Employability Skills for the Future

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COMMONWEALTH DEPARTMENT OF EDUCATION SCIENCE & TRAINING

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Contents

Preface and
Acknowledgments

The Australian Chamber of Commerce and Industry and the Business Council of Australia have undertaken this research project *Employability Skills for the Future* to provide the Department of Education, Science and Training with a detailed understanding of the employability skills needs of industry. This report provides a consolidation of research with small, medium and large-sized enterprises during 2001. The outcome of the research has been the development of an Employability Skills Framework that has strong industry support from a representative sample of stakeholders.

This final report has benefited from the contributions of:

- Australian Council of Educational Research, which was commissioned to conduct a literature review to assist the development of a draft framework;

- Field Learning, which undertook the case study research with large enterprises; and

- Diverse Education Services, which completed the focus groups and interviews with small and medium-sized enterprises.

The Employability Skills for the Future Reference Group has provided invaluable insights and comment on the project as it has progressed. Industry representatives on this Group endorsed the final report as reflecting industry views.

Abbreviations

ACCI	Australian Chamber of Commerce and Industry
ACER	Australian Council of Educational Research
AGPS	(former) Australian Government Publishing Service
AHEC	Australian Higher Education Council
AiG	Australian Industry Group
ANTA	Australian National Training Authority
AQF	Australian Qualifications Framework
AV-CC	Australian Vice-Chancellors' Committee
AVETRA	Australian Vocational Education and Training Research Association
BCA	Business Council of Australia
CUT	Curtin University of Technology
DEST	Department of Education, Science and Training
IT	Information Technology
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MINCO	Australian National Training Authority Ministerial Council
NBEET	National Board of Employment, Education and Training
NCVER	National Centre for Vocational Education Research
NCVQ	National Council of Vocational Qualifications
NFF	National Farmers' Federation
NTQC	National Training Quality Council
OECD	Organization for Economic Cooperation and Development
QUT	Queensland University of Technology
RMIT	RMIT University
RTO	Registered Training Organisation
SCANS	Secretary's Commission on Achieving Necessary Skills
TAFE	Technical and Further Education
TER	Tertiary Entrance Ranking
UNISA	University of South Australia
UTS	University of Technology, Sydney
VET	Vocational Education and Training

Executive Summary
and Recommendations

Introduction

Australia is the 14th largest economy in the world. It has achieved this position through a decade of change and economic growth and a strong focus on productivity improvements (International Monetary Fund, 2001). Australian enterprises, in recognition of the economic challenges and globalisation, have implemented a range of strategies to support growth and increase their international competitiveness. Allen Consulting (2000) advised that such strategies included:

- multiskilling;

- greater automation; and

- workforce restructuring.

Three recent government reports, *Backing Australia's Ability* (2001), *Knowledge and Innovation* (1999) and *Investing for Growth* (1997), highlight the positioning of Australia as an international player in the knowledge economy and the need to continue building Australia's capacity to effectively operate in the 'global knowledge-based economy'. They outline a series of government initiatives targeting research and development, commercialisation, venture capital and technology diffusion.

These reports discuss how Australia will effectively respond to globalisation and the knowledge economy. They note the importance of knowledge work and knowledge workers to Australia's economic success. Significantly, the authors discussed the need to ensure the Australian community understands the broad issues underpinning globalisation and the knowledge economy, but more particularly they considered the need to create a community equipped to understand and participate in ongoing change. Education and training providers will have a key role in equipping the community for this challenge.

Enterprises continue to focus on adaptation, cost reduction, increased productivity and new markets and/or new products and services. Enterprise choices with regard to recruitment and training are largely being driven by these business strategy directions. In this environment, there is an increasing requirement for employees to be able to support increased competitiveness, innovation, flexibility and client focus.

Enterprises are increasingly seeking a more highly skilled workforce where the generic and transferable skills are broadly distributed across the organisation.

There has been broad agreement that all young people need a set of personal attributes and skills that will prepare them for both employment and further learning. It is also recognised that the ongoing employability of individuals is dependent on them having a set of relevant skills, as well as a capacity to learn how to learn new things.

However, what has been less clear is what these atttributes and skills should be in the context of challenges facing Australian industry.

The Business Council of Australia (BCA) and the Australian Chamber of Commerce and Industry (ACCI) judged that it was timely to obtain the views of industry to assist in the development of a comprehensive framework of employability skills. They sought assistance from the Department of Education, Science and Training (DEST) and the Australian National Training Authority (ANTA). It was recognised that such a framework of employability skills would need to be relevant to small, medium and large enterprises and able to support the future needs of Australian industry.

Purpose of the Project

DEST commissioned the project to provide advice on:

- possible new requirements for generic employability competencies that industry requires, or will require, in the foreseeable future, since the Mayer Key Competencies were developed;

- clear definitions of what Australian industry and leading business enterprises mean by 'employability' skills and the consistency or otherwise between the various terms similarly used;

- a proposed suite of employability skills, including an outline of assessment, certification and reporting of performance options that suit both industry and education;

- industry (small, medium and large business) reactions to the proposed suite and reporting options;

- a report on the case studies involving 13 large enterprises; and

- a report on focus group research with small and medium-sized enterprises.

The project was established in recognition of the changing nature of work and skills required by enterprises to ensure long-term economic growth. The project has sought the views of employers with regard to the set of employability skills relevant to Australian industry for the future.

The focus of the research was to identify the set of employability skills that employers sought in their employees. The project did not examine the skills required for self-employment although it can be imagined that there would be strong similarities.

Project Methodology

Research in this area is complex. Factors contributing to this complexity include the lack of clarity in language and definitions, the capacity of enterprises to predict their future and the changing nature of the workplace. Consequently, it was decided to use largely qualitative research tools and attempt to capture the detailed views of a sample of enterprises.

There were four main components of the research. The first step in the project was the commissioning of a comprehensive literature review that informed the two industry research components – focus groups and individual interviews with a sample of 40 small and medium-sized enterprises and 13 detailed case studies in large enterprises.

Enterprises selected for the qualitative research (interviews, focus groups or case studies depending on size and location) were located in both metropolitan and regional Australia across a range of industry sectors. Interviews were undertaken with key senior managers to determine the views of individual enterprises on necessary employability skills, approaches to developing, tracking and assessing employability skills and how educational providers could play a more effective role in developing employability skills. Enterprise size ranged from enterprises with two employees through to those with over 1000 employees.

The fourth step was a validation process following the completion of case study, focus group and interview research. The draft Employability Skills Framework, developed as part of the project, was assessed by another 150 enterprises and employer groups. This provided feedback and acceptance of the framework. This step was used to help offset any skewing from the sampling in the qualitative research.

This report to DEST, *Employability Skills for the Future*, provides details of the outcomes of these three research components and proposes a new framework of employability skills for the future from the perspective of the employer.

Project Management

The project has been jointly managed by BCA and ACCI.

A reference group was established at the commencement of the project to provide guidance.

Members of the Reference Group were:

ACCI – Steve Balzary

Australian Industry Group (AiG) – Brian Curtin

ANTA – Paul Byrne

BCA – Maria Tarrant, Chair

DEST – Murray Judd

National Centre for Vocational Education Research (NCVER) – Chris Robinson

National Farmers' Federation (NFF) – Richard Calver.

The Reference Group provided strategic advice on the areas for research and key issues that required consideration. The Reference Group then considered the draft reports resulting from each stage of the research. Members of the Reference Group provided advice on the issues emerging from the research that should be considered in the final report to DEST.

The members of the Reference Group have endorsed this report, *Employability Skills for the Future.*

Terminology

Many terms are used in different environments to describe general skills that all employees may have. Similarly, education and training providers use a range of terms to represent concepts relating to learning and learning outcomes.

The Australian Council of Educational Research (ACER) review (2001) identified a range of descriptors for the characteristics learners are expected to acquire. These are included in the table below.

Descriptor	Definition
Skills	*Skills* are commonly understood to refer to an ability to perform a specific task.
Competencies	*Competency* is used to refer to an observable behaviour performed to a specified level and therefore provides a basis for the assessment of performance.
Attributes, qualities and characteristics	These refer to those capabilities of an individual in most instances although "*characteristics*" is sometimes used to describe a workplace/ job-specific requirement.

The Reference Group decided to use the term *skill* as it was generally used in enterprises where it has a broader definition than other terms in the literature. However, as there was a need to differentiate between technical skills, job specific skills and the more general skills and personal attributes related to employment, the Reference Group developed the following working terminology and definition for the project:

Employability skills are defined as 'skills required not only to gain employment, but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions'.

This approach was reinforced by the literature review completed for this project by ACER, which also noted that there was a greater use of the term employability when describing certain skill sets. They argue:

> Employability is more attractive as a descriptor than employment-related since it conveys a greater sense of an individual's long-term capacity to build a career and to prosper in a dynamic labour market. Employability implies qualities of resourcefulness, adaptability and flexibility, whereas employment-related suggests an orientation to the current state of the labour market. As such, employability has more potential as a term to signal the qualities needed for success not only in paid employment but also in other domains of life. (ACER 2001, p. 6)

The literature review also provided an international overview highlighting the similarities in both the need for employability skills in a range of developed economies and the range of skills governments and enterprises see as a priority. The table below from the ACER review (2001, p. 38) provides a comparison of the skill frameworks in place.

Comparative table of generic employability skills by country

Australian key competencies (Mayer Key Competencies)	United Kingdom (NCVQ) core skills	Canada employability skills profile	United States (SCANS) workplace know-how
Collecting, analysing and organising information	Communication	Thinking skills	Information Foundation skills: basic skills
Communicating ideas and information	Communication Personal skills: improving own performance and learning	Communication skills	Information Foundation skills: basic skills
Planning and organising activities	Personal skills: improving own performance and learning	Responsibility skills Thinking skills	Resources Foundation skills: personal qualities
Working with others and in teams	Personal skills: working with others	Positive attitudes and behaviour Work with others Adaptability	Interpersonal skills
Using mathematical ideas and techniques	Numeracy: application of number	Understand and solve problems using mathematics	Foundation skills: basic skills
Solving problems	Problem solving	Problem-solving and decision-making skills Learning skills	Foundation skills: thinking
Using technology	Information technology	Use technology Communication skills	Technology Systems
Post-Mayer additions: Cultural understandings	Modern foreign language	Manage information Use numbers Work safely Participate in projects and tasks	

Source: Adapted from Werner 1995.

The Employability Skills Framework identified through this research project includes a number of similarities to the overseas frameworks.

The Employability Skills Framework developed through the research includes three key terms that are described in the table below and used in this report.

Term	Explanation
Personal attributes	Term used to describe a set of non skill-based behaviours and attitudes that employers felt were as important as the employability skills and other technical or job specific skills.
Skills	Term used to describe the learned capacity of the individual. *Skills* has been used instead of *competencies* reflecting the language of the enterprises interviewed and to avoid any definitional confusion with the different ways *competencies* is used.
Elements	The elements are the facets of the skill that employers identified as important. The mix and priority of these elements would vary from job to job. The list of elements is not exhaustive but rather reflects the information provided by the specific enterprises interviewed for this study. The list of elements is indicative of the expectations of employers. The level of sophistication in the application of the element will depend on the job level and requirements.

Overview of Project Findings

The project has identified those key generic employability skills that enterprises argue individuals should have along with the job-specific or relevant technical skills. The project also identified the ongoing relevance of the Mayer Key Competencies but confirmed that employers now required a set of personal attributes in all employees and a set of additional skills. These additions are seen as essential by the enterprises participating in the research. Finally the project has identified an Employability Skills Framework that can contribute to the thinking and curriculum development of the Australian education and training system.

Chapter 5 of this report provides details of the personal attributes and employability skills that enterprises identified as critical.

In summary, there are a number of critical aspects underpinning this framework.

- The framework identified by employers through the research with enterprises builds on the Mayer Key Competencies.

- Employer recognition and integration of the Mayer Key Competencies in their discussion of the nature of jobs and skills are strong.

- Employers have identified the importance of what have been termed 'personal attributes that contribute to employability' and indicate that these are required as part of the set of employability skills.

- Small and medium-sized enterprises and large enterprises have identified the same critical mix of skills as being relevant to the employability and ongoing employment of individuals.

- The skills identified as critical to employability are broadly consistent across industry sectors and all are important though the elements would depend on the industry and workplace context.

- The priority of these employability skills (and their respective elements) vary from enterprise to enterprise subject to the context of the job level and requirements.

- The employability skills identified are as relevant as job-specific or technical skills.

- The employability skills identified are relevant to entry-level and established employees. What is also recognised by employers is that the elements and level of complexity of the skill will vary with both the job type and classification.

- There is a strong recognition of the role of lifelong learning in skill development and response to change.

- Employer views with regard to leadership have emerged in this research differently from in other research. Some employers have suggestd that the skills identified in the framework underpin an employee's capacity to lead.

- It is recognised that customer service of itself is not an isolated skill but rather the outcome of the integration of a range of different skills of an individual, e.g. communication and problem solving.

- Throughout the project interviewees also argued that the employability skills identified had a much broader application. The skills were as important to effective participation in the community as they were to effective participation in the workforce.

A critical feature of this research has been the comment by many employers that the elements related to the skills will change both in their nature and priority in line with the business activity of enterprises and that flexibility needs to be maintained in dealing with generic skills. New work and production processes, new threats and opportunities, and new technology will continue to have an impact on the elements in the Employability Skills Framework.

The Employability Skills Framework consolidates the outcomes of the research with enterprises and takes into consideration the Australian context and overseas trends. There are significant areas of commonality with the outcomes of this research and the international research as discussed in Chapter 3 of this report.

The configuration and content of the Employability Skills Framework, however, more closely reflects the language and trends in thinking in Australia. The Mayer Key Competencies have provided both Australian industry and the Australian education and training system with a useful starting point and tool for understanding and applying the concepts of generic employability skills.

Enterprises participating in the research placed a strong emphasis on the need for both entry-level and ongoing employees to exhibit a broad range of personal attributes. Employers suggested that entry-level and ongoing employees needed to reflect attributes that were acceptable to the rest of their working peer group and the customer and in line with the company's approach. The employers participating in the research stressed the need to ensure future employees developed these personal attributes, as they are an integral feature of an employable person and a key component of the Employability Skills Framework.

The identification of personal attributes as critical to employability will require further consideration by education and training providers regarding how they can assess these attributes and provide advice to the individual.

A number of enterprises and organisations in the research also suggested that there would be benefit in reviewing and redeveloping aspects of the current documentation and practice used by education institutions to record student attainment so that the documents better reflected the personal attributes and skills attained by the student.

The Employability Skills Framework incorporates the following personal attributes that contribute to overall employability:

- loyalty

- commitment

- honesty and integrity

- enthusiasm

- reliability

- personal presentation

- commonsense

- positive self-esteem

- sense of humour

- balanced attitude to work and home life

- ability to deal with pressure

- motivation

- adaptability.

There is no doubt that enterprises saw the inclusion of these attributes as a new and essential component of employability skills.

The key skills identified in conjunction with the personal attributes to make up the Employability Skills Framework are:

- **communication** skills that contribute to productive and harmonious relations between employees and customers;

- **team work** skills that contribute to productive working relationships and outcomes;

- **problem-solving** skills that contribute to productive outcomes;

- **initiative and enterprise** skills that contribute to innovative outcomes;

- **planning and organising** skills that contribute to long-term and short-term strategic planning;

- **self-management** skills that contribute to employee satisfaction and growth;

- **learning** skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes; and

- **technology** skills that contribute to effective execution of tasks.

The following table provides a consolidation of the personal attributes, skills and elements that make up the Employability Skills Framework.

Employability Skills Framework

Personal attributes that contribute to overall employability	• Loyalty • Commitment • Honesty and integrity • Enthusiasm • Reliability • Personal presentation • Commonsense	• Positive self-esteem • Sense of humour • Balanced attitude to work and home life • Ability to deal with pressure • Motivation • Adaptability

Skill	Element– (facets of the skill that employers identified as important, noting that the mix and priority of these facets would vary from job to job)
Communication that contributes to productive and harmonious relations between employees and customers	• Listening and understanding • Speaking clearly and directly • Writing to the needs of the audience • Negotiating responsively • Reading independently • Empathising • Using numeracy effectively • Understanding the needs of internal and external customers • Persuading effectively • Establishing and using networks • Being assertive • Sharing information • Speaking and writing in languages other than English
Teamwork that contributes to productive working relationships and outcomes	• Working with people of different ages, gender, race, religion or political persuasion • Working as an individual and as a member of a team • Knowing how to define a role as part of a team • Applying teamwork skills to a range of situations, e.g. futures planning, crisis problem solving • Identifying the strengths of team members • Coaching, mentoring and giving feedback
Problem solving that contributes to productive outcomes	• Developing creative, innovative solutions • Developing practical solutions • Showing independence and initiative in identifying problems and solving them • Solving problems in teams • Applying a range of strategies to problem solving • Using mathematics including budgeting and financial management to solve problems • Applying problem-solving strategies across a range of areas • Testing assumptions taking the context of data and circumstances into account • Resolving customer concerns in relation to complex project issues

Initiative and enterprise that contribute to innovative outcomes	• Adapting to new situations
	• Developing a strategic, creative, long-term vision
	• Being creative
	• Identifying opportunities not obvious to others
	• Translating ideas into action
	• Generating a range of options
	• Initiating innovative solutions
Planning and organising that contribute to long-term and short-term strategic planning	• Managing time and priorities – setting timelines, coordinating tasks for self and with others
	• Being resourceful
	• Taking initiative and making decisions
	• Adapting resource allocations to cope with contingencies
	• Establishing clear project goals and deliverables
	• Allocating people and other resources to tasks
	• Planning the use of resources including time management
	• Participating in continuous improvement and planning processes
	• Developing a vision and a proactive plan to accompany it
	• Predicting – weighing up risk, evaluating alternatives and applying evaluation criteria
	• Collecting, analysing and organising information
	• Understanding basic business systems and their relationships
Self-management that contributes to employee satisfaction and growth	• Having a personal vision and goals
	• Evaluating and monitoring own performance
	• Having knowledge and confidence in own ideas and vision
	• Articulating own ideas and vision
	• Taking responsibility
Learning that contributes to ongoing improvement and expansion in employee and company operations and outcomes	• Managing own learning
	• Contributing to the learning community at the workplace
	• Using a range of mediums to learn – mentoring, peer support, networking, information technology (IT), courses
	• Applying learning to 'technical' issues (e.g. learning about products) and 'people' issues (e.g. interpersonal and cultural aspects of work)
	• Having enthusiasm for ongoing learning
	• Being willing to learn in any setting – on and off the job
	• Being open to new ideas and techniques
	• Being prepared to invest time and effort in learning new skills
	• Acknowledging the need to learn in order to accommodate change
Technology that contributes to effective execution of tasks	• Having a range of basic IT skills
	• Applying IT as a management tool
	• Using IT to organise data
	• Being willing to learn new IT skills
	• Having the occupational health and safety knowledge to apply technology
	• Having the appropriate physical capacity

The framework is discussed in detail in Chapter 5 of this report.

Recommendations

This report provides a comprehensive picture of the views of a significant sample of enterprises with regard to the employability skills needs of industry.

Recommendation One

That DEST refer the report, *Employability Skills for the Future*, to relevant agencies including:

- Transition from School Task Force of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA);

- Australian Vice-Chancellors' Committee (AV-CC); and

- National Training Quality Council (NTQC).

That these agencies be requested to respond to DEST regarding:

- implications for policy development and programs in schools, vocational education and training and higher education; and

- strategies and timelines for implementation of the framework in schools, vocational education and training, and higher education.

Recommendation Two

That at their meetings during 2002, MCEETYA and the ANTA Ministerial Council note the report, *Employability Skills for the Future,* as the employer view of the employability skills necessary for the future success of Australian business, industry and employees. That they also note advice from the relevant agencies about possible strategies and timelines for the implementation of this framework in an integrated manner across the three sectors of education and training.