The Future of Training in the Building and Construction Industry - A Discussion Paper -

The building and construction industry has undergone considerable change over the last few decades which have affected the way that people are employed, the way work is carried out at the worksite and the corresponding breadth of skills required by workers

These changes have made it difficult for individual enterprises to employ new entrants under contracts of training (apprenticeships & traineeships) and have put pressure on prescribed courses to adapt to changing industry requirements.

The question is whether these structural changes have fundamentally altered the capacity of firms to support employment- based training arrangements.

If there has been a fundamental change in the capacity of firms to support employment-based training arrangements, then changes to the existing system will be merely "stop-gap" measures that will prolong the inevitable.

This paper summarises some of these fundamental structural changes and their effects on traditional employment- based training arrangements. It focuses on South Australia but many of the issues are shared with other states. The paper poses alternative models for consideration and debate. Comments in relation to the matters raised in this paper are being sought.

Disclaimer: The views expressed in this paper do not necessarily represent the views of the CITB or the members of the Board.

Employment-based training arrangements

Apprenticeships and the more recently introduced traineeships have served certain sections of the building and construction industry well for generations of workers. Entry into the industry through contracts of training is the most commonly stated preference by employers. However, this stated preference does not always translate directly into employment of an apprentice or trainee.

As an employment-based training system, the number of people under contracts of training will fluctuate in line with general business cycles. However, if there is a sustained decline over the longer term, then some action needs to be taken to ensure that the skill base of the industry is maintained.

Concerns have been expressed by various researchers, industry and government agencies over the decline in the number of apprentices over the last decade or so[1]. This decline has been masked to some degree by a corresponding increase in the number of traineeships over the same period. Overall, there appears to have been a reduction in the training effort by industry.

If there is a sustained decline in the take up of contracts of training then certain questions need to be asked:

Are employment-based training arrangements, with contracts of training, the only acceptable means of inducting new entrants for the building and construction industry?

If not, then what alternative systems should be considered for implementation in the next century?

[1] Fooks, D "Apprenticeship System in Decline", *Campus Review*, 5-11 Mar. 1997, p.8

Factors affecting training in the industry

The key driver of demand for training is the overall level of building activity. This, in turn, is dependent on a number of other factors such as population growth rates, demographic changes, investment levels, economic cycles and consumer confidence that affect long and short term building activity and numbers in training.

Population growth

The population growth for South Australia has been minimal due to the low birth rate and low share of interstate and overseas migration. This situation is unlikely to change over the medium to long term.

Low population growth results in lower levels of building activity and dampens demand for apprentices. A small population base makes it difficult to justify private or public investment decisions that are of the same size as those in the larger states. The small number, size and duration of the projects can reduce demand for contracts of training for a number of reasons, including:

- reduced capacity of firms to make employment and training commitments
- narrowing of the skill base of local firms
- greater difficulty for local firms to compete for larger projects that might arise

Variations in levels of work

By its very nature, the construction industry is project-based rather than continuous in the same way as the manufacturing industry. Companies must survive on the cashflow generated from a series of short-term projects.

The project-based nature of the work means that continuity of work and employment cannot be guaranteed for any particular enterprise. The risk of employing staff when there is no work is overcome by "buying in" or contracting the services of others as needed. The increase in the number of labour hire firms and in workforce casualisation are testament to the change in employment and recruitment practices.

The wide variations in levels of work lead to:

- uncertainty of work and poor industry image
- changes in employment and recruitment practices, more contract work and casual employment
- growth in the number of small competing contractors that specialise in narrow tasks
- increased specialisation with improved efficiencies but undesirable affect on training
- a focus on short term needs of the business rather than the long term needs of the industry

Small business nature of the industry

Self employed persons and employees working in businesses with less than 10 employees accounted for 54.2 % of the private sector building and construction workforce in 1983-84. By 1993-94 this group accounted for 61.1 % of the workforce. The proportion of small businesses in the industry also grew from 73.7% of all businesses in the industry to 81.8 % in the same period.[2] The number of large companies in the industry has declined in the same period.

The growth in small business numbers is occurring at a time when governments are reducing their workforce and their numbers under contracts of training.

The relative ease of starting a small contracting business (even with consumer protection legislation restrictions) creates a very price competitive business environment with low levels of profitability. Downward pressure on costs can also change consumer expectations about the value of work being paid for. This further increases pressure to reduce prices. The growth in the number of small businesses leads to:

- increased competition in the industry and consequent reduced profitability
- reduced capacity for individual small firms to undertake sizeable projects
- reduced capacity of small firms to employ staff or apprentices
- reduced capacity of small firms to employ staff
- increased specialisation of work carried out by the specialist contractor

[2] Australian Bureau of Statistics *Small Business in Australia 1995* Cat 1321.0

Capacity to employ an apprentice

A recent study by the Centre for Labour Market Research (CLMR) estimated that on average, the "net cost"[3] of employing an apprentice over the four years amounted to approximately $22,000[4].

The actual net cost or benefit to a particular employer will vary significantly from the CLMR estimate depending on a wide range of factors, including the apprentice's level of productivity and the profitability levels of the business.

In recent surveys conducted by the CITB, seven out of ten respondents indicated that their businesses turned over less than $500,000 pa.

If one of the typical small businesses takes on a first year apprentice it would cost approximately $318 per week. Depending on the profit margin, a business would have to generate between about $600 (50% profit margin) to $3000 (10% profit margin) in additional turnover per week every week to be able to afford to pay the apprentice.[5] This means that a business with a turnover of $500,000 would have to expand its annual turnover by between about 6% and 30% to take on a first year apprentice - a significant expansion by any measure.

On these figures, it would be extremely difficult, if not impossible, for a small business working in a highly competitive environment to make the commitment to take on an apprentice for an extended period. It is not surprising that the construction industry "spent the lowest of gross wages and salaries on training of all industries (1.25%) "with one of the lowest expenditures per employee.[6]

Group training schemes can certainly ease the problem for many small businesses by sharing the burden amongst a number of employers. However group schemes cannot alter the fact that contracted training is becoming increasingly difficult to support because:

- there are fewer large employers and an increasing number of small businesses competing in a highly competitive, low profit environment
- continuity of work is difficult to guarantee
- the capacity of the typical small contractor to employ an apprentice is limited.

Changes to technology, work organisation

Technological changes have also had an impact on the skill range and mix required by workers in the industry.

[3] Defined as the average of the known and estimated costs and benefits to the enterprise over the training contract term

[4] Centre for Labour Market Research, *Training Apprentices is a Costly Business,* September 1997

[5] This includes wages, travel allowance, employer superannuation and Workcover charges

[6] Australian Bureau of Statistics *Employer Training Expenditure 1996*

The shift to off-site construction, new computer design technologies and the development of new materials and products have all had an impact on skill needs. In most cases, these new developments have simplified many tasks and reduced the demand for higher level skills on site. Simplification of tasks through increased specialisation and changing technologies has resulted in an expansion of the "do-it-yourself" market which can create the public impression that construction work is simple and over paid.

An apprentice working with many contracting firms is unlikely to experience the full breadth of skills normally expected in their occupation. This, again, is partially addressed by group schemes that rotate their apprentices amongst different employers. However, where technologies or work organisation have simplified tasks, the demand for broadly skilled workers (the traditional product of the apprenticeship system) will decrease.

Paradoxically, the blending of certain technologies has meant that some workers can no longer rely on their initial trade training to perform their work, but must expect to upgrade their skills across new disciplines. In such circumstances the traditional trade classifications and the corresponding training will not be sufficient for the new types of work.

As a result:

- where technological advances or work organisation simplify on-site tasks, the demand for broadly skilled workers produced by traditional training arrangements will reduce
- where technological advances require skills beyond traditional occupational groupings, demand for traditional trade courses will reduce, while demand for greater flexibility and upskilling will increase
- there will be a need for multiple training pathways to accommodate different training demands arising from changes to work and employment practices and building technologies

Recent changes to the training system

The Federal Government's New Apprenticeship System (NAS), incorporating National Training Packages, potentially provides the flexibility which would enable the diverse needs of enterprises to be addressed. The increases in flexibility, greater simplicity and user choice of the NAS are expected to make the New Apprentices more attractive to employers.

However, the entire focus of these changes is on making ***employment-based*** training arrangements more flexible.

The contention is whether the industry has the capacity to continue to support employment-based arrangements to the extent that it has in the past. Prima facie, the push for greater flexibility and responsiveness is an attempt to redress a decline in this support.

In a recent survey commissioned by the CITB on training needs, businesses were asked what factors affected their decision to take on an apprentice or trainee. The survey found that the availability of work and the cost of employing an apprentice or trainee were far more important than the choice of the provider or choice of options within the training package. Issues related to "user choice" were of secondary importance in the decision to employ an apprentice or trainee.

This finding is consistent with the KPMG report to ANTA that determinants of demand for training were "largely economic in nature".[7] Of far greater importance were the level of work and the overall cost of employing additional staff in light of inconsistent levels of work. It would appear on these findings that the introduction of User Choice on its own is unlikely to have a significant impact on the numbers under contracts of training.

Alternative training arrangements

The CITB recently commissioned a review of entry-level training arrangements by the University of South Australia. Coincidentally, this review was conducted during the initial consultations for the National Training Packages. The release of the USA review, which preceded the results from the national training package consultations, described a number of alternative training models for consideration and discussion. These models, which are shown in Figure 1, are competency-based rather than time-served with assessment of competence in the workplace being the primary indicator of achievement.

A number of the models are simply variations of existing employment-based training arrangements with modifications in either the breadth and depth of qualifications or with extensions into the schools sector. These particular models are now seen to be consistent with the proposed qualifications in the draft National Training Packages for the industry. Of primary interest, however, is Model E which "breaks the nexus between training and the need for paid employment".[8]

Model E is based on a significant introductory period of intensive off-job training (say, one year full time) followed by a further year of on-job training in an "internship".

The models need to be considered in light of the decline in contracts of training which the New Apprenticeship System and National Training Packages are seeking to address. They potentially increase the options available to industry but raise significant implementation issues that need to be explored.

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[7] KPMG *The costing and resourcing of New Apprenticeships,* May 1997

[8] R Harris, M Simons & I Gillespie, *Evaluation of Entry Level Training Arrangements in the Building and Construction Industry in South Australia,* Construction Industry Training Board, November 1997.

Discussion points

This paper was prepared to stimulate discussion on the capacity of firms within the industry to support contracted training arrangements in light of the changes to the industry and to pose potential new arrangements to meet skill requirements for the future.

Readers are asked to respond to the points raised in this paper (and any other related matters). The following questions may be of assistance in formulating a response:

1 What is the likelihood that enterprises within the construction industry will increase its support for contracted training arrangements?

2 What is the likely degree of acceptance of these models by industry and individuals - particularly the need for extended off-site training prior to entry into the industry for Model E?

3 What are the benefits or disadvantages of the models for the new entrant? The business?

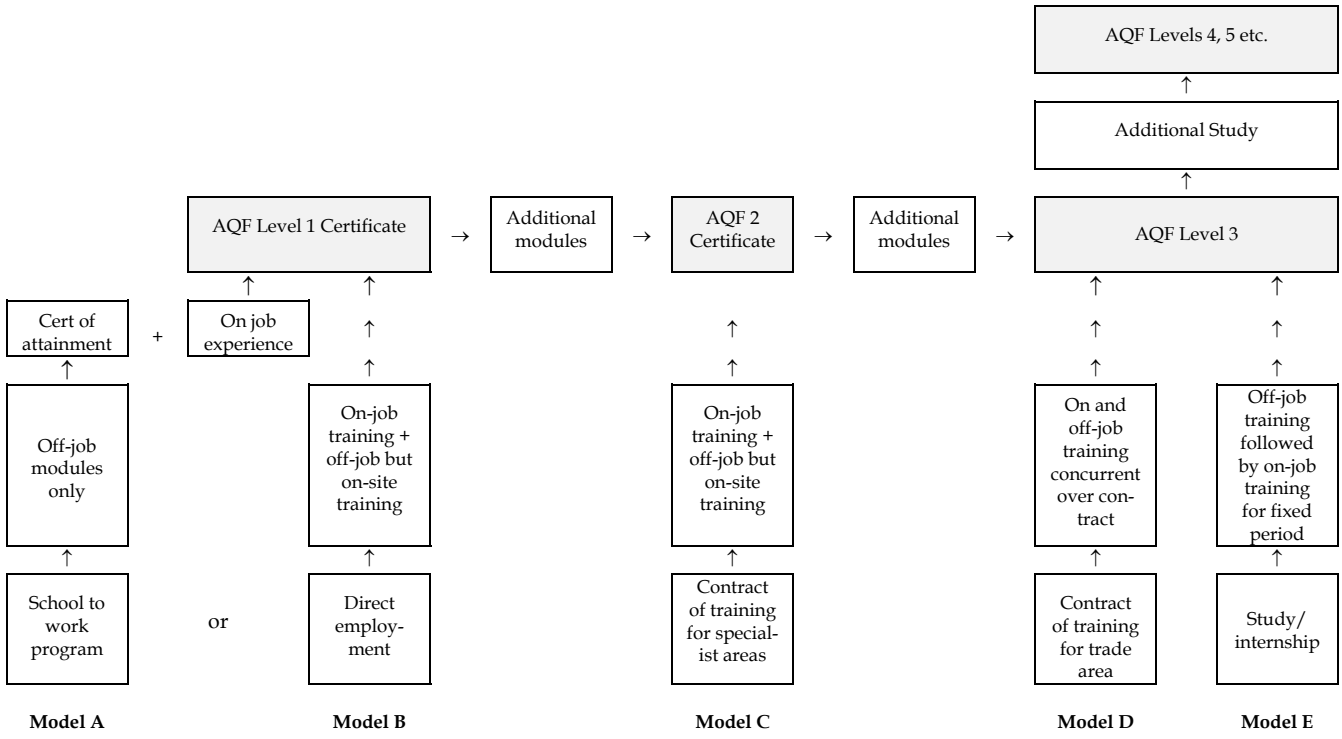
4 What alternative models might there be?

5 Who would or should bear the cost of training within each of these models?

6 What are the wider implications that these models have on: work placements; full time and part time study or employment; industrial relations; access and equity; assessment of job performance; group training schemes?

7 What other issues need to be addressed for the different models?

Figure 1 - Schema of possible training pathways for the industry



Your comments on the issues raised in this paper or other matters related to training for the industry are being sought.
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