



A WELL-SKILLED FUTURE

Tailoring VET to the emerging labour market

What is a skill shortage? by Sue Richardson

A skills shortage encompasses much more than an inadequate supply of workers to meet the demand at the current rates of pay. This research looks at some of the causes of skill shortages, the various types and some of the ways in which shortages can be overcome.

Introduction

A shortage of skills is a source of aggravation to firms, and when acute it is likely to hamper the quality and quantity of their output. The vocational education and training (VET) system plays an important role in assisting the matching of the skills required by employers to the skills offered by workers.

The VET system will be assisted in this task if: we can give a precise meaning to the term 'shortage'; identify the circumstances under which any such shortage is likely to be naturally and efficiently resolved by market forces; and identify when direct policy intervention is required to assist the market. The VET system itself will be a part of any public policy response.

This paper aims to set out some clear thinking on each of these issues. It does not attempt to quantify any overall or particular shortage of skills.

What causes skill shortages?

Skills shortages can have many causes. These include: a general under-investment in skills development; rapid structural change combined with low levels of overall unemployment; a cyclical surge in employment in a part of the economy; and particular areas of weakness in the training system.

It is likely that the shortages we see in 2006 are a consequence of all of these factors. Employers may also be unable to obtain the workers they require because the pay and working conditions offered are unattractive. This

will feel like a shortage to the employers concerned, even if the labour force as a whole has an adequate supply of the skills in question.

The idea of a shortage seems straightforward: the supply of workers is not sufficient to meet the demand, at current rates of pay. But, on closer inspection, 'shortage' is a surprisingly slippery concept. To quote the United States Bureau of Labor Statistics, '...there are no objective measures or direct indicators of skill shortages'.

It is difficult to measure the supply of workers with a particular skill for several of the following reasons.

- It is not just the number of *people*, but also the number of *hours* they are willing to work, that matters: while some people work long hours, many others want to work part-time.
- Within an occupation, there may be specialised sub-sets of skills or locations having difficulty recruiting, while other areas are not.
- Vacancies may go unfilled, not because there is no one available to do the job, but because the wages and conditions on offer are unattractive.
- Within every skill group, there is a range of ability, from exceptional to ordinary: this variation in quality is important to employers, but not observable in measures of labour supply.
- Many people with highly desired skills work in jobs that do not directly use their formal qualifications; alternatively, they are of working age, but not seeking employment.

Program 2:

The nature of the labour supply

The research consortium, *A well-skilled future: Tailoring vocational education and training to the emerging labour market*, comprises researchers from the National Institute of Labour Studies and the Centre for Post-compulsory Education and Lifelong Learning. Managed by the National Centre for Vocational Education Research (NCVER), it aims to investigate future work skill needs and work organisation arrangements, and their implications for VET.

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From this we can see that it is possible to increase the supply of a particular skill in a number of ways. These include increasing the hours worked per worker, encouraging people who are qualified for an occupation to actually work in the occupation, and increasing the intensity of work and the efficiency with which the scarce skill is used. Increasing the number of people newly trained in the skill (for example, by undertaking vocational courses) is only one way to increase supply.

Definitions of shortages need to make an additional distinction—between workers who do not have the essential technical skill, on the one hand, and workers who are judged not to have the degree of motivation and other personal characteristics employers desire, on the other.

To illustrate, suppose that Australia has sufficient qualified automotive technicians to fill all the vacancies, and they are willing to apply for the available jobs. However, not enough are self-motivated, versatile and willing to work overtime to meet employers' requirements. Is there a shortage? If there is, it is a different form from the absence of specific skills, and beyond the reach of the VET system to address.

Types of skill shortage

We suggest the following scheme for classifying skills shortages:

■ Level 1 shortage

There are few people who have the essential technical skills and who are not already using them, *and* there is a long training time to develop the skills.

■ Level 2 shortage

There are few people who have the essential technical skills and who are not already using them, *but* there is a short training time to develop the skills.

■ Skills mismatch

There are sufficient people who have the essential technical skills and who are not already using them, *but* they are not willing to apply for the vacancies under current conditions.

■ Quality gap

There are sufficient people with the essential technical skills, not already using them, who are willing to apply for the vacancies, *but* who lack some qualities that employers think are important.

Different responses to different types of skill shortage

In many cases, we can reasonably leave it to the labour market to sort out the problem of shortage. There is no fixed quantity of any particular skill supplied to the economy; nor is there a fixed quantity demanded. Rather, supply will rise as the terms of employment become more attractive. And demand will fall as the costs of employing people with particular skills rise. But the market will not work well if *both* supply and demand are unresponsive to the wage and other conditions of employment.

The wage is not the only aspect of employment that works to correct a shortage (or a surplus). When a particular occupation moves from a position of surplus workers to a shortfall of workers, then firms will not be able to recruit from an inviting pool of applicants. Instead, they will find that they have to reduce their expectations of the 'quality' (including perhaps the motivation, initiative, experience, presentation and so on of candidates) of the workers they can recruit for the pay and conditions they are offering. This acceptance of firms of a reduced quality in workers basically equates to an increase in pay for the 'high-quality' worker.

Clearly, Level 1 shortages will be the most severe obstacle to the expansion of firms, since they require the longer-term planning of the training system. This planning is required to anticipate skills needs as accurately as possible and also to ensure that the VET system has the capacity to provide the required training. Where it takes only a short time to acquire the necessary skills (for example, Certificate III in Aged Care) and many people have the ability to learn these skills, then the normal adaptation mechanisms of the labour market are likely to work quite well to ensure that any shortage does not persist.

This overview is based on the research report, *What is a skill shortage?* Visit <http://www.ncver.edu.au/publications/1721.html> for more information.