

SENATE INQUIRY INTO CURRENT AND FUTURE SKILLS NEEDS

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A - Areas of skills shortage and labour demand in different areas and locations, with particular emphasis on projecting future skills requirements;

In addition to changes in the kinds of occupations that are available to provide employment, two other changes need be considered in developing skills likely to be required now and in the future. These are: (1) changing requirements for some paid work and (2) changes in how people are participating in paid work. As both of these have implications for what constitutes effective work (i.e. the kinds of capacities required in the workplace), how individuals engage in work and their capacity to initially develop and refine their skills, they are briefly outlined below.

1. Changing requirements for some forms of paid work

Despite not being consistent across all forms of work, it is possible to identify some trends in the emerging and future requirements for work:

Increasing intensity of work (e.g. nurses' work) Work is becoming increasingly intense in many sectors of the workforce, as a result of changes in work practices and reshaping of work. Increased intensity of work requires the skills to manage multiple work tasks simultaneously and to prioritise how best to achieve desired workplace goals.

Shorter production and service cycles (e.g. production, processing) Shorter production cycles and periods of service provision means that work is increasingly becoming less routine. Successful implementation of and engagement in new work tasks requires capacities to adapt and change. Higher orders of knowledge are commonly held as being required to undertake novel tasks, because of the requirement for changes in work procedures and goals. However, the development of these capacities is not generally seen as a priority for all sections of the workforce.

Enhanced complexity (i.e. a broader range of tasks, more discretion) Work tasks for many in the workforce are becoming increasingly complex. For example, when enterprises reduce the size of their work force (down-sizing), workers are often expected to perform a wider range of tasks and participate in more distributed forms of work organisation. Often, this change is associated with removing workplace demarcations or through the advent of new technologies and work practices. When work becomes more complex there is the need for workers to possess a wider range of capabilities, to understand the requirements of a widening range of factors that influence effective work practices.

Enhanced requirement for conceptual and symbolic knowledge (e.g. requirements for contemporary work often requires conceptual understanding) A key change in work, brought about by the use of technology and distributed work practices, is the requirement for high levels of conceptual and symbolic knowledge. This is because the processes and interactions that workers need to engage with have become increasingly opaque or hidden. As such, workers need to develop, deploy and monitor their symbolic and conceptual knowledge. This is of a kind that seems to be different from and more harder to learn about than that required by more manual applications of work (e.g. the difference between operating a CNC and manual lathe). Because it is not easy to access or comprehend, conceptual knowledge of this

kind is often difficult to learn, particularly without specific interventions aimed at its development.

Flatter organisational structures

Contemporary and emergent work practice may require lower levels of direct hierarchical management or supervisory control. Some, but not most, workers enjoy broader discretion in their work. Many more are increasingly requested to work as part of a team and in ways that may encompass a broader range of responsibilities. These requirements often demand a higher level and broader scope of decision-making than in more restricted forms of employment. This emerging need may require technical, negotiating and decision-making skills that are distinct from those required in the past. The capacities to perform this enhanced role likely require intentional and guided development.

Specialisation and diversification

In keeping with the above, and in response to changing demands (e.g. shorter production and service cycles, downsized workforce is) both specific and more general workplace skills are likely to be required, albeit in different measures. For instance, being a good technician alone may no longer suffice in some situations, whereas in others highly specific technical skills will be prized. Being able to communicate with others, evaluating how best innovative practices might proceed, as well as accounting for practice, that ensure safety and are sensitive to the environment are also increasingly likely to be required.

From these factors, four consequences for current and future skills are identified. These are:

- Preparation for work needs to become more thorough, because the capacities required for emergent work are increasingly complex, demanding, intense and difficult to learn.
- An on-going commitment to the currency of individuals' skillful knowledge (i.e. learning through working life required to respond to constant change), illustrates the importance for all in the work force to be able to access support and learning experiences that can assist them develop further their knowledge and throughout their working lives.
- Work tasks may be less identifiable by traditional industry/occupational classification, given the changes in the requirements for work (e.g. the growth in technical work across industries)
- The demands of the requirements for some, but not all, work tasks have increased, as has the difficulty for learning these tasks (e.g. intellectual, effortful, currency).

2. Changes in individuals' participation in paid work

Changes in how individuals' participate in work are important for the requirement to work effectively and continued to learn the skills required for work.

Contingent workers

An increasing percentage of the Australian workforce is now contingent (i.e. part-time, contractual workers). Moreover, the anticipated decline of the incidence of contingent work when economies are performing strongly has failed to occur (e.g. USA and UK). Contingent workers may struggle to interact with other colleagues in ways that assist understanding the requirements for work practice and changes in those requirements, as well as having more limited opportunities to developing further their skills. Contingent workers are also less likely to be provided with support by the employer to develop further their skills.

Separation

Increasingly, some kinds of workers are being separated from the workplace (e.g. home-based, part-time and isolated). For these workers, there are difficulties in participating fully in

workplaces, being seen to be competent and accessing opportunities for advancement. As with contingent workers, the frequency of changes to the requirements for work makes physical or social isolation more problematic. Workers separated by distance, shift rosters or are the sole individual in the workplace possessing particular skills may find the demands for effective work practice and further developing their skills an increasingly difficult task.

Changing relationships between employers and employees

An emerging trend is the potential erosion of the relationships between employers and employees. While the increase in percentage of contingent workers is an instance of this trend, there are other factors. The shift from national industrial awards to enterprise-based agreements, negotiated under a far more restricted set of basic requirements has permitted employment conditions to be bereft of some of the formalised commitments (e.g. such as to training) that were central to previous employment conditions. Evidence suggests that Australian employers are spending less on enterprise-based training, along with the decline in enterprise sponsored apprenticeships is indicative of this changing relationships.

New work practices

'New' models of work practice that are team-based, highly discretionary and self-managed appear not to be being widely adopted. When it does occur, it seems to be mainly in highly paid quasi-professional or professional work. For many workers, however the scope and complexity of work has been extended making it more demanding, however the opportunities for participation in decision-making, beyond their immediate activities, appear not to be growing. Curiously, studies of American small to medium enterprises that have stood the test of time have indicated that the degree by which all workers were brought into decision-making processes and identified with the workplace was a key factor in their ongoing productivity and success.

Status and standing of workers

Work is privileged in different ways in workplaces, which results in unequal access to support, discretion, resourcing and opportunities for career progression. Central to how work is valued and opportunities afforded for workers to progress in their careers, are the standing and status of those who conduct the work. Employees who work is not acknowledged and recognised as being a high standing, are less likely to be able to access opportunities for training and advancement. There is clear correlation between level of expenditure on in-house training and salary. However, the correlation between the complexity of work that individuals conduct and the existence or level of formal recognition may not be as great. For instance, the Australian study has shown that all categories of workers engaged in some level of new tasks (i.e. those requiring adaptation and extensions to what they already know).

Workplaces as highly contested terrain

Workplaces are often far from being benign and supportive of all workers' participation in work and the opportunities to learn through work. Instead, workplaces are often highly contested terrain, perhaps no more so than in tight economic times. Contestation can be between: labour and management; workers and owners; 'new-comers' and 'old-timers'; part and full-time workers; English speaking and non-English speaking workers; workplace cliques; union and non-union labour etc etc. Yet, it is often these workplace relationships that influence how opportunities to engage in new tasks and secure opportunities for advancement are distributed. The important point here for the optimum utilisation of skills and for learning throughout working life is that opportunities for individuals to fully use their skills and to develop them further may not be premised on individual attributes. Workplaces affiliations,

cliques, the standing of individuals, the status of their work, their gender, race and language may all influence opportunities for workplace participation and development of skills.

Some consequences for participating in and learning through work are as follows.

- The bases upon which employment has proceeded are changing. These need to be taken into account when descriptions and analysis of work (i.e. skill needs) are undertaken and goals for learning the skills are being formulated. In particular, the requirement to interact with others and technology, as well as diverse forms of engagement suggests that describing work and requirements for performance in terms of tasks alone will be insufficient. Instead, a considerations of the interactions that comprise so much of contemporary and emerging work need to be addressed.
- Access to work activities, particularly those that lead to enhanced opportunities, may well be distributed on the basis of factors that discriminate against particular individuals or groups of individuals. For learning throughout working life to be something enjoyed equitably across Australia's workforce, there may need to be policies associated with participation in and learning for all in the workforce.
- Those workers whose employment pattern is contingent are likely to suffer great disadvantage over time in securing work and advancing their careers throughout their working life. For those workers whose patterns of employment militate against ongoing development, structured support from the vocational education system may need to be considered. Some sectors have historically done very well from the public provision of the vocational education and training. It is timely, therefore, to consider the needs of those who have done less well (e.g. small business, small industry sectors) and consider it what ways can vocational education system assist learning throughout their working lives.
- Levels of education and the standing of work appear to continue to be the bases by which opportunities are distributed across the workforce. However, given the need for individuals to learn continuously across their working lives, ensures that the provision of vocational education is distributed equally across all industry sectors, and that these provisions are accessible to all in the workforce becomes a societal obligation and one where a consideration of equity needs to be exercised.

B. The effectiveness of current Commonwealth, state and territory education, training and employment policies, and programs and mechanisms for meeting current and future skills needs, and any recommended improvements;

If Australia is to develop and the kinds of skills that are identified in the previous sections, there is a need to move away from the behavioural measures and approaches (e.g. Competency Based Training, competency standards) and move to a focus on learning processes and outcomes that reflect the requirements for contemporary work. Beyond the appeal of purporting to be able to measure observable performance, behavioural approaches have long been considered inadequate to understand or develop the kinds of capacities students and workers require to work effectively. Tradespersons, vocational educators and the professions have long understood the importance of processes and experiences that underpin competent performance. However, because of reasons that are largely focused on the administration of vocational education, this focus on learning has not been a priority in the past. What is probably required now is developing the capacities of individuals through a consideration of instructional processes and learning experiences that engage individuals in the kinds thinking and acting that vocational experts engage in. Also, rather than being seen as unitary and easy to define, an acceptance of the virtue of the complexity and diversity of the vocational practices that occur in Australia needs to be used to identify the content and goals for skill development programs.

These more informed accounts could be used to guide more effective curriculum development, richer modes of instruction and assessment that reflect something of the diversity of vocational practice, and in doing so open up the prospects for handling adaptability and change. Vocational practice is neither unitary nor able to be disaggregated into sets of small learning outcomes. Processes of curriculum development and instruction need to be engaged that are sufficient to address the difficult task of engendering robust vocational knowledge in Australian students and workers.

Because vocational education has long been enmeshed in industrial (relations) processes, the championing of the richness and significance of vocational skills has been highly contested and, ultimately, muted. Union claims about the complexity of vocational tasks will be dismissed as ambitious. Employers are likely to be reluctant to champion the skillfulness of work least this be used to support a claim for higher remuneration. Government policies that have focused on modularised instruction, competency based and ungraded assessment have done little to elevate the standing of vocational education. In schools, these measures merely entrench biases about 'non-academic' options and the lowly status of a vocational option (i.e. where competence is based on pass and fail). Therefore, if younger and older Australians are to be attracted to vocational education and encouraged to exercise their energies in the ongoing process of developing further their skills, voices that champion the importance and significance of vocational practice need to be heard. Without this, vocational education of the kind that are often associated with skillful work may continue to be seen as low status, and not demanding that students and workers need to apply effort beyond being judged competent. Instead, students and workers ought to be encouraged to make the kinds of effort (and sacrifices) required to excel in their studies and practice.

In considering this important issue, the Australian community could consider what arrangements might: (1) elevate the standing of vocations and the attractiveness of vocational education; (2) be required to initiate trade and professional associations at both national and local level to champion and promote skilled work and vocational education in ways more effective than industrial relations practitioners have been able to achieve; and (3) enact vocational learning experiences that can be enriched through a more collaborative relationship among vocational educators, enterprises and students rather than vocational educators and students merely being subject to the demands of the voice of industry. Models from northern Europe suggests these are achievable rather than fanciful goals.

C. The effectiveness of industry strategies to meet current and emerging skill needs;

Perhaps the most disappointing aspect of the leadership given by industry (and more recently business) to vocational education in Australia in the last 15 years has been a gradual reduction in commitment to skill development by Australian enterprises, in both the public and private sectors. While apprentice numbers may remain high, the numbers actually indentured by individual enterprises (i.e. not those in group apprenticeship schemes) is faltering. Governments need look at ways of encouraging Australian enterprises in making greater contributions to vocational education. It would seem that national training levies will never be palatable in the foreseeable future. However, some industry based levies schemes have proven quite effective both in this country (e.g. construction industry) and overseas. Also, locally based arrangements may be worth considering, in conjunction with item D.

Regardless of which approach is adopted to encourage enterprise expenditure on or the sponsorship of skill development, it would seem that for enterprises to be engaged there would have to be a key and visible focus on developing industry sector skills. Finding ways of making skill development more attractive and strategic to enterprises will likely be salient to increasing investment in and commitment to skill development, with the latter of these being the most important.

Central to both these goals is a sorely required need to elevate the standing of vocational practice and vocational education in the Australian community generally, and in the private and public sector especially. A key quality which seems to incite both individual and enterprise investment in skill development overseas is an appreciation of the richness and significance of the skills. The narrow range of apprenticeship callings in this country, and the pragmatic profile which vocational education has been given does little to accurately depict the qualities required for effective vocational practice. It would seem that mandated approaches to enterprise sponsorship of skill development only serves to degrade the standing of vocational practice and encourage superficial compliance. Therefore, engendering the importance and significance of vocational skills needs in the community should become a priority for government, because the deserved profile of skilled work is unlikely to flourish in a contested industrial relations environment.

D. The performance and capacity of Job Network to match skills availability with labour-market needs on a regional basis and the need for improvements;

Decision making about employment and the development of skills for the paid workforce may well benefit from a more localised focus. This needs to occur both in support for more localised decision-making about vocational education provisions in how they can best meet localised needs, but also through the loosening up of the rigid national frameworks whereby the aims, goals and objectives as well as the content of vocational education courses are decided nationally and centrally. More scope is required for overall skill development to occur in ways that reflect a kind of variations in practices that are evident in Australian workplaces. These are not uniform, as rigid national frameworks position vocational education to be highly utilitarian. Here, an elevated role for vocational educators is required. More than being the implementers of curriculum decided elsewhere, these teachers need to be developers and researchers in order to best meet local needs and requirements.

However, the needs to be oversight to ensure that localised decision-makers are not seduced by the prospect of preparing people for emerging industries in ways that are not commensurate with opportunities that are actually available.

E. Strategies to anticipate the vocational education and training needs flowing from industry restructuring and redundancies, and any recommended improvements; and

See earlier sections

F. consultation arrangements with industry, unions and the community on labour-market trends and skills demand in particular, and any recommended appropriate changes.

Government might seek to secure a greater maturity in the relationships between industry, enterprises and the vocational education and training system. It is not sufficient for the leadership of the nation's vocational education system to be exercised by interest groups (e.g. large enterprises, industry groups, spokespersons for enterprises) as has been the case in the past. These groups have demonstrated a capacity to represent mainly the needs of sectoral interests, rather than a broader range of national interests. For instance, the needs of small business and the students who participate in vocational education have been habitually ignored. As students and others are now being asked to contribute financially to the vocational education system, as well as with their time and effort they can no longer be denied their legitimacy as part of the demand-side need.