International perspectives on generic skills

David D Curtis

This chapter examines recent developments in conceptions of generic skills in Australia and similar developments overseas. Three approaches are used in this review. First, two periods of generic skill initiatives are distinguished: those that occurred before 1995 and those that have been advanced since that time. Second, various national schemes are compared and they reveal differences in key issues that remain unresolved in Australia. Third, generic skills are defined by different groups (industry leaders, human resource managers and academic researchers from various disciplines) and these groups produce different conceptions of generic skills. Each of these perspectives can inform current policy debates.

Several key issues emerge from the analysis of Australian and overseas generic skills initiatives. First, their scope and definition have varied over time and between countries. Second, effective methods for teaching or otherwise developing these skills remain to be articulated. Third, methods for the valid and reliable assessment of generic skills in all sectors of education are required. Finally, forms of recording, certifying and reporting are of current concern and are addressed in some of the schemes.

Emergence of generic skills in Australia

The Quality of Education Review Committee, chaired by Professor Peter Karmel, was convened after a long period of sustained increases in educational attainment (Quality of Education Review Committee 1985) accompanied by concern about the quality and relevance of the education that was being offered to students. The committee’s terms of reference noted the increasingly competitive environment of Australia’s industries, and the importance of basic skills as preparation for further education and for the changing work environment.

The committee recommended that, in order to improve the relevance and quality of compulsory education, attention be paid to students’ ‘general competences’, identifying information skills, thinking skills, and working
independently and in groups as necessary generic skills (Quality of Education Review Committee 1985, p.201).

The Finn Committee (Australian Education Council, Finn Review Committee 1991) was the next major review charged to consider, among many very wide-ranging terms of reference, the role of generic skills. Indeed the term ‘key competencies’ was used in the committee’s terms of reference.

This committee noted the emergence of new demands for multi-skilling and adaptability brought about by both structural economic change and increasing global competition.

The Finn Committee considered the issue of generic skills and suggested six key areas of competence: language and communication, mathematics, scientific and technological understanding, cultural understanding, problem-solving, and personal and interpersonal skills. The committee also appreciated the complexity of this task, and recommended that a separate group be established to address this matter.

The committee established following the Finn recommendation was chaired by Eric Mayer and a major milestone in the development of generic skills in Australia was the publication of the Mayer report (Australian Education Council, Mayer Committee, 1992).

The Mayer Committee recommended that seven key competencies be recognised. These are well known and will not be reiterated here (see chapter entitled ‘Employability skills for the future’ by Penelope Curtin). The committee also recommended that each of these key competencies be assessed at three performance levels. However, there are other aspects of the Mayer report which distinguish it from comparable reports.

The Mayer Committee was careful to establish a set of principles that guided its selection of key competencies and their intended implementation. They defined key competencies as being:

... competencies essential for effective participation in the emerging patterns of work and work organisation. They focus on the capacity to apply knowledge and skills in an integrated way in work situations. Key Competencies are generic in that they apply to work generally rather than being specific to work in particular occupations or industries. This characteristic means that the Key Competencies are not only essential for participation in work, but are also essential for effective participation in further education and in adult life more generally.

(Australian Education Council, Mayer Committee 1992, p.7)

The committee established a set of required characteristics for a proposed generic skill to be acceptable as a key competency. They had to:

❖ be essential to preparation for employment
❖ be generic to the kinds of work and work organisation emerging in the range of occupations at entry levels within industry rather than be occupation- or industry-specific

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equip individuals to participate effectively in a wide range of social settings, including workplaces and adult life more generally

involve the application of knowledge and skill

be able to be learned

be amenable to credible assessment.

(Australian Education Council, Mayer Committee 1992, p.12)

Many submissions made to the committee had urged the inclusion of values and attitudes and other personal qualities. About these, the committee said:

Both the principles and characteristics the Committee has used to construct the set of Key Competencies preclude the inclusion of values and attitudes.

(Australian Education Council, Mayer Committee 1992, p.13)

The principles and characteristics outlined by the committee circumscribed the scope and definition of key competencies. While the first four characteristics are quite broad in scope, the last two constrain those attributes that are acceptable. In much recent discussion about the incorporation of key competencies into education and training, the requirement that they are ‘able to be learned’ has been transformed to ‘able to be taught’ and there has been discussion on how generic skills can be ‘delivered’. Many skills and attitudes are acquired through experiences in the family and in the community generally, as well as through formal education and training programs, so the questions of how they might be acquired, and separately, how they might be verified, are posed.

The requirement that key competencies be ‘amenable to credible assessment’ is a reasonable demand, although what constitutes credibility in assessment is contested, and this matter is discussed in another chapter in this volume (see chapter entitled ‘The assessment of generic skills’ by David Curtis).

If the original form of words used by the Mayer Committee is accepted; that is, that key competencies must be ‘able to be learned’ rather than formally taught, and if key competencies must also be assessable, a question arises about whose responsibility it is to assess those attributes that may have been learned, but not taught through formal education and training. The question is: Should education and training providers be required to assess all desired employability attributes, including those which have been delivered through their programs as well as those which learners may have acquired through life experiences?

Before considering this question further, it is profitable to examine comparable developments overseas.

International generic skills perspectives

Generic skills schemes have been developed in many countries. Only a few of them are examined in this chapter, and they have been selected because they
illustrate the issues of current concern to practitioners and policy-makers in Australia. Those which are reviewed are listed in table 1. For a brief discussion of developments in some European countries, see Curtis and McKenzie (2002, appendix 2).

In addition to transnational differences in generic skills schemes, in most countries the schemes have been revised or replaced, and so there are differences across time. There was considerable activity in the countries reviewed in the late 1980s and into the early 1990s and another period of activity in the late 1990s which continues to the present. The hiatus in activity is more noticeable in Australia than in some other countries, for example, in the United Kingdom, where activity appears to have been continuous. For convenience, activity prior to 1995 is compared with efforts since that time.

The reviews of the schemes listed in table 1 are in summary form only and are restricted to those elements that inform current debate within Australia.

Table 1: Generic skills schemes by country and over time

<table>
<thead>
<tr>
<th>Country</th>
<th>Activity before 1995</th>
<th>Activity since 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>SCANS</td>
<td>SCANS 2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21st Century Workforce Commission</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Core skills</td>
<td>Key skills</td>
</tr>
<tr>
<td>Canada</td>
<td>Essential skills</td>
<td>Employability Skills</td>
</tr>
<tr>
<td></td>
<td>Employability skills</td>
<td>Employability Skills 2000+</td>
</tr>
<tr>
<td>DeSeCo (OECD international)</td>
<td></td>
<td>DeSeCo (generic competencies)</td>
</tr>
<tr>
<td>Australia</td>
<td>Key competencies (Mayer)</td>
<td>Australian Industry Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business Council of Australia and Australian Chamber of Commerce and Industry</td>
</tr>
</tbody>
</table>

Note: SCANS = Secretary’s Commission on Achieving Necessary Skills

Generic skills schemes have been developed in many countries. The early Australian experience appears to have been influenced most strongly by developments in the United Kingdom and the United States. However, developments in Canada and the international DeSeCo project sponsored by the Organisation for Economic Co-operation and Development (OECD) provide useful resources for current debate within Australia.

United States

The Secretary’s Commission on Achieving Necessary Skills

The Secretary’s Commission on Achieving Necessary Skills (SCANS) report (1991) sought to document the skills and attributes which school leavers required in order to enter the United States workforce successfully. The
commission’s remit was to identify the skills required for employment, to propose levels of proficiency in them, to suggest effective ways to assess them, and to disseminate its findings. On the basis of analyses of the skills required in a range of jobs and in-depth interviews with workers from five major industry groups, the report did define what it called ‘workplace know-how’ which comprised a set of five workplace competencies and three foundation elements (see table 2).

Table 2: Summary of SCANS workplace know-how components

<table>
<thead>
<tr>
<th>Workplace competencies</th>
<th>Foundation skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective workers can productively use:</td>
<td>Competent workers in high performance workplaces need:</td>
</tr>
<tr>
<td>❖ Resources (time, money, materials, personnel)</td>
<td>❖ Basic skills (literacy, numeracy, communication)</td>
</tr>
<tr>
<td>❖ Interpersonal skills (teamwork, lead, negotiate)</td>
<td>❖ Thinking skills (decision making, problem solving)</td>
</tr>
<tr>
<td>❖ Information (acquire, evaluate organise data)</td>
<td>❖ Personal qualities (responsibility, self-esteem, integrity)</td>
</tr>
<tr>
<td>❖ Systems (social, organisational, technical)</td>
<td></td>
</tr>
<tr>
<td>❖ Technology (use technology, diagnose faults)</td>
<td></td>
</tr>
</tbody>
</table>

Note: SCANS = Secretary’s Commission on Achieving Necessary Skills

The early 1990s was a period of high youth unemployment in the United States, and there were considerable concerns both about this and the general competitiveness of American industry. The skills and attributes of workplace know-how were promoted in the expectation that schools would incorporate them in curricula. The assessment strategies were directed at schools with formal assessment of the Secretary’s Commission on Achieving Necessary Skills competencies suggested at grades 8 and 12 (Secretary’s Commission on Achieving Necessary Skills 1991, p.17).

The elements of workplace know-how were derived from an analysis of the requirements of numerous jobs listed in the Department of Labor’s Dictionary of occupational types and through interviews with workers in five major industry groups.

The report of this project included basic skills (literacy, numeracy, and communication) and personal attributes. The personal attributes were a mixture of behaviours, dispositions and attitudes, which included politeness, friendliness, empathy, application of effort, perseverance, goal-setting and positive self-worth.

Five performance levels were recommended: preparatory, work-ready, intermediate, advanced and specialist. The preparatory level was described as being suitable only for unskilled work, while the highest level, specialist, was for experienced employees in specialised positions. However, by the time the
report was released, the committee had not undertaken the work necessary to specify assessment strategies or detailed standards for the competencies or foundation skills.

**SCANS 2000**

The work of the Secretary’s Commission on Achieving Necessary Skills has continued in a series of projects run through the SCANS 2000 Center at Johns Hopkins University.¹ The set of workplace competencies and foundation skills continue to be used in SCANS 2000 programs.

School-to-work transition remains a strong focus and a range of assessment tools have been developed to document and certify students’ achievements of the competencies. The center has conducted a variety of projects itself and has generated related projects in other organisations. The SCANS 2000 Career Transcript System includes workplace simulations which provide opportunities for assessment of workplace know-how and a secure online repository in which individuals can build a resumé of skills acquired through courses and on the job.

In a Secretary’s Commission on Achieving Necessary Skills-related project, a set of assessment tools has been developed by the Comprehensive Adult Student Assessment System (CASAS).² The Workforce Skills Certification System consists of instrumental test batteries to assess basic skills and some project-based tasks and worksite performance ratings with corresponding scoring rubrics, all of which contribute to a portfolio, to assess workplace competencies.

Many agencies at the federal, state and district levels and many industry organisations at local levels are involved in assessment projects and certification systems. However, there is no dominant certification system.

**21st Century Workforce Commission**

In another initiative which sought to address the skills required by industry, then Vice President (Al Gore) established the 21st Century Workforce Commission (21st Century Workforce Commission 2000b). This commission was established in response to concerns about America’s competitiveness as a result of technological change and globalisation. Its goals were: to build an education and training system to meet the emerging needs of industry; to improve access to education and training for all, including those in low-skill and low-wage jobs; to promote flexibility of access to education; and to increase individuals’ awareness of and motivation to undertake education and training.

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¹ [http://www.scans.jhu.edu](http://www.scans.jhu.edu)
² [http://www.casas.org/casasnewweb/index.cfm]
Initially, the commission built upon the Secretary’s Commission on Achieving Necessary Skills foundation, but in a second report (21st Century Workforce Commission 2000a), there was a much stronger emphasis on information technology skills. It argued that America’s future competitiveness lay with growth in the information technology sector and it defined ‘21st century literacy’ around information technology facility. This might be seen as an extension of the original Secretary’s Commission on Achieving Necessary Skills recognition of the importance of basic skills. That report also included emphases on teamwork and communication, but its focus became rather narrower than the original Secretary’s Commission on Achieving Necessary Skills proposal.

What it added to Secretary’s Commission on Achieving Necessary Skills was a set of strategies for building a national commitment to lifelong learning and it introduced the idea of ‘lifelong learning accounts’ and other entitlements to ongoing education and training, and it attempted to include low-skill, low-wage workers in this scheme. In this sense it bears some similarity to the United Kingdom policy emphasis on lifelong learning.

United Kingdom

Core skills

An account of the evolution of generic skills in the United Kingdom is complicated slightly by differences between policy in Scotland and in the remainder of the United Kingdom. Here, events in England are taken as indicative of the United Kingdom scene.

Werner (1995, pp.41–7), noted that the Confederation of British Industry wanted to include values and integrity, personal and interpersonal skills, and a positive attitude to change, but these proposals were rejected by the National Curriculum Council. The set of core skills were:

❖ communication
❖ problem-solving
❖ personal skills
❖ numeracy
❖ information technology
❖ competence in a modern (foreign) language.

Five performance levels were proposed for this set of skills. They were: foundation, craft, technician/supervisor, higher technician/junior manager, and professional/managerial.
Core skills initiatives were aimed at the 15 to 19-year-old age group, that is, new entrants to the workforce. The core skills were intended to be integrated into national vocational qualifications and into higher school education courses and to be assessed as parts of those courses, rather than to become the basis of specific courses themselves. However, specific units of work for the core skills were developed for use within courses. Since the core skills were assessed as part of the national vocational qualifications which had no formal examinations, but which required that evidence of performance be presented, there was no mechanism by which proficiency in the core skills could be certified.

‘Key skills’
The core skills were revised and became known as ‘key skills’, comprising:

- communication
- application of number
- information technology
- working with others
- improving own learning and performance
- problem-solving.

A subset of communication and application of numbers—literacy and numeracy—defined at lower levels, comprise the set of basic skills. The separation of basic skills from the key skills may reflect a concern which arose out of the International Adult Literacy Survey (OECD & Statistics Canada 1995) which revealed that a large proportion of adults (up to 45%) in many Organisation for Economic Co-operation and Development (OECD) countries, including the United Kingdom, the United States and Australia, had low levels of functional literacy and numeracy.

A national key skills qualification, based upon the first three key skills, has been available. Assessment for this qualification uses both an internal (to the training provider) portfolio of learning tasks or work experience and an external test in each of the key skill areas. This qualification is in effect a profile of achievement across the three key skill areas and performance levels reported are the lowest three of the National Qualifications Framework. Recently, Turner (2002) has reported that training providers and employers have become disenchanted with the key skills qualification. They believe that it does not guarantee the level of skill desired and it has been onerous to administer. In Scotland, a different approach was taken. A new Scottish qualifications certificate was developed to include both school and vocational college attainment and it is expected to include a core skills profile.

Neither the core or the key skills schemes incorporated personal attributes, despite pressure from the Confederation of British Industry for their inclusion.
initially during the formulation of core skills and more recently (Confederation of British Industry 1998). The list of skills endorsed in the United Kingdom was constrained to quite a modest size compared with the North American schemes.

The core and key skills included a substantial emphasis on the basic skills of literacy, numeracy and information technology.

The United Kingdom experience with a single national qualification is not an encouraging one for those in Australia who might want to pursue this option. The key skills qualification was narrowly based and had a centralised and highly prescriptive format. Its narrow focus limits its use and probably adds little that is not already apparent in reports of school performance. Further, the qualification was typically taken at an early stage in the transition to work. This once-and-forever result does not acknowledge any subsequent learning, either formal or informal, and therefore is not consistent with many other United Kingdom initiatives in lifelong learning.

Canada

Employability skills

In the early 1990s, the Conference Board of Canada developed the Employability Skills Profile (ESP) which identified the generic academic, personal management and teamwork skills which are required, to varying degrees, in every job (Conference Board of Canada 1992). Three broad domains of employability skills were identified.

Table 3: Summary of the Employability Skills Profile (1992)

<table>
<thead>
<tr>
<th>Academic skills</th>
<th>Personal management skills</th>
<th>Teamwork skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills needed to get, keep and progress in a job</td>
<td>Personal skills, attitudes and behaviours to get, keep and progress in a job</td>
<td>Skills needed to work with others to achieve the best results</td>
</tr>
<tr>
<td>Communicate</td>
<td>Positive attitudes and behaviours</td>
<td>Work with others</td>
</tr>
<tr>
<td>Think</td>
<td>Responsibility</td>
<td></td>
</tr>
<tr>
<td>Learn</td>
<td>Adaptability</td>
<td></td>
</tr>
</tbody>
</table>

Each of the three broad domains comprised a further 3–4 sub-domains and a number of more specific skills (for example, ‘Write effectively in the languages in which business is conducted’). The 1992 version of the employability skills profile comprised 26 specific skills.

The Employability Skills Profile was aimed specifically at new entrants to the workforce and it was adopted by all provinces in their education curriculum planning.
Essential skills

Human Resources Development Canada initiated the Essential Skills Research Project (ESRP) in 1994. The work of this organisation led to nine essential skills being identified. These were:

- reading text
- document use
- writing
- numeracy (mathematics)
- oral communication
- thinking skills (problem-solving, decision-making, job task planning and organising, significant use of memory, and finding information)
- working with others
- computer use
- continuous learning.

These skills were described as enabling the learning of other more job-specific skills. The focus of the project was on enhancing the skill levels of workers in relatively low-skill jobs—those requiring no more than completion of secondary schooling. The emphasis on document use, reading texts, writing, and numeracy reflects concerns arising as a result of the International Adult Literacy Survey which found that many workers lacked the basic skills that would enable them to enjoy sustained employment security and contribute to national economic growth.

Two assessment strategies were developed to support the Essential Skills Research Project. The Test of Workplace Essential Skills built upon the work undertaken by Statistics Canada for the OECD in the International Adult Literacy Survey. In these tests, which were customised for particular industries but maintained a common core of items to enable cross-industry skill demands to be made, authentic workplace materials were used to assess literacy and numeracy. The Essential Skills Portfolio Developer provided a mechanism by which students and workers could construct a portfolio that incorporated a profile of their essential skills. This tool provided a means of promoting the importance of essential skills among both potential employees and employers.

Employability Skills 2000+

The Conference Board has recently published Employability Skills 2000+ (Conference Board of Canada 2000a). This enhanced framework has built on the experiences with the 1992 Employability Skills Profile and the work of the
Essential Skills project of 1994. It is an extensive set of 56 skills and attributes and a synopsis of it is presented in table 4. The set of 1994 ‘essential skills’ were quite similar to the ‘key skills’ of the United Kingdom. Basic skills (literacy, numeracy and information technology) were represented; thinking skills were presented in a traditionally cognitive way; interpersonal skills were present in working with others; and continuous learning was included. Personal attributes were absent.

Table 4: Summary of Employability Skills 2000+

<table>
<thead>
<tr>
<th>Fundamental skills</th>
<th>Personal management skills</th>
<th>Teamwork skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills needed as a base for further development</td>
<td>Personal skills, attitudes and behaviours that drive one’s potential for growth</td>
<td>Skills and attributes needed to contribute productively</td>
</tr>
<tr>
<td>Communicate</td>
<td>Demonstrate positive attitudes and behaviours</td>
<td>Work with others</td>
</tr>
<tr>
<td>Manage information</td>
<td>Be responsible</td>
<td>Participate in projects and tasks</td>
</tr>
<tr>
<td>Use numbers</td>
<td>Be adaptable</td>
<td></td>
</tr>
<tr>
<td>Think and solve problems</td>
<td>Learn continuously</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work safely</td>
<td></td>
</tr>
</tbody>
</table>

The Employability Skills Profile (1992) had a greater role for personal attributes such as self-esteem, integrity, initiative, and a positive attitude to change than did the set of Essential Skills.

It is instructive to analyse the changes between the 1992 and 2000 versions of Employability Skills. Both employ the same basic structure of three major domains and detailed skill specifications, but there are some significant differences.

The 2000 version emphasises to a much greater extent, the skills needed to progress in the world of work, and not just to enter it. The later version emphasises application beyond work. The categories, manage information; use numbers; work safely; and participate in projects and tasks, have been added. The more recent version is also much more specific, listing 56 skills and attributes compared with the 26 of the original scheme. The additions are a mixture of attitudes and higher levels of thinking skills, such as monitoring and evaluating.

The assessment regime suggested in Employability Skills 2000+ is based around the Employability Skills Toolkit (Conference Board of Canada 2000b). This is a suite of tools designed to assist individuals to build portfolios of evidence of their skills.
Disciplinary perspectives

The DeSeCo Project

The DeSeCo project (the Definition and Selection of Competencies) is an important generic skills initiative for several reasons. First, it deals in great depth with generic skills—an issue which continues to exercise the thinking of policy-makers and practitioners in all sectors of education in many countries. Second, it is supported by the OECD and is therefore likely to be a very influential project as member countries and others watch the progress of this project. Third, a very different approach has been taken in this project in defining generic skills compared with most of the national projects described above. Many past generic skills initiatives can be described as consensual in that they represent the considered opinions of informed business leaders. In the DeSeCo project, perspectives from a range of relevant disciplines have been sought and experts from those disciplines have been asked to define the concept of competence and to list the elements of generic competence.

Experts from five major disciplines—anthropology, sociology, economics, psychology and philosophy—outlined those skills they considered to be generic. Haste (1999), a psychologist, suggested five competencies: technological competence; dealing with ambiguity and diversity; finding and sustaining community links; managing motivation, emotion and desire; and agency and responsibility. Economists Levy and Murnane (1999) suggested a conventional set of competences which included the basic skills of literacy and numeracy, communication, teamwork, interpersonal skills, and information technology facility. Other contributors suggested competences that revealed a strong community and citizenship orientation, rather than a workplace one.

In addition to definitional statements, the project has identified four major conceptual elements of generic competences. Key competencies:

❖ are multi-functional. They meet a range of different and important demands of daily life. They are needed to achieve different goals and to solve multiple problems in different contexts.

❖ are relevant across many fields. They are relevant for participation in school, the labour market, political processes, social networks, and interpersonal relationships, including family life and for developing a sense of social wellbeing.

❖ refer to a high order of mental complexity. They assume a mental autonomy which involves an active and reflective approach to life.

❖ are multi-dimensional. They are composed of know-how, analytical, cultural and communication skills, and common sense.

These characteristics of generic competences are reflected in the views of several researchers who have investigated generic skills in an Australian context.
The DeSeCo project has an orientation which is broader than workforce participation and includes strong personal fulfilment and community involvement objectives. The scope of its competencies is therefore broader than many national generic skills schemes. It includes personal attributes, but limits them to constructs that are accepted in psychological and sociological discourses. At this stage the project has not dealt directly with issues of assessment, but there appears to be an intention to use the DeSeCo outcomes in an extension of the Programme for International Student Assessment (PISA) project (Lokan, Greenwood & Cresswell 2001). If this occurs, robust assessment of selected competencies can be expected.

A human resources perspective

Spencer and Spencer (1993) outlined an analysis of workplace competence based on the work of McClelland (1973). He had observed that traditional aptitude and intelligence test performance did not correlate well with on-the-job performance and he redefined competence in terms of what worked at work:

*A competency is an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation.*

(Spencer & Spencer 1993, p.9)

Key elements of this definition of competence are: that it is a latent trait and therefore not directly observable; it must be shown to be correlated with criteria of performance that have been defined in terms of observable behaviours; and that it must be correlated with superior job performance.

Five types of competency characteristics are recognised: motives, traits, self-concept, knowledge and skills. Two general levels of competency are recognised: threshold competencies necessary for effective performance, and differentiating competencies necessary for superior performance. The elements of competence and the types of competency recognised in this work have important implications for assessment.

Spencer and Spencer identified six competency clusters:

- achievement and action
- helping and human service
- impact and influence
- managerial
- cognitive
- personal effectiveness.

These were elaborated through 20 competencies. The authors reported that this set of competencies accounted for 80–95% of job competencies. The remaining competencies are specific to particular jobs and are therefore not generic.
The competencies defined in this work are used in the analysis of job requirements and for recruitment, selection, performance management and promotion. Because the definition of these competencies was specifically job-related, it is not certain that they would apply to the broader personal and social dimensions of competence. The assessment regime involves interviews based on critical incident analysis, and while this is feasible for recruitment, it is probably not a viable large-scale assessment strategy.

Recent Australian initiatives

Australian Industry Group report

In 1999, the Australian Industry Group commissioned a report into the training needs of Australia’s industries (Allen Consulting Group 1999). The views of 350 companies from the manufacturing, construction, and information technology sectors were canvassed. Among many findings, the report noted that ‘an increasing premium is being placed on generic skills, both “hard” (notably IT skills) and “soft” (e.g. problem-solving, team skills, willingness and ability to adapt) to be developed prior to recruitment’ (p.v). The report then outlined the skills that are required by Australian industry if it is to remain globally competitive (p.xi). These included, in addition to job-related technical skills, the skills and attributes shown in table 5.

Table 5: Summary of the Australian Industry Group proposed set of generic skills

<table>
<thead>
<tr>
<th>Generic ‘core’ or basic skills</th>
<th>Interpersonal or relationship skills</th>
<th>Personal attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy</td>
<td>Communication</td>
<td>Capacity to learn</td>
</tr>
<tr>
<td>Numeracy</td>
<td>Team working</td>
<td>Willingness to embrace change</td>
</tr>
<tr>
<td>Information technology capability</td>
<td>Customer focus</td>
<td>Independent problem solving and reasoning capability</td>
</tr>
<tr>
<td>Understanding of systems relationships</td>
<td>Project and personal management</td>
<td>Practicality and a business-orientation</td>
</tr>
</tbody>
</table>

Companies are focusing more on recruiting and are using more rigorous and structured approaches to recruiting. They emphasise up front, the key core skills, interpersonal skills and personal attributes they seek more than specific technical skills, which can often be gained through further training (Allen Consulting Group 1999, p.32).

The Australian Industry Group identified ‘achieving, high-performing companies’ and among them found the following characteristics. They:

❖ recruit people with key, generic work-related skills
recruit people from education and training programs that emphasise key generic skills

place a priority on developing direct relationships with education and training institutions (Allen Consulting Group 1999, p.92)

These views have implications for policy-makers and practitioners in all sectors of education. A greater focus on skill development, of both technical vocational skills and generic skills, is required. Providers that add value to their education and training programs by targeting generic skills will provide a comparative advantage to their graduates in the labour market and be similarly advantaged themselves through direct relationships with companies and in attracting future learners.

Business Council of Australia and the Australian Chamber of Commerce and Industry

More recently, the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA), with support from the Australian National Training Authority (ANTA) and the Commonwealth Department of Education, Science and Training, undertook a comprehensive study of generic employability skills in Australia and elsewhere (Australian Chamber of Commerce and Industry & Business Council of Australia 2002).

The report from this study reiterated many of the previously identified contextual factors which are expected to continue to influence Australia’s competitiveness. These include a demand for greater profitability, increasing global competition, increased complexity, innovation, and flexibility.

The report proposed an Employability Skills Framework, and recognised the importance of the Mayer key competencies as a basis for continuing work in this area. However, the report also identified the need to expand the scope of employability skills to include personal attributes and supported a more extensive list of skills than had been recognised in earlier work. The major skill groups identified are: communication, teamwork, problem-solving, initiative and enterprise, planning and organising, self-management, learning, and technology. Important workplace abilities, such as customer service and leadership, result from combinations of elements of the major skills. The Employability Skills Framework provides a coherent list of attributes and skills while providing scope for enterprise-level flexibility (see chapter entitled ‘Employability skills for the future’ by Penelope Curtin).

Several noteworthy features of the Employability Skills Framework are:

- It includes extensive lists of skills and attributes and broadens the scope of the employability skills concept compared with the Mayer Committee’s recommendations.
Each of the skills has been elaborated through lists of skill ‘elements’, and these provide an opportunity for each skill to be contextualised, thus acknowledging the variation in skill requirement of different work contexts, while retaining the central concept of broadly applicable generic skills.

The report asserts that some work-related skills are, in reality, combinations of more central key skills. For example, customer service involves both communication and problem-solving. An important implication from this is that it is not necessary to develop an exhaustive list of skills: it is more productive to identify a common set of skills which, in combination, lead to high job-related performance.

Key issues

The review of national schemes, their variation over time, and the perspectives from other disciplines is informative in seeking answers to Australia’s current policy questions on generic skills. Many issues require resolution, and some of these issues are partly addressed in the review.

Principles

The Mayer Committee is one of few which explicitly addressed criteria for acceptance of a proposed skill as a key competency. While such principles would have been debated in framing their schemes, it seems important to articulate them and to use them to establish acceptable generic skills and priorities for their implementation. The Mayer Committee’s criteria seem conservative when the range of skills accepted elsewhere are considered. The Canadian Employability Skills 2000+ initiative suggests that much more accommodating criteria were in operation.

Scope and definition

It is clear that the scope and definition of generic skills have differed considerably between countries and over time. The United Kingdom and Australia adopted a conservative approach in defining generic skills in the early 1990s. The Essential Skills scheme in Canada was similarly conservative. In North America, the United States Secretary’s Commission on Achieving Necessary Skills workplace know-how and the Canadian Employability Skills Profile were less conservative and included personal attributes. In Canada, the revised generic skills scheme (Employability Skills 2000+) is a much more diverse set with an even stronger representation of personal attributes. In the United States, the Secretary’s Commission on Achieving Necessary Skills scheme has been retained, while the work of the 21st Century Workforce Commission reflects a narrowing of focus on the ‘new literacies’ for an economy increasingly dependent on information technology. The schemes proposed
recently in Australia by the Australian Industry Group and jointly by the Australian Chamber of Commerce and Industry and the Business Council of Australia clearly support a more open definition of competence that includes personal attributes.

The work of the multidisciplinary DeSeCo project provides support for a more encompassing definition. However, the reason for the broader approach is the wider scope of this project in which generic competencies are seen as important for reasons of personal development and community engagement, as well as for participation in productive work. The human resources perspective, while very focused on entry to and advancement in jobs, shows a strong orientation to personal characteristics.

There is considerable variation between countries, over time and across disciplinary perspectives, over what constitutes a coherent set of generic skills. There is evidence of a conservative approach in which a concern for the ‘teachability’ and ‘assessability’ is apparent. The views of peak employer organisations and the human resources perspective support the inclusion of a broad range of personal attributes. These views indicate that such attributes are important. What now needs to be shown is that these can be assessed in a credible and efficient way. The DeSeCo project may be able to do this.

Assessment and certification

The national projects have shown varying levels of concern with assessment. For the Mayer Committee, it was an important consideration and indeed, a framing principle. A variety of approaches to assessment have been tried. The most common approach is to rely on a portfolio to illustrate individual achievement, and this has occurred in Canada and the United States. Instrumental assessment has been tried in Canada and the United States, but where this has worked well, it has been restricted to basic skills. Recent work in Australia on graduate skills assessment has shown that this approach can be extended to other skill domains (see chapter entitled ‘The assessment of generic skills’ by David Curtis).

Assessment continues to be one of the most difficult issues surrounding generic skills implementation. A broad consensus is beginning to emerge on definitional issues, but successful implementation depends on credible, reliable and efficient assessment. This is an area where much more work is required. This should not stop attempts to implement generic skills, but it may suggest priorities for a progressive roll-out of generic skills in education and training.

The Key Skills Qualification in the United Kingdom and to a lesser extent, the Test of Workplace Skills in Canada are examples of attempts to certify achievement of generic skills. The United Kingdom experience is not encouraging. Its scope was too restricted, as credible assessment was only available for basic skills, and the higher-order thinking skills, interpersonal
skills and personal attributes, which are of interest to employers, were not tested. Instead of a single national test, it may be more productive to develop a devolved system of assessment, as occurs in Australia in all education sectors, but to consider also methods of quality assurance, such as those being implemented in the higher education sector, to validate reported achievement.

References

21st Century Workforce Commission 2000a, Building America’s 21st century workforce, National Alliance of Business and US Department of Labor, Washington, DC.


