New Apprenticeship pathways

An option for associate professionals?

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NCVER

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Key messages

- Associate professionals perform complex technical and administrative functions, often in support of professionals. Analysis of labour market statistics over the period 1996–2002 shows associate professionals to be the second fastest growing occupational group in the labour market, with a higher percentage of job openings than any other group. However, only one-third of existing associate professionals hold the normally stipulated minimum qualification of a diploma.
- Associate professionals are desperately needed in some countries. However, in some industries the training of associate professionals appears to be somewhat laissez faire, with loose and informal training arrangements, often with individuals pursuing training on their own accord. It is suggested that the formal arrangements, and structured training and work experience offered by New Apprenticeships may be utilised as an appropriate means for training associate professionals.
- Because associate professionals are a very diverse occupational group, the training arrangements employed must take special account of the nature of work they do. Training models which differ from the 'traditional' apprenticeship approach need to be considered.
- Two such models developed from discussions with respondents to this study comprise a period of full-time study towards a diploma (nominally one year) followed by two or more years of work-based training with an employer.
- There was a notable lack of awareness of the New Apprenticeship system in the six industries covered in this research, and, if the concept of apprentice-type training at associate professional level is to gain acceptance, a term other than 'apprentice' may need to be used.

Executive summary

New Apprenticeships is a training option already available to associate professionals (typically those performing complex technical and administrative functions, and qualified at diploma or advanced diploma levels). This study suggests that this apprenticeship-type training has real merit as a means of training associate professionals because it offers formal training agreements and incorporates structured training and work experience within contracts. Despite this, relatively few people undertake training as an associate professional through a New Apprenticeship.

The aim of this research was to explore the issues affecting the New Apprenticeship system as a training pathway for this segment of the labour market. Interviews were conducted with representatives from a variety of organisations across six industries (building and construction, finance, community services, tourism and hospitality, information technology and real estate). These interviews, summarised as a case study for each industry, are reported separately in a support document, which can be accessed on the National Centre for Vocational Education Research (NCVER) website: <http://www.ncver.edu.au>.

Labour market and vocational education and training (VET) data surveyed for this report indicate that:

- ✧ Associate professionals are a growing section of the labour market.
- ✧ The level of job openings for associate professionals is high.
- ✧ Vocational education and training is an important source of qualifications for this component of the labour market.

Interview respondents generally predicted growth and a healthy long-term future for the six industries chosen as the focus of the research. However, they highlighted significant changes impacting on the work roles of people at higher Australian Qualifications Framework (AQF) levels in all six industries. These changes included:

- ✧ greater complexity in the workplace as a result of new and changing technology and new working arrangements
- ✧ increased regulation and licensing requirements leading to greater accountability being placed on organisations and individuals in terms of quality and workplace practices
- ✧ increased emphasis on sound organisational administration and management.

Based on these changes, the demand for associate professionals is expected to grow.

Taken overall, interview respondents were generally positive in their outlook, both in terms of occupational prospects for associate professionals and likely acceptance by their industries of contracted work-based training arrangements like New Apprenticeships. This positive outlook is illustrated by the following comment from a finance industry association respondent:

> Increasingly there are degree programs in financial planning. This may be excluding people who don't have access to that level of education but have the ability to do well. If these people can be nurtured through different sectors of the industry via apprenticeship I think

> the concept is a very good idea. I also think it is a good idea for the smaller employers who may be able to groom somebody for the industry and get some relief in terms of financing the training and mentoring that they would do.

Training of associate professionals through contracted work-based training arrangements like New Apprenticeships is therefore recommended to employers, industry organisations and professional associations for more serious consideration. The main issues highlighted by the study which need to be taken into account in pursuing an apprenticeship model are outlined below.

Training arrangements

Training needs of apprentices and trainees at the Australian Qualification Framework level of diploma and advanced diploma (associate professional) are likely to be different from those at certificate III and IV levels. For example, training at associate professional level can be more 'academic' (that is, greater emphasis on theoretical knowledge as opposed to practical skills), and the work regime of associate professionals (for example, hours and responsibilities) may necessitate training arrangements different from those for the other workers. From discussions with respondents in this research, several different training models emerged which, it was suggested, might be more in tune with the needs of associate professionals. These training models included:

- a traditional single-stage apprenticeship in which the apprentice was indentured with an employer to undertake training capable of taking the individual from scratch to a fully qualified associate professional. Estimates of the time required to complete such an apprenticeship varied from three years to seven years.
- a two-stage apprenticeship in which the individual first completes a lower-level apprenticeship to certificate III followed by a second higher-level apprenticeship which extends to diploma or advanced diploma.
- a two-stage apprenticeship in which the individual first completes a one-year theoretical course as a private student, and upon successful completion of this study, commences an apprenticeship with an employer to undertake the remainder of the training.
- a second version of the preceding two-stage apprenticeship in which the individual is conditionally indentured to an employer during the first year of study off the job and, contingent upon successful completion of this initial study, automatically continues the apprenticeship with the employer, to undertake the remainder of the training.
- a fully work-based apprenticeship in which all training is done in the workplace, most of it on the job.

Some of these models are innovative and might involve new approaches to meeting the costs of training and wages.

Financial considerations

Currently, much of the training at associate professional level appears to be undertaken in the students' own time and at their own expense, being seen as the responsibility of the individual rather than the employer or government.

Australian Government training incentives, such as those available for apprenticeships, are not available above certificate IV level. The view offered by interview respondents was that incentives at diploma and advanced diploma level would encourage greater uptake of apprenticeships for associate professionals, particularly in view of the wages which may need to be paid. Similarly,

state government funding support for apprenticeships at diploma and advanced diploma level could act as an incentive to undertake associate professional apprenticeships.

Because of their greater age and maturity, and in many instances, their greater financial and family commitments, wage rates for apprentices at associate professional level could be a contentious issue. Apprentices at this level are more likely to expect a higher level of remuneration than apprentices at lower levels.

Promotion of New Apprenticeship training for associate professionals

To encourage the uptake of apprenticeships at associate professional level, promotion of the concept will be important. Responses in this study suggested there was a notable lack of awareness and understanding of the New Apprenticeship system in some of the industries concerned, particularly in relation to its application to training at associate professional level. In addition, there was a lack of familiarity with the term 'associate professional'. Any planning to promote the uptake of apprenticeships at associate professional level would need to take into account a need for increased awareness in the broader community as well as in industry, of the New Apprenticeship system and its potential for application at associate professional level.

Respondents also reported that the terms 'apprentice' and 'apprenticeship' would be seen by people in the industries concerned as being inappropriate for persons working at associate professional level because these terms would not adequately reflect the status of associate professional occupations. Apprenticeship was seen to be too closely associated with trades and lower-level occupations. The implication was that alternative terms to apprenticeship and apprentice might need to be adopted if the concept of apprenticeship training at associate professional level was to be readily accepted. Of note in this context was the fact that, in the Australian Capital Territory childcare industry, the term 'cadetship' was being used rather than apprenticeship.

Several other issues raised also warrant consideration in relation to publicising and promoting apprenticeships for associate professionals. They were:

- identification and promotion of the advantages of apprenticeship by comparison with existing associate professional training, advantages which include:
  - It is more clearly defined and structured training.
  - It offers greater security of employment during the period of training.
  - It enables increased sharing of responsibility for training (rather being the sole responsibility of the person in training).
- provision of a clear definition of the role of the associate professional in the industry
- availability of training incentives to employers (if they were extended to associate professional level).

Context

Introduction

There have been changes to the occupational structure of the labour force which have brought with them a demand for higher-level skills (although Cully [2003] points out that there has also been an increase in demand for lower-level skills). More particularly, analysis of occupational profiles indicates that job opportunities for associate professionals are increasing, with continuing strong job growth being predicted.

Associate professionals comprise a relatively diverse range of occupations within the Australian Standard Classification of Occupation (ABS 1997). Occupations listed under associate professionals include medical technical officers, financial dealers and brokers, massage therapists, chefs, enrolled nurses, and police. The definition for associate professionals provided by the Australian Bureau of Statistics (ABS) is:

> Associate Professionals perform complex technical and administrative support functions which require an understanding of the underlying theories and methods of a particular field and significant practical skills. Tasks are often performed in support of professionals.
>
> (ABS 1997, p.229)

Within the major occupational group designated associate professional there are five sub-major groups: science, engineering and related associate professionals; business and administration associate professionals; managing supervisors (sales and service); health and welfare associate professionals; and other associate professionals.

Associate professionals normally require education to the level of diploma/advanced diploma, or at least three years relevant experience.

The New Apprenticeship system was introduced in Australia in 1998 with the primary aim of providing a more flexible system of work-based training than that offered by the apprenticeship and training systems they replaced. One of the flexibilities introduced was the expansion of apprenticeships and traineeships to diploma/advanced diploma level qualifications. With an increase in the qualification levels available through New Apprenticeships, this mode of training may now be an option to help meet the demand for associate professionals.

Why employers may be interested in apprenticeships for associate professionals

There are various reasons why employers may be interested in considering apprentices and trainees as a means of meeting the demand for associate professionals:

- Apprenticeships provide structure, particularly for on-the-job training and real exposure to the demands of work. Registered training organisations cannot always provide a high standard of

practical experience, relying instead, for instance, on simulated practice. It is therefore generally thought preferable for the learner to be working for an employer while training.

- ✧ The employer knows the employee will generally be with them for the duration of training. Hence, because employees will not move to another employer after a few months, they provide stability to an enterprise.
- ✧ The term of an apprenticeship allows an employer to form a sound opinion of the value of the employee to the company, with a view to permanent employment after training.
- ✧ The employer has flexibility regarding the nature of the training provided, both on the job, and off the job (in terms of choice of electives most useful to the employer). There are opportunities for the employer to train the apprentice according to the needs of the business.
- ✧ For small businesses, apprenticeships offer opportunities to have workers who are productive within a short period of time.
- ✧ Apprenticeships through group training companies may also be an attraction, particularly where insufficient breadth of training through one employer is an issue. Originally conceived in the 1970s these companies employ apprentices and trainees, and lease them to host employers (NCVER 2001b). Group training companies also relieve the host employer of much of the burden associated with recruiting employees and attending to bureaucratic matters associated with apprenticeship.

Why employers may not be interested

The Commonwealth Government has a financial incentives program to encourage employers to take on apprentices and trainees. The aim of these programs is to 'to develop a more skilled Australian workforce that delivers long-term benefits for our nation and our international competitiveness' (Department of Education, Science and Training 2003b). In addition to the Commonwealth incentives program, states and territories may also provide their own incentives for employers. However, there are no incentives available at the diploma/advanced diploma qualification level, an area of particular relevance to associate professionals. This issue was mentioned in a report of the review of the Commonwealth New Apprenticeships Incentive Program. However, it received only limited consideration during consultations (Department of Education, Science and Training 2003d).

Aims and method

This research aimed to explore the possibility of expanding apprenticeship and traineeship opportunities for associate professionals. In particular, the research considered associate professional areas which might benefit from the take-up of New Apprenticeships.

The study comprised two major components.

The first component was an analysis of labour market and apprenticeship and traineeship statistics, in particular:

- ✧ labour market trends for associate professionals
- ✧ qualification levels of associate professionals
- ✧ numbers of apprentices training towards associate professional occupations.

Data on apprenticeships were obtained from the National Centre for Vocational Education Research's (NCVER) apprenticeship and traineeship collection. Other labour market data were largely based on ABS catalogue data.

The second component of this study was a series of interviews with key stakeholders aimed at gaining insight into how successfully New Apprenticeships were already working for associate professionals, their potential for application to associate professionals in other occupational areas, or why they may not be relevant or appropriate for some occupations within the associate professional group.

Associate professional occupations across six industries were examined. In choosing the occupations, consideration was given to choosing those which:

- were currently using the New Apprenticeship scheme
- already had training at the higher Australian Qualifications Framework (AQF) levels
- showed favourable labour market trends (for example, strong employment growth and good job prospects).

The occupations chosen and details of the criteria used to select them are given in the next section.

The interviews endeavoured to identify the structural characteristics of apprenticeships that would be appropriate for particular associate professional occupations; for example, what the nominal length of training should be (which gives some indication of the extent of training), and the means of training delivery (whether training should be work-based, campus-based, online, etc.). Protocols were developed for these interviews.

Sampling procedure: locating respondents

The procedure used to identify potential respondents for the study normally involved an initial approach to a relevant industry training advisory body for advice on who to contact for interviews. Most of the contacts for subsequent interviews were obtained from those interviewed using a 'snowball' sampling strategy. In choosing respondents from the pool of suggested contacts for each of the six industry categories, attention was directed to gaining representation from an industry training advisory body or industry association, a registered training organisation, a group training organisation, an employer association, an employer, and a union. While this was not possible in all instances, a broad cross-section of respondents was achieved. All opinions reported in this study come from an industry/employer perspective; student views were not canvassed.

Limitations

As a caveat to the research, it needs to be noted that associate professionals are a diverse group with considerable variation in job roles. It also needs to be noted that, within this group, job growth and demand for skills varies considerably. This means that obtaining a holistic impression is very difficult. As such, the findings of this research are not meant to be generalisable to all associate professional occupations, but rather to raise issues which may be worthy of further examination. Indeed, since there is a dearth of research into associate professionals as an occupational group (see also Curtain [2003]), very little material is available for comparative purposes.

The case studies

Selecting the occupations

In selecting associate professional occupations to be the subject of case studies in this research, VET statistics were analysed to identify occupations that showed relatively high numbers of students at diploma and advanced diploma levels.

Other criteria taken into account included the following:

- occupations in which there were already apprentices or trainees at associate professional level (Australian Standard Classification of Occupations 3000 series)
- occupations for which there appeared to be scope for introduction of, or growth in, training at associate professional level
- occupations for which training at AQF diploma or advanced diploma level could already be identified
- labour market trends that were favourable to the establishment and growth of apprenticeships at associate professional level. These trends were identified by means of the following measures contained on the JobOutlook website (see <http://www.jobsearch.gov.au/joboutlook>):
  - a history of employment growth at associate professional level over the preceding ten years
  - predictions (to 2007–08) of moderate-to-strong long-term employment growth
  - job prospects rated as good to very good.

In making the final selection, emphasis was also placed on spreading the choices across the five sub-major occupational groups contained within the associate professional major group. Because this criterion was given high priority, not all of the other criteria were met by each of the occupations finally selected.

Application of the above criteria led to occupations being chosen from the following industries: building and construction; finance; community services; tourism and hospitality; information technology; and real estate. It should be noted that some occupations span several industries; for example, chefs may work in the hospitality and health industries, and computing support technicians may be found in the information technology and retail industries.

In addition, discussion with people in the industries associated with the selected occupations showed that some of the Australian Standard Classification of Occupations occupational titles were not commonly used (for example, the term 'building inspector' was not as commonly used as was the term 'building surveyor'). Where this was the case, the more common occupational title was used during interviews. In the case of a diploma-qualified childcare worker (one of the occupations falling under the occupational grouping of social, welfare and security), there was no corresponding Australian Standard Classification of Occupations classification. A number of changes, such as a licensing requirement specifying a particular ratio of diploma-qualified childcare workers, were introduced after the current Australian Standard Classification of Occupations was developed.

The occupations selected are shown in table 1 along with details of information used in the selection process.

Table 1: Summary of attributes upon which case study occupations and industries were selected

Occupational category (JobOutlook) Occupation (JobOutlook) *ASCO coded occupation*	Number employed in occupation (JobOutlook at Feb 2002)	Number of Apprentices & Trainees Dip/Adv Dip (certificate IV)	Employment growth 10 years to Feb 2002 (%)	Employment growth 5 years to Feb 2002 (%)	Employment growth 2 years to Feb 2002 (%)	Predicted employment growth (to 2007–08)	Diploma courses available?	Job prospects
Building & construction								
Building, architectural & surveying associates	47 400	10	6.3	3.1	1.9	Moderate	Yes	Good
3121-11 Building associate		(2)						
3121-17 Building inspector								
Accounting, finance & management								
Finance adviser	30 500	0	11.3	14.9	12.3	Strong	Yes	Very good
3213-11 Financial investment adviser		(0)						
Social, welfare & security								
Welfare & community worker	25 200	304	2.8	6.4	-3.1	Strong	Yes	Very good
3421-19 Family support worker		(0)						
Computing & information technology								
IT technician (hardware), IT support	30 200	0	5.2	2.9	3.6	Moderate	Yes	Average
3294-11 Computing support technician		(888)						
Food, hospitality & tourism								
Chef	48 900		6.3	9.5	11.3	Strong	No	Very good
3322-11 Chef								
Marketing & sales representative								
Real estate agents & property managers	61 600	0	5.2	2.3	8.4	Moderate	Yes	Good
3293-11 Real estate agency manager		(1285)						
3293-13 Property manager								
3293-15 Real estate salesperson								

Table 2 lists the industries covered and the types of organisations consulted in developing the case studies.

Table 2: Numbers of respondents by industry and type of organisation

	Building & construction	Finance	Community services	Information technology	Chef	Real estate
Industry training advisory body	2	1	2	2	1	2
Industry association	1			1		
Registered training organisation	1	1	1	1	1	2
Group training company	1	1	2	1	1	
Employer association	2	1		1	1	
Employer or representative	1	1	1		4	2*
Union		1	2			
Apprentice/Trainee			1			
Total	**8**	**6**	**9**	**6**	**8**	**6**

Note: *This representative from a real estate agency was also a union representative.

The case study findings

In compiling the case studies, interviews were conducted with representatives of key stake-holding organisations, including employers, registered training organisations, group training organisations, industry and employer associations, industry training and advisory bodies, and unions. The interviews sought respondents' views on a number of issues:

- ✧ their perceptions of the state of the industry and its prospects for the future
- ✧ industry awareness of associate professionals and the role they could or might play
- ✧ industry awareness of the New Apprenticeship system and its application to associate professionals
- ✧ barriers to take-up of apprenticeships at associate professional level
- ✧ financial incentives for training of apprentices at associate professional level
- ✧ how apprentice associate professionals should be trained.

In reading these case study findings it is important to keep in mind that, because they were developed from interviews with a small sample of 43 respondents (see table 2), the findings are not intended to be representative of the occupations surveyed. Rather, they highlight issues respondents have raised which should be considered if the concept of apprenticeships for associate professionals is to be further developed.

Occupational structure of the labour force

Australia's occupational structure for the period 1996–2002 is shown in table 3. All major occupational groups except advanced service and clerical, and intermediate production have recorded an increase in numbers in the labour force. The largest percentage increases in labour force numbers have been for the groups of professionals (27.3% increase), associate professionals (24.3%), and intermediate service and clerical (14.0%). These three groups are also expected to show the strongest employment growth for the period 2000–01 to 2008–09.

Within the associate professional major group, the sub-major group business and administration associate professionals showed by far the greatest growth over the period 1996–2002 with an increase of 58.2%, nearly five times that of the 12.0% growth for the labour force as a whole. This sub-major group is also expected to experience continued strong growth up to 2008–09 (22.7%). The other associate professional sub-major groups also showed growth in excess of the labour force, with the exception of science, engineering and related associate professionals which shrank by 10.7% and was expected to increase its labour force by only 4.4% to the period 2008–09.

Table 3: Occupational change 1996–2002 and projected growth 2000–01 to 2008–09

Occupation	1996 ('000s)	1999 ('000s)	2002 ('000s)	% Change 1996–2002	Projected growth (%)
1 Managers and administrators	624.4	637.8	687.6	10.1	10.9
2 Professionals	1389.7	1543.4	1769.7	27.3	20.3
3 Associate professionals	867.1	993.0	1077.9	24.3	14.1
Science, engineering and related associate professionals	*129.8*	*132.2*	*115.9*	*-10.7*	*4.4*
Business and administration associate professionals	*229.1*	*301.9*	*362.4*	*58.2*	*22.7*
Managing supervisors (sales and service)	*370.9*	*412.1*	*431.6*	*16.4*	*11.6*
Health and welfare associate professionals	*55.2*	*57.2*	*67.8*	*22.8*	*5.2*
Other associate professionals	*82.1*	*89.6*	*100.2*	*22.1*	*12.6*
4 Tradespersons and related workers	1141.1	1172.5	1171.7	2.7	3.5
5 Advanced clerical and service workers	403.1	376.6	388.2	-3.7	-1.3
6 Intermediate clerical, sales and service workers	1394.4	1494.2	1590.2	14.0	15.3
7 Intermediate production and transport workers	793.3	775.2	789.6	-0.5	6.2
8 Elementary clerical, sales and service workers	862.2	868.8	938.6	8.9	5.0
9 Labourers and related workers	834.5	869.9	896.6	7.4	5.7
All occupations	**8309.8**	**8731.4**	**9310.1**	**12.0**	**10.8**

Source: Unpublished data from the ABS Labour Force Survey and Centre for Policy Studies, Monash University, cited in the Department of Education, Science and Training (2003a)

In the early stages of the interviews, respondents were asked several preliminary questions about the state of the industry and the demand for associate professionals. Their responses suggested that only five of the six industries targetted were experiencing growth (the exception being

information technology which was 'consolidating after the dot.com bubble burst', as one respondent put it). However, all generally predicted a healthy future for their industry and the associate professionals within them.

The respondents painted a picture of change in their industries as a result of expansion and through added complexity. Increasing obligations on companies and employees to comply with government regulations, licensing requirements and industry codes also contributed to substantial change within enterprises. New conditions imposed by government regulations, licensing requirements etc. necessitated more employees at diploma and advanced diploma (associate professional) levels, particularly with qualifications in management, human relations, finance, and technical areas. The combined effects of impending retirements of senior people in an ageing workforce and a lack of suitably qualified people to replace them when they retired added to the demand for higher-level employees.

Educational attainment

The educational attainment of employees provides a broad measure of skills in the workforce, although it does not consider skills obtained through partial completion of qualifications, or through training received at work (ANTA 2002). Table 4 shows the educational attainment of employees in the workforce by major occupational group.

Table 4: Level of highest non-school educational qualification for employed persons May 2002, percentage

Occupation	Bachelor degree or higher	Advanced diploma/ diploma	Cert. III/IV	Cert. I/II	Level not determined	Total non-school	Without non-school	Total
1 Managers and administrators	31.3	10.1	16.6	6.4	1.3	**65.7**	**34.3**	**100.0**
2 Professionals	69.7	13.0	4.6	2.2	0.6	**90.1**	**9.9**	**100.0**
3 Associate professionals	20.7	12.7	18.4	9.4	0.7	**61.9**	**38.1**	**100.0**
Science, engineering and related associate professionals	*18.6*	*23.1*	*28.5*	*9.0*	*0.9*	***80.1***	***19.9***	***100.0***
Business and administration associate professionals	*30.4*	*11.0*	*12.3*	*12.0*	*0.5*	***66.2***	***33.8***	***100.0***
Managing supervisors (sales and service)	*13.9*	*7.6*	*20.4*	*7.8*	*0.6*	***50.3***	***49.7***	***100.0***
Health and welfare associate professionals	*16.8*	*28.8*	*32.4*	*11.3*	*0.0*	***89.3***	***10.7***	***100.0***
Other associate professionals	*21.9*	*18.3*	*11.1*	*7.8*	*1.4*	***60.5***	***39.6***	***100.0***
4 Tradespersons and related workers	2.8	4.1	56.1	5.3	0.5	**68.8**	**31.2**	**100.0**
5 Advanced clerical and service workers	11.9	10.6	8.9	17.5	1.1	**50.0**	**50.0**	**100.0**
6 Intermediate clerical, sales and service workers	10.9	8.9	12.3	13.6	0.9	**46.6**	**53.4**	**100.0**
7 Intermediate production and transport workers	2.6	3.0	19.0	6.1	0.6	**31.3**	**68.7**	**100.0**
8 Elementary clerical, sales and service workers	5.8	5.0	7.8	8.2	0.4	**27.2**	**72.8**	**100.0**
9 Labourers and related workers	3.3	3.2	12.7	7.0	0.3	**26.5**	**73.5**	**100.0**
All occupations	**21.6**	**8.2**	**17.5**	**7.8**	**0.7**	**55.8**	**44.2**	**100.0**

Note: Some figures need to be treated with caution as they have a relative standard error of greater than 25%.
Source: Derived from unpublished data from the ABS Education and Work Survey, May 2002

The occupations which have the largest proportion of employees qualified at certificate III/IV level are tradespersons (56.1%), intermediate production and transport workers (19.0%), and associate professionals (18.4%). A large majority of certificate-level training takes place within the VET sector.

About 13% of professionals and associate professionals are qualified to the diploma/advanced diploma level. While a significant proportion of diploma/advanced diploma-level qualifications are obtained through the VET sector, they are also obtained through the higher education sector. It is notable that only about one-third of associate professional employees possess a diploma or higher (the stipulated qualification for associate professionals, other than extensive experience).

Within the associate professionals group, the health and welfare sub-group has 28.8% of its labour force qualified to diploma/advanced diploma level, and 32.4% qualified to certificate III/IV level, while for science, engineering and related associate professionals, 23.1% are qualified to diploma/advanced diploma level, and 28.5% to certificate II/IV level. Taken as a whole, these two sub-groups are the most highly qualified of the five sub-groups which fall within the associate professional classification.

Provision of training

Within the sphere of vocational education and training, respondents to this study perceived technical and further education (TAFE) institutes as the major provider of training for associate professionals. Other providers also working in the VET sector are group training companies, industry associations and employer associations. Most of the training for associate professionals is termed 'cadetship' or 'traineeship' rather than apprenticeship. As will be discussed later, some employers have traditionally preferred to hire university degree holders for associate professional positions rather than VET diploma holders. Offering New Apprenticeships at associate professional level may encourage greater acceptance of VET-based diploma/advanced diploma qualifications.

Group training, whereby a group training company acts as employer and takes on the employer responsibility for overseeing training of apprentices and trainees on behalf of a number of host employers, has also been used in some instances. Typically, group training was conducted by companies formed specifically for the purpose, or by employer or other industry associations which took on the training responsibility as a service to the industry.

In the occupations considered in this study, group training company involvement in apprenticeships at associate professional level was most often found in childcare. However, based on their experience of group training at lower levels, most respondents spoke favourably about the potential benefits of group training for associate professional apprentices. They saw the following advantages in group training:

- ✧ a means of enabling smaller employers to cope with large fluctuations in their workload (as occurs, for example, in the finance and building and construction industries)
- ✧ as a means of enabling businesses to reduce costs
- ✧ in the case of companies with narrow-based work roles (for example, in the community services industry), as a means for ensuring that apprentices received comprehensive, broad-based training.

One respondent noted that groups of employers might themselves form associations or networks for broadening apprentice learning through arranged exchanges of apprentices. Such exchanges would enable apprentices to gain experience outside that available from their primary employer, particularly if they were employed by a relatively small employer. However, it must be emphasised

that some employers, with concerns about confidentiality and competition, might be reluctant to see their apprentices at associate professional level moving to other employers.

> I think a group training scheme would be a very good idea because some of the small dealers say they would like to take someone on but there would be times when they are so incredibly busy that it would not be appropriate. I think it would work very well for these employers.
>
> Employer association—finance

> Without a doubt, group training would help the small employer ensure that the trainee received the necessary breadth of training.
>
> Group training organisation—finance

Some registered training organisations indicated they would be keen to deliver training to apprentices at associate professional level should the concept take hold. However, it appeared that employers might first need to be convinced of the benefits of apprenticeships in their industry. One large group training company noted that it had tried very hard to win employers over to the idea of apprenticeships in the information technology industry (an industry which has had little experience of apprenticeship), but with little success.

Who receives the training?

Currently, much of the training at associate professional level appears to be undertaken by students in their own time, many of whom are already working in the industry and studying part-time. In fact, in some industries, those undertaking associate professional training are often persons who are building on skills previously acquired; for example, one respondent suggested that many persons training at associate professional level in the building industry would have previously completed study at certificate III (through apprenticeship) or certificate IV.

Respondents held the view that there could be many aspiring associate professionals who would welcome the opportunity to train by means of apprenticeship if the conditions of apprenticeship, particularly rates of pay and length of training, were suitable.

Job openings for new entrants

Table 5 provides information on job openings for new entrants by major occupational groups. The second column in table 5 provides data for the average annual net replacement rate. This rate is defined as jobs available for new entrants to an occupation due to people leaving the occupation minus jobs taken up by re-entrants to the labour force (Shah et al. 2002). The third column in the table shows job growth for major occupations for the five years to 2001–02. Addition of net replacement demand and job growth then provides the estimate of job openings for new entrants into an occupation which is shown in the fourth column.

Table 5: Job openings for new entrants by major occupation group, percentage

Occupation group	Average annual rate, 1997–98 to 2001–02		
	Net replacement	Growth	Job openings
1 Managers and administrators	2.3	2.8	5.1
2 Professionals	1.6	3.7	5.3
3 Associate professionals	1.8	4.1	6.0
Science, engineering and related associate professionals	*2.0*	*-0.5*	*2.0**
Business and administration associate professionals	*1.6*	*7.6*	*9.2*
Managing supervisors (sales and service)	*1.8*	*3.7*	*5.5*
Health and welfare associate professionals	*2.2*	*1.2*	*3.4*
Other associate professionals	*2.3*	*3.7*	*6.0*
4 Tradespersons and related workers	2.2	0.5	2.7
5 Advanced clerical and service workers	2.1	0.3	2.5
6 Intermediate clerical, sales and service workers	2.0	2.4	4.4
7 Intermediate production and transport workers	2.0	0.1	2.2
8 Elementary clerical, sales and service workers	3.9	0.8	4.7
9 Labourers and related workers	2.8	0.2	3.0
All occupations	**2.3**	**1.9**	**4.2**

Note: *Where job growth is negative, the job opening figure is the same as net replacement as in this instance job growth contributes nothing to openings.

Source: ANTA (2002, ABS data analysed by the Centre for the Economics of Education and Training (CEET), Monash University)

As can be seen from the table, associate professionals enjoy a greater percentage of job openings for new entrants (6.0%) and growth rate of job openings (4.1%) than any other occupation group. Within the associate professional major group, business and administration associate professionals have had the highest rate of job openings (9.2%), and science, engineering and related, the lowest (2.0%) (unpublished data supplied by Centre for the Economics of Education and Training).

The New Apprenticeship system

Basis of the New Apprenticeship system

The New Apprenticeship system began in 1998 and brought together under one system all apprenticeships and traineeships (NCVER 2001a). The overriding aim of the New Apprenticeship system was to introduce a more flexible system of work-based contracts of training which lead to nationally recognised qualifications (Dockery et al. 2001). Some of these flexibilities include:

- expansion of contracts of training to certificate IV, and diploma/advanced diploma levels (Traditionally, 'trade' apprenticeships were at AQF certificate III level and traineeships at certificate I and II levels.)
- broadening of contracts of training across all non-professional occupations in the labour market (as opposed to being focused on the traditional trades)
- introduction of 'user choice'. This is one of the key features of the system and involves the clients having choice in the use of training providers for the off-the-job component of New Apprenticeship training. User choice also means that employers can negotiate in relation to the content, method of delivery, and sequencing of the training
- extension of training contracts to part-time as well as full-time employees
- flexibility regarding the length of training (Traditional contracts of training for apprenticeship were for a fixed period, usually four years full-time.)
- possibility of students commencing the off-job training component of an apprenticeship while still at school (NCVER 2001a).

Numbers of apprentices and trainees in training have been growing gradually, although there has been a marked increase since 1998. The proportion of apprentices and trainees in training in the total workforce has also been increasing, from 1.9% in 1996 to 4.0% in 2002.

The composition of the apprentice and trainee population has changed since 1998. Training statistics (NCVER 2003) show that the changes include:

- strong growth in apprentices and trainees aged 40 and over
- an increase in the participation rate of females
- increases in the proportion of school-based and part-time apprenticeships
- strong growth (albeit from small bases) in non-trade occupations such as associate professionals, and in training contracts at certificate IV and above.

Changes in the occupational structure for apprentices and trainees

Table 6 shows how the composition of apprentices and trainees in training has changed in terms of major occupational groups over the period 1995–2002 .[1]

Table 6: Number and share of apprentices and trainees in training for December quarter 1995–2002

Occupation	1995		1999		2002	
	'000	%	'000	%	'000	%
1 Managers and administrators	1700	1.2	1638	0.6	5543	1.5
2 Professionals	67	0.0	1678	0.7	2492	0.7
3 Associate professionals	1887	1.3	6630	2.6	21 443	5.7
Science, engineering and related associate professionals	*741*	*0.5*	*1598*	*0.6*	*1426*	*0.4*
Business and administration associate professionals	*420*	*0.3*	*2773*	*1.1*	*10 166*	*2.7*
Managing supervisors (sales and service)	*0*	*0.0*	*1279*	*0.5*	*7823*	*2.1*
Health and welfare associate professionals	*212*	*0.1*	*232*	*0.1*	*940*	*0.3*
Other associate professionals	*514*	*0.4*	*756*	*0.3*	*1089*	*0.3*
4 Tradespersons and related workers	120 785	85.4	130 204	51.0	13 2202	35.4
5 Advanced clerical and service workers	72	0.1	240	0.1	10 716	2.9
6 Intermediate clerical, sales and service workers	10 225	7.2	58 789	23.0	102 514	27.5
7 Intermediate production and transport workers	855	0.6	15 580	6.1	47 403	12.7
8 Elementary clerical, sales and service workers	2994	2.1	19 183	7.5	18 173	4.9
9 Labourers and related workers	2807	2.0	21 232	8.3	32 712	8.8
Total	**141 392**	**100.0**	**255 182**	**100.0**	**373 199**	**100.0**

Source: NCVER Apprenticeship collection March 2003, collection 35

Numbers of apprentices and trainees in training increased for all occupational groups over the period 1995 to 2002. For associate professionals, numbers of apprentices and trainees have increased each year over the period (from 1887 in 1995 to 21 443 in 2002). Most of the growth in apprentices and trainees within associate professionals has been for business and administration associate professionals (from 420 in 1995 to 10 166 in 2002), and managing supervisors (from 0 to 7823) (NCVER Apprenticeship collection March 2003).

There have also been changes in the share of apprentices and trainees in training for the major occupational groups. While tradespersons still had the largest share of apprentices and trainees in 2002 (35.4%), this is considerably less than in 1995 (when it was 85.4%). This decline in share for tradespersons has, of course, been balanced by increases in the share of apprentices and trainees for the other major occupational groups. For associate professionals, the share has increased from 1.3% in 1995 to 5.7% in 2002. This increase has, however, not been as large as for some of the other major occupational groups, notably intermediate service and clerical, intermediate production, and labourers.

[1] When looking at these figures it is important to keep in mind that the New Apprenticeship scheme was introduced in 1998.

More light can be shed on the movements of apprentices and trainees in training over time by examining apprentices and trainees as a percentage of the labour force. Table 7 shows that there has been an increase in apprentices and trainees as a proportion of the labour force for all occupational groups over the period 1996–2002. The proportion for associate professional apprentices and trainees increased from 0.4% of the labour force in 1996 to 2.0% in 2002; however, this increase is somewhat lower than for the advanced service and clerical, intermediate service and clerical, intermediate production, and labourers major groups. Within associate professionals, the largest increase in apprentices and trainees has been for business and administration associate professionals (from 0.4% of the business and administration associate professional labour force in 1996 to 2.8% in 2002).

Table 7: Apprentices and trainees as a percentage of the labour force by occupational category 1996–2002, December quarter

Occupation	1996	1999	2002	Change 1996–2002	Change 1999–2002
1 Managers and administrators	0.4	0.3	0.8	0.4	0.5
2 Professionals	0.0	0.1	0.1	0.1	0.0
3 Associate professionals	0.4	0.7	2.0	1.6	1.3
Science, engineering and related associate professionals	*1.1*	*1.2*	*1.2*	*0.1*	*0.0*
Business and administration associate professionals	*0.4*	*0.9*	*2.8*	*2.4*	*1.9*
Managing supervisors (sales and service)	*0.0*	*0.3*	*1.8*	*1.8*	*1.5*
Health and welfare associate professionals	*0.4*	*0.4*	*1.4*	*1.0*	*1.0*
Other associate professionals	*1.4*	*0.8*	*1.1*	*-0.3*	*0.3*
4 Tradespersons and related workers	10.8	11.1	11.3	0.5	0.2
5 Advanced clerical and service workers	0.1	0.1	2.8	2.7	2.7
6 Intermediate clerical, sales and service workers	1.4	3.9	6.4	5.0	2.5
7 Intermediate production and transport workers	0.2	2.0	6.0	5.8	4.0
8 Elementary clerical, sales and service workers	0.7	2.2	1.9	1.2	-0.3
9 Labourers and related workers	0.8	2.4	3.6	2.6	1.2
All occupations	**2.0**	**2.9**	**4.0**	**2.0**	**1.1**

Source: Derived from: unpublished data from the ABS Labour Force Survey, and NCVER Apprenticeship collection March 2003, collection 35

There are two factors which may help to account for the apparent slow uptake of apprenticeship at associate professional level. The first was a failure to identify associate professional occupations as such. While most respondents were able identify occupations in their industry which fitted the description used for this research, they almost invariably went on to say that the employees were called something else, usually 'para-professionals' (or in some cases, even 'professionals').

> Associate professional is not a term used in the industry. In community services, people having a diploma are regarded as being professionals. In the health industry they may be referred to as para-professionals.
>
> National industry training advisory body—community services and health

The second factor contributing to slow uptake of apprenticeship at associate professional level was lack of awareness in some industries of the New Apprenticeship system. Awareness was generally highest in industries which had a history of apprenticeship use, such as building and construction, and tourism and hospitality. There was also some awareness of the concept in the

childcare industry. Where a structured combination of employment and training was offered at levels above certificate III, it was usually identified as being through a 'cadetship' or 'traineeship'. In most cases (childcare was an exception) there was acknowledgment that the contractual arrangements for cadetships and traineeships were somewhat looser than those for apprenticeships. There was also an issue concerning the nomenclature used, the term 'apprenticeship' being deemed inappropriate for associate professional occupations.

> There is a low level of awareness of the apprenticeship scheme. People in the industry don't see how it relates to them. They see apprenticeships as applying to the trades, young people, and males.
>
> Union representative—welfare and community services

> Employers are aware of flexibilities inherent in New Apprenticeships, although they don't understand all of the rules surrounding them.
>
> Group training company chief executive officer—hospitality

Age groups of apprentices and trainees

Traditional apprenticeships have always focused on young people from school leaving age to about 18 years. One of the aims of the New Apprenticeship scheme was to increase the number of adult apprentices and trainees.

As can be seen from table 8, almost 19% of all apprenticeships were being undertaken by people over 40, and about 44% by people over 25. For the associate professional group, nearly 32% of apprenticeships were being undertaken by people over 40, and 70% over the age of 25. In contrast, only about 10% of apprenticeships at the associate professional level were undertaken by people aged 15–19 (school leaver age). These figures generally support the perception of some respondents that associate professionals tend to fall within the higher age ranges. However, there were some notable exceptions within the associate professional group: while a majority of apprentices in three of the five sub-groups were aged 25 years and above (business and administration, 73.6%; managing supervisors, 76.4%; and health and welfare, 64.9%), the converse was true for science, engineering and related, and other (71.3% and 58.1% aged less than 25, respectively).

Table 8: Apprentices and trainees by age groups for different occupational levels, December 2002, percentage

Australian Standard Classification of Occupations	15–19*	20–24	25–39	40+	Total
1 Managers and administrators	8.1	18.0	46.0	28.0	100%
2 Professionals	22.7	24.1	31.3	21.9	100%
3 Associate professionals	10.6	19.8	38.0	31.7	100%
Science, engineering and related associate professionals	*36.7*	*34.6*	*19.9*	*8.7*	*100%*
Business and administration associate professionals	*10.6*	*15.8*	*33.5*	*40.1*	*100%*
Managing supervisors (sales and service)	*3.9*	*19.7*	*48.1*	*28.3*	*100%*
Health and welfare associate professionals	*9.8*	*25.3*	*33.1*	*31.8*	*100%*
Other associate professionals	*25.7*	*32.4*	*34.5*	*7.4*	*100%*
4 Tradespersons and related workers	42.9	42.2	11.8	3.1	100%
5 Advanced clerical and service workers	17.7	22.3	32.0	28.0	100%
6 Intermediate clerical, sales and service workers	31.7	24.1	25.2	19.0	100%
7 Intermediate production and transport workers	4.3	9.1	41.2	45.5	100%
8 Elementary clerical, sales and service workers	31.7	21.8	29.4	17.1	100%
9 Labourers and related workers	18.8	16.2	32.7	32.3	100%
All occupations	**29.0**	**27.4**	**24.7**	**18.9**	**100%**

Note: * Includes a number of apprentices aged less than 15 years.
Source: Derived from NCVER Apprenticeship collection March 2003, collection 35

Quality of New Apprenticeship training outcomes for associate professionals

The data on associate professional level apprentices and trainees indicate that there were over 21 000 apprentices and trainees in training for the associate professional occupational group, accounting for 5.7% of all apprentices and trainees (refer table 6). However, in a submission to the Senate Enquiry on Current and Future Skills Needs, Curtain (2003) queries whether an examination of AQF qualification levels independent of expected duration of the apprenticeship or traineeship is an adequate guide to skill levels. That is, do apprenticeships and traineeships of two years or less expected duration (for a given AQF level) impart the same level of skills as those of three years or more? In addition, there is also the issue of whether qualifications at AQF certificate III and below impart a sufficient level of skills for many associate professional occupations.

In this context, the spread of qualification levels and expected durations of apprenticeships for associate professionals contained in table 9 suggest that there may be a lack of consistency in the level and extent of training undertaken for associate professional qualifications. This notion is supported by the views of several respondents which suggest that training arrangements at associate professional level in some industries (for example, building and construction, and finance) appear to be somewhat laissez-faire. While qualification requirements may have been adequately specified, the means by which the training was to be undertaken were not. Training arrangements were said to be rather loose or informal and employees could be left to pursue training entirely through their own initiative. By comparison, training arrangements under traditional apprenticeship agreements have been clearly structured and closely monitored.

Wider implementation of New Apprenticeships for associate professionals therefore, might offer the potential for more clearly defined training paths and tighter contracts of training with more clearly stated obligations in terms of employment, work performance and training, all of which could contribute to more widely recognised and better accepted qualifications.

Table 9: Expected duration of New Apprenticeships for associate professionals by qualification level, December 2002, percentage

Qualification	< 1 yr (%)	1–2 yrs (%)	2–3 yrs (%)	> 3 yrs (%)	Total (%)	Total (number)
Certificate II	51.7	41.6	3.8	2.9	**100**	**998**
Certificate III	10.7	65.1	22.4	1.8	**100**	**10 665**
Certificate IV	16.7	52.0	21.6	9.6	**100**	**9 282**
Diploma	0.0	2.7	3.1	94.2	**100**	**450**
Advanced diploma	0.0	0.0	0.0	100.0	**100**	**48**
All occupations	**15.0**	**56.9**	**20.8**	**7.3**	**100**	**21 443**

Source: Derived from NCVER Apprenticeship collection March 2003, collection 35

Table 9 shows that, in December 2002, there were, at the associate professional level, just under 500 apprentices and trainees in training at the diploma/advanced diploma level, representing only about 2.3% of all associate professional apprentices and trainees. Of the remainder, about 43% were at certificate IV level, with 55% at certificate III. Of those undertaking apprenticeships and traineeships at lower AQF levels, most were of no more than two years duration. Most of the occupations falling under the associate professional classification, according to Australian Standard Classification of Occupations (ABS 1997) define the skill level for these qualifications to be AQF diploma level or above, and/or three years experience. The data in table 9 highlight the large degree of variability that exists across the associate professional occupational group. Part of this variation can be attributed to classification anomalies which have arisen since the system's inception in 1997.

Options for employment/ training arrangements

The traditional concept of apprenticeship

Traditionally, apprenticeships have been a single-stage process in which employees are indentured for a nominal period (typically three or four years) during which time they work for their employer and complete their training. Upon achieving competence in the requisite areas, the apprentices are 'signed off' as qualified and are free to leave the employer if they wish. If competencies can be achieved at a faster-than-average rate, or if recognition of prior learning or recognition of current competency is awarded, the length of apprenticeship can be less than the nominal time specified. In this traditional approach, an individual can enter into an apprenticeship without any prior industry knowledge or skills and exit the apprenticeship fully qualified.

Some New Apprenticeship training models for associate professionals

The following training models for training of apprentices at associate professional level are a synthesis of the many comments and suggestions received from respondents interviewed during this research project. Because they are a synthesis of ideas—some new, some old, some radical, some conservative—the resulting training models do not all fit the traditional concept of apprenticeship. It must be emphasised that they are not presented as proposals for action, but rather, as a compendium of ideas for consideration.

Three distinct training formats were identified:

- ✧ the traditional single-stage format
- ✧ a two-stage format
- ✧ fully work-based training.

Traditional single-stage format

Under this approach the person would enter into a conventional apprenticeship and train to associate professional level in the occupation of their choice. A complete training course would be undertaken or some element of recognition of prior learning/recognition of current competencies for knowledge and skills already possessed could be incorporated.

The nominal period of training considered by respondents to be necessary for a person to train from scratch to associate professional level ranged from around two to six years. However, while it was believed that a person might be able to master the technical aspects of the job in as little as two years, a longer period was considered necessary to allow them to accumulate the experience, develop the maturity, and in some cases, attain an age needed to work effectively at associate

professional level (for example, gaining the confidence of clients when working as a financial planner).

> I would envisage it taking four to five years for a person to do a complete 'New Apprenticeship' at the normal rate of work. This length of time is necessary to give them the practical exposure they need to exit with the necessary skills.
>
> Industry training advisory body—building industry

A respondent (from an industry training advisory body in the building industry) made the interesting observation that training from scratch could be preferable to having a person come into the industry with the requisite qualification but limited industry experience (see following quote).

> I cannot see any difficulties in somebody going all the way up to level five or six by an apprenticeship. In fact the opposite is the case, it is more appropriate than someone just coming up through an academic process. Someone who studies project management or project supervision and then comes in with just the theory and suddenly has to deal with groups of people, such as union delegates on the job can have a problem. People who have come up to that level through the job are already familiar with these sorts of practicalities.
>
> Industry training advisory body—building Industry

Of course, apprenticing existing workers who seek to raise their qualification level would be advantageous in that they already posses the underpinning industry knowledge and experience. The prospect of existing employees being able to advance their qualifications to associate professional level through apprenticeship was seen as a potentially valuable avenue of training.

Two-stage format

As an alternative to the traditional single-stage apprenticeship, one respondent raised the possibility of a two-stage process. When the idea was subsequently raised in discussion with other respondents, nine of the ten who felt able to comment on the idea viewed a two-stage format favourably. Of the two models of the two-stage format which emerged from the discussions (see following), six favoured the consecutive apprenticeships approach (model 1), two favoured the one-year intensive study approach (model 2) and one liked both approaches.

Model 1 (consecutive apprenticeships)

In effect, this model comprises two consecutive apprenticeships, the first taking the person to a certificate III or IV qualification, the second continuing on up to a diploma or advanced diploma (associate professional) qualification.

For example, respondents suggested that chef training could comprise a normal apprenticeship in cookery to provide the underpinning basic industry knowledge and technical skills, followed by a second apprenticeship covering the higher-level knowledge and skills needed by a chef (such as various aspects of personnel, kitchen and business management). Or in the building industry, a person could initially complete an apprenticeship in a trade, followed by a higher-level apprenticeship to qualify as, say, a building inspector.

Model 2 (full-time study, followed by job-based training)

In this model, the first stage comprises one year of full-time study with a registered training organisation, covering the underpinning knowledge and theoretical skills. This is followed by a second stage (nominally of two or three years) in which the person is in full-time employment with the employer during which time they undertake intensive on-job training. One respondent, a group training provider, likened the first stage to 'pre-apprenticeship course' undertaken by persons preparing themselves to apply for and enter into a traditional (certificate III) apprenticeship.

> It [model 2] would be similar to pre-apprenticeship in which the first twelve months of study done at TAFE would represent a pre-apprenticeship component [of the associate professional apprenticeship].
>
> Group training provider—information technology industry

It was suggested that this model, because of the intensity of the first year of study, followed by two or three years on-the-job training, might provide an adequate training from scratch to a full qualification as associate professional in as little as three or four years (leaving aside age, maturity and length of experience considerations).

This model emerged during some of the early interviews conducted with industry respondents. Discussion of the concept with subsequent respondents led to the identification and refinement of two versions (A and B). Table 10 lists their essential characteristics.

Table 10: Two versions of a two-stage New Apprenticeship model for associate professionals

	Version A	Version B
Stage 1 (1 year full-time study)	Full-time study component undertaken as a private student, outside New Apprenticeship system.	Conditional apprenticeship starts here. Apprenticeship continues if this stage is passed.
Transition	*Apprenticeship commences at stage 2 below.*	*Stage 1 passed, apprenticeship continues into stage 2.*
Stage 2	Formal apprenticeship commences here with work-based learning.	Formal apprenticeship confirmed, continues into stage 2 with work-based learning.

- ✧ Version A: in this version, stage 1 (study with a registered training organisation) is undertaken privately by the student rather than as an employee, and stage 2 becomes the formal apprenticeship. Some respondents suggested that employers would find graduates of stage 1 very attractive prospects and would keenly 'head-hunt' them from TAFE and other registered training organisations for induction into associate professional apprenticeships.
- ✧ Version B: at commencement of stage 1 the employer enters into a conditional apprenticeship contract with the individual, the condition being that, in order for the apprenticeship to continue into stage 2, the apprentice must satisfactorily complete stage 1 studies within a prescribed time (say, one year).

In both versions there is obviously an issue regarding how the apprentice or trainee is to be remunerated during the stage 1 period of study. Employers are unlikely to agree to fund a full year of study before the apprentice begins training on the job, despite the obvious advantage in taking on a person with up-to-date knowledge and skills relating to the work. Some candidates for apprenticeship might be sufficiently dedicated (and able) to directly fund the year of study themselves; others might need some assistance. One possible source of financial assistance raised was that of broadening the Higher Education Contribution Scheme to include study at diploma and advanced diploma level with VET providers. It was suggested that many of the associate

professional apprenticeship graduates might receive sufficient income upon completion of their apprenticeship to begin repaying their debt to the government immediately.

In discussing this two-stage concept, respondents generally agreed that, if apprentices were to undertake the stage 1 (off-job) training at their own expense, it would make the scheme extremely attractive to employers. As an example, one respondent, referring to the information technology industry, suggested that a person who had completed their first year of intensive off-job training and commenced working with their employer might begin their second year at, say, the national training award rate plus 10% (something like $18 000 per year in the information technology industry). This would provide the employer with an apprentice who would rapidly approach the productivity of a 'fully qualified' employee (normally paid around $35 000 per year)—a considerable saving.

> I think it could be possible to do the whole thing as a single apprenticeship, but in some parts of the industry they like to take on people who can hit the ground running. I think the two-stage arrangement would be a little bit more palatable to the industry than one in which a person started straight out of school.
>
> Industry association—information technology

> The concept of an associate professional apprentice first doing a period of intensive study and then going on to the employer is a good one. Employers would like it. It would certainly work for the information technology industry and, with a bit of adaptation, for the building industry too.
>
> Group training provider—information technology and building industries

It was also noted that a large proportion of the training undertaken by people going into some industries, such as information technology, was already self-funded, so the idea of persons funding their own one year of initial training would not be a radical departure from what is already happening. The new twist would be that the self-funded training could be formally linked to an apprenticeship.

Fully work-based training

Apprenticeships in which training was fully work-based were often said to be used to qualify existing workers (a necessity brought about by the need to meet licensing requirements). In such cases, the apprentice was commonly granted recognition (through recognition of prior learning/recognition of current competencies) for competencies already acquired through experience in the industry as an unqualified worker, a process which could significantly shorten the period of apprenticeship.

Childcare in the community services industry provides a good example of how fully work-based training can operate. The *Childcare Workforce Planning Project–2002* (Community & Healthworks 2002) conducted in the Australian Capital Territory, proposed, in consultation with industry and the industry training advisory board, a 'children's services workplace apprenticeship model' (called a cadetship). This model is aimed at alleviating the recruitment, training and retention problems of the childcare industry in the Australian Capital Territory. The model is based around a four-year cycle, rather than the traditional two-year diploma, so that the student has sufficient time to gain both practical and theoretical skills. This approach also gives the student sufficient time to become accustomed to the demands of the job role. The final year of the apprenticeship allows the student to specialise in particular areas. Although there is a theoretical component to this apprenticeship, much of it is practical.

In addition to this proposed model of training, a group training company operating in rural areas in New South Wales and the Australian Capital Territory provides a fully on-the-job diploma-level apprenticeship for childcare workers. The essential elements of their approach to training are that:

- ✧ It is entirely work-based (trainers come on site for one day per month).
- ✧ There is a major emphasis on building trust and relationships between the trainee's organisation and the group training company.
- ✧ Recognition of prior learning is used as a mechanism to give credit for existing knowledge and skills and shorten the period of apprenticeship or traineeship.

A recently published NCVER report, exploring the views of registered training organisations and trainees in relation to fully work-based training, showed both groups to be generally supportive of this mode of training. The report states that, with appropriate support systems in place for trainees, 'fully' on-the-job training offers significant benefits. The report also suggests ways in which the training could be improved, including increasing networking amongst students—especially from outside their place of employment—improving students' time-management skills, providing better balance between work and study loads, and improving the training capacity of employers (Wood 2004).

Some important issues

Case study interviewees were asked to identify any issues which might arise in connection with provision of apprenticeships for associate professionals. Their responses covered a variety of areas, including terminology, licensing and industry awards, structure and delivery of training, age, training incentives, and concept promotion. The following is a summary of the issues they raised.

Use of the terms 'associate professional' and 'New Apprenticeship'

Respondents from all of the industries surveyed commented on the terminology being used. While they generally felt the term 'associate professional' was acceptable to their industry as a means of identifying persons working just below the professional level, they were virtually unanimous in reporting that the terms 'apprenticeship' and 'apprentice' would be disliked. Such terms, they said, would be seen to decrease the status of people training at diploma and advanced diploma levels because of their connotations of trades, level III study and training of young (that is, 'junior') people. When asked to suggest a substitute term for 'apprenticeship', the most common responses were 'cadetship' or 'traineeship'—terms already in use in some sectors. (As stated earlier, in childcare in the Australian Capital Territory, newly proposed traineeships are to be called 'cadetships' to differentiate them from other 'lower' level traineeships.) Other alternatives to the term apprenticeship suggested included undergraduate trainee (which would lead to job titles like undergraduate network administrator) and mentorship.

> Apprenticeship would not be the best term to use, we would immediately think of a trade apprenticeship … Call it something else. If entry is going to be open to people of all ages, this would be very important.
>
> Industry association—building and construction

> If we put someone on a professional development program, it is called a cadetship. We would never use the word apprenticeship—it is not considered appropriate.
>
> Group training organisation—finance

> Apprenticeships in our industry would just be not on—they would be rejected. The term apprenticeship is not in the industry's psyche.
>
> Industry training advisory body—information technology

> The [proposed] traineeships [for the childcare industry] will be called 'cadetships' to differentiate them as higher level traineeships. The new title is more catchy than traineeship or apprenticeship.
>
> Industry training advisory body—community services

Promotion

With a few exceptions (for example, childcare in the Australian Capital Territory, Queensland and New South Wales), industry awareness of the existence of the New Apprenticeship option for associate professionals appeared to be quite low. Most respondents reported that employers and employees generally knew little about the system. Promotion of the concept therefore could have an important bearing on its acceptance and utilisation. If apprenticeships for associate professionals are to be promoted, there are several issues raised by respondents that should receive special consideration.

Two important strengths commonly cited for apprenticeships are that they provide structure to the training and they offer security of employment during the period in which training is being undertaken. These features of apprenticeship are particularly appealing to young people and their parents, and to older persons with family and financial commitments. These benefits should not be overlooked in any promotional activity for apprenticeships at associate professional level.

As has been mentioned above, almost all respondents felt that the term 'apprenticeship' was inappropriate for persons working at associate professional level. In developing any promotional strategy, therefore, careful consideration should be given to selection of alternative terms to identify apprenticeship at associate professional level.

Licensing and other compliance requirements

Employers in most industries are facing increasing obligations to comply with government regulations, licensing requirements and industry codes, many of which require key employees to be qualified at associate professional level. For example, in the childcare industry, group leader, team leader or coordinator positions may, in some states, specify a Diploma of Children's Services and a director position may require an advanced diploma. In the finance industry, the qualification commonly cited for persons overseeing or providing financial planning is the Diploma of Financial Planning, which is about to be replaced by a new national qualification, the Diploma of Financial Services (Financial Planning).

Training by means of apprenticeship can be one way of gaining qualifications at associate professional level to meet licensing and other regulatory requirements, either from scratch, or by upgrading qualifications of existing employees (including application of recognition of prior learning/recognition of current competencies). As the level of regulation in industries and associated licensing requirements grow, so too will the potential for apprenticeship to meet the training need. However, whether or not it fulfils this need, may be dependent on a number of other issues covered in this report.

Wage rates for New Apprentices at associate professional level

Concern was expressed about the rates of pay for apprentices at associate professional level. Some respondents felt that the specified rate of pay for apprenticeships might turn out to be too low for persons training at associate professional level, particularly mature-age apprentices who are likely to have family and major financial commitments. This could have particular significance in those industries which are said to favour mature-age apprentices because of client perceptions, such as finance and community welfare. However, the other side of the argument was also raised: if associate professional apprentices were paid a rate considered to be commensurate with their mature-age circumstances and the level at which they worked, it might be perceived as too high by employers. For some occupations, such as childcare, the low pay rates for qualified workers (typically around $16 per hour for diploma and $17 for advanced diploma level) might also act as a disincentive to take-up of higher-level apprenticeships. Setting the pay rates for apprenticeship at associate professional level could therefore be a challenging task.

In some industries, such as real estate, there is a tradition of payment by commission. If associate professional apprentices received commissions as part of their remuneration, this may need to be taken into account in setting their pay structure and rates of pay. The simple alternative, of course, would be to pay the apprentices a flat rate without commission.

Training

Respondents had a number of comments about the content and delivery of training for apprentices at associate professional level. Several pointed out that, because management and supervision are important components of the work of an associate professional, appropriate management and supervision training should be included in programs for associate professional apprentices.

The nature of some occupations at associate professional level means that it is sometimes difficult for students to engage in study during traditional hours and through traditional means. For instance, chefs and real estate agents often need to work unusual hours. Delivery of training for associate professional apprentices therefore needs to be flexible (particularly in terms of hours, location and mode of study) enough to accommodate the special circumstances of employers and employees at this level. Two possible training arrangements suitable for chefs mentioned by one respondent offer good examples of this: chefs may be given blocks of time off from work for training (typically two weeks) or they may be released from work for training each Monday.

> Short, sharp intensive courses given at times which suit the industry, not at times which suit the registered training organisation. For example, Mondays would be a good time for chefs to attend off-the-job training because most restaurants are closed on this day.
>
> Industry training advisory body representative

One respondent mentioned that a lack of programming options from TAFE sometimes impeded students in their quest for study at associate professional level. Another respondent (speaking from an information technology industry standpoint) claimed that some registered training organisations chose to provide only lower-level training because it was more profitable.

While online training might be considered as a particularly appropriate means of delivering training at associate professional level, responses on this issue were somewhat mixed. In some industries (such as community services), the nature of the work, the nature of the students, and in some cases, a lack of computer-based skills, tend to make online training not a viable option.

Where choice existed, students were said to prefer learning face-to-face rather than online, even in the information technology industry. In community services, training through workshops was popular.

Prevailing employer attitudes to higher-level training

A number of respondents saw the prevailing attitudes of some employers to training as a possible impediment to acceptance of apprenticeships at associate professional level in their industry. Not all employers were prepared to support employees in diploma study, seeing this level of study as the sole responsibility of the individual. Their expectation was that the person would either come into the job already qualified or, if already employed, undertake study in their own time and at their own expense. Persons studying to be building surveyors in the building industry were an example of this.

> Nobody would want to sign an employee on for a period of, say three years, while they obtain a diploma. They would see it as the responsibility of the employee … it's hard enough to get [employers] to sign up a chippie let alone someone who is doing and estimating qualification or a building qualification.
>
> Industry association—building and construction

Some industries, such as community services (for which licensing and qualification requirements have been instituted), were said to possess a very supportive training culture.

> Most members [of the union] encourage training for employees. People are encouraged to undertake traineeships and apprenticeships. These help with gaining understanding of a wider base of issues to do with children's services … There may well be a culture of learning within the industry.
>
> Union delegate—community services

Respondents suggested that some employers tended to choose people with university degrees rather than diplomas or advanced diplomas despite the latter qualifications fulfilling all requirements for the job. Employers in the information technology industry were a case in point. These employers were said to be short-changing themselves by doing this because, by the time university graduates had completed their degree studies, their knowledge and skills were becoming out of date by comparison with someone who acquired their knowledge and skills through an ongoing process of on- and off-the-job learning in an apprenticeship. One respondent also noted that university graduates in the information technology industry were turning to TAFE study to update their computer programming skills.

Age barriers

Respondents from several industries suggested that the age, maturity and life experience of the candidate for an associate professional apprenticeship might be an issue. For example, as noted earlier, if people commenced apprenticeships to train as financial planners at too early an age, they might not be able to work effectively as financial planners immediately upon completion of their training because clients may perceive them to be lacking the wisdom and experience on which to base the important advice they were expected to give. In the community services industry also, it was suggested that people with appropriate life experience would be preferred for jobs in childcare and other care professions.

> The issue is … that of someone who is very young giving advice to someone who may be ten or fifteen years away from retirement. The life skills are going to be fairly critical and that may be the biggest problem with the idea—the resistance is ultimately going to be generated by the financial planning clients.
>
> Employer association—finance

Further to the above, respondents suggested that, even during training in an apprenticeship, difficulties might arise if apprentices were expected to deal directly with clients in the early stages of their apprenticeship (as could be the case for community care workers, financial planners, and real estate agents). Interestingly, one respondent indicated that consideration was being given to offering some training in real estate at certificate II and III levels in secondary schools.

Financial resources and training incentives

There is currently no provision for Commonwealth Government financial incentives to employers taking on apprentices to study at diploma and advanced diploma level. Several respondents felt that incentive payments could influence employers, particularly smaller ones, to take on apprentices at associate professional level.

> Incentives are important. This is the number one topic asked about by employers. They would make a difference.
>
> Group training company trainer—childcare

> I think the concept [of New Apprenticeships at associate professional level] has got potential. I certainly would be interested. I have three cadets, and if I can get onto some scheme to help me out [financially] it would be great.
>
> Employer—building surveying

However, some exceptions were cited. In the case of the finance industry, large banks were said not to access incentives, instead electing to fund (and often provide) their own training, and in the building industry, a number of employers claimed that they didn't bother applying for incentive payments because of the bureaucracy and record-keeping involved.

Earlier in this report a two-stage apprenticeship model for associate professionals was described in which the student undertakes full-time study for a period of say, one year, at their own expense prior to commencing virtually full-time with the employer for the on-job training component. If such a scheme were adopted, employer incentives might no longer be an issue.

Another issue is that of state government funding of apprenticeships. Each state government has policies regarding funding the training component of apprenticeships. Because of a limited amount of money, some apprenticeships attract funding whereas others do not. Having the training paid for could be a factor in whether an employer decides to take on an apprentice.

> In the Australian Capital Territory context, the deciding force (to take on trainees) is not incentives, but whether existing workers will get their Diploma level training paid for by the government.
>
> Group training company—community services

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