receive lower average hourly earnings than employees of large-enterprises.

**PROPOSED RESEARCH METHODOLOGY**

This project will focus on both the individual and the enterprises. By presenting these two perspectives it will be possible to determine if the objectives of the current apprenticeship and traineeship system are being achieved. It will also be possible to identify if there are particular attributes that affect an enterprise or an industry to train apprentices and trainees.

**Research objectives**

The research has several objectives. The principal objective is to describe the role of apprenticeship and traineeship training as a means for skill acquisition for individuals employed in Australian small-enterprises.

From the perspective of the individual, the factors that influence the likelihood of an apprentice or trainee to remain in the employment of the enterprise after the completion of the apprenticeship or traineeship will be examined. From the perspective of the enterprise, the characteristics of firms' that effect their propensity to employ apprentices and trainees will be identified.

There are two hypotheses that will be tested as part of the research:

*Hypothesis one*  
- Australian small-enterprises are using the apprentice and traineeship system as a wage subsidy.

To test this hypothesis it is necessary to examine the labour market experiences of apprentices and trainees. The employment characteristics of apprentice and trainee graduates before, during, and following their training are indicators of the role being played by employment-based training.

The NCVER has managed three annual vocational education and training Graduate Destination Surveys (GDS) that commenced in 1997. The survey is conducted on during the last week of May and samples graduates from the previous calendar. The surveys collect information about graduates' general characteristics, fields of study, employment outcomes, occupations and industries of employment.

In this research, GDS data from 1997, 1998 and 1999 will be stacked to construct a cross-sectional time-series dataset. Stacking the GDS data from these three years provides data from a total of 24,500 apprentices and trainees. This sample represents approximately 18 per cent of all people who completed a contract of training between 1996 and 1998.

By stacking the results from three GDS surveys adequate data is available to enable appropriate analysis to be undertaken and conclusions to be derived. The stacked dataset will be analysed to determine the mobility of apprentices and trainees by enterprise size, industry and occupation. The cross-sectional nature of the stacked dataset will enable an analysis of the apprentices and trainees personal attributes that may influence their experiences in the labour force.

The time-series characteristic of the stacked dataset will also be used to determine if the conclusions drawn from the analysis are independent of the economic-cycle. That is, did the labour force experiences of the apprentices and trainees change throughout the three years included in the analysis.

To determine if the experiences of apprentices and trainees are dependent on the economic-cycles it is necessary to examine the experiences of the labour force as a whole. To enable a comparison, data from the ABS labour mobility surveys (conducted annually since 1972) will be used.

The labour mobility surveys provides information on persons aged 15-69 years who had worked at some time throughout the year. Details of job mobility, job tenure, number of employers or businesses during the year and reason for ceasing last job or changing locality are presented. Occupation, industry and duration of current and last job are also available. Estimates can be cross-classified by labour force demographics such as State, sex, age, marital-status and birthplace. This information will
be compared to the results obtained from the analysis of the GDS to determine if the employment experiences of apprentice and trainee graduates differs from that of the labour force as a whole.

Hypothesis two

- the level of technological change, enterprise structure and business practices of Australian small-enterprises affect their propensity to employ apprentices and trainees.

A study of small-enterprise in the United States found that enterprises involved in technological change, restructuring of the organisation and those with total-quality-management practices are more likely to provide training (Lankard-Brown, 1999, p.1). This project will assess if these findings hold in the Australian context.

To test this hypothesis it is necessary to analyse the business characteristics of Australian small-enterprises that employ apprentices and trainees. In testing hypothesis two, data from the Business Longitudinal Survey (BLS) will be used. The BLS is a longitudinal survey conducted between 1994-95 and 1997-98 collecting information from enterprises employing less than 200 people. The survey can be considered as two parts. The first part forms the longitudinal or continual part, and consists of the remaining live businesses, while the second part consists of the new business units added to the survey from the Business Register. If analysis is limited only to those enterprises in the longitudinal section then a sample of 4 068 enterprises is available.

The data collection unit used in surveys conducted for the BLS is the 'management-unit'. In most cases management-units are the same as the legal-entity owning the business. However, in some cases enterprises may cover a number of management units, in this case some small-scale management units, that is employing less than 20 people, contained in the BLS may actually be part of a medium-sized or large-enterprise.

The 1997-98 BLS included 24 questions regarding enterprise training practices, therefore, the BLS can be used to test hypothesis two. Importantly the survey included a question relating to the enterprises use of apprentice and trainee training.

Questions related to employment-based training were not included in previous waves of the BLS. However, the time-series nature of the BLS and the continuity of the enterprises examined by the survey enables longitudinal analysis of business attributes which can then be related directly to the propensity of a firm to employ apprentices and trainees.

Information on the growth and performance of Australian employing enterprises was collected in the BLS and selected economic and structural characteristics and trends of these businesses can be identified. For example, trends in labour turnover, measuring the numbers of persons commencing and ceasing employment from 1995-96 through 1997-98, can be analysed against the number of enterprises that employ apprentices and trainees.

Other characteristics that can potentially be analysed from the BLS when determining what affects the propensity for small-enterprises to employ apprentices or trainees, include:

- the characteristics of major decision makers, their educational attainment etc.;
- the business intentions and business practices of the enterprises, including those with documented formal strategic plans; and
- the training attributes of the enterprise.

**CONCLUSIONS**

Small-enterprises, and their group-training surrogates, are important employers of apprentices and trainees.

Work completed in the US and Europe has shown that small-enterprises continue to develop the majority of employment opportunities. Australian data supports these findings.
The purpose of the project is to identify the likelihood of apprentices and trainees continuing in employment after the completion of their training, and to identify the characteristics of small-enterprises that utilise the apprenticeship and traineeship system in Australia.

References


Lankard-Brown, B (1999) Training practices for small businesses, Practice application brief no.6, Center on education and training for employment, Ohio State University, Columbus, Ohio.


