DEAKIN UNIVERSITY LIBRARY

TO: ALL USERS OF THIS THESIS

Please sign this form to indicate that you have used this thesis in accordance with the disposition signed by the author of this thesis.

Thank you.

SUE McKNIGHT
University Librarian

Name
Signature
Date

Chiradza Simatwe
Signature Redacted by Library
1/4/97
1/3/98
3/4/98
1/6/98
2/8/98
3/9/98

Kawat Temleta
Signature Redacted by Library
1/6/98
2/9/98
3/9/98

Hichina Sabwaji
Signature Redacted by Library
1/7/99
3/6/00
5/4/01
9/4/02

Theresa Power
Signature Redacted by Library
2/11/98
1/17/99
5/6/00
2/1/01

Burcan O
Signature Redacted by Library
3/4/01
9/4/02

Birce O
Signature Redacted by Library

Sanader Sartor
FOLIO OF WRITING

LYNETTE FLORENCE WAKEFIELD, B ED, M ED

DOCTOR OF EDUCATION

THIS FOLIO IS SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

DEAKIN UNIVERSITY

AUGUST 1996
TABLE OF CONTENTS

CERTIFICATES IN WORKPLACE EDUCATION:
EVALUATION PROJECT REPORT - NOVEMBER 1992

CERTIFICATES IN WORKPLACE EDUCATION PROJECT:
GORDON TAFE

Paper presented at the AUSTAFE Inc Conference held in Canberra 26-29 September 1993

CERTIFICATES IN WORKPLACE EDUCATION:
COURSE BROCHURE - 1995

CERTIFICATES IN WORKPLACE EDUCATION:
COURSE BROCHURE WITH CHINESE TRANSLATION - 1995
CERTIFICATES IN WORKPLACE EDUCATION

EVALUATION PROJECT REPORT

on

THE DEVELOPMENT OF BROAD-BASED GENERIC SKILLS

by

Lynette F Wakefield

November 1992

THE GORDON TECHNICAL COLLEGE
Fenwick Street, Geelong 3220   Telephone (052) 250 500   Facsimile (052) 250 505
Wakefield, Lynette

Certificates in Workplace Education: Evaluation Project Report on The Development of Broad-Based Generic Skills, conducted by GOTE C Ltd, Gordon Technical College, Geelong, Victoria at the Port of Geelong Authority.

November 1992

Information on the Certificates in Workplace Education and further copies of the evaluation report may be obtained from Lyn Wakefield, Training and Instructional Design Consultant, GOTE C Ltd, Gordon Technical College, Private Bag No 1, Geelong, Victoria, 3220. Telephone: (052) 250 680.

Printed by the Media Production Unit, Gordon Technical College, Geelong, Victoria.
FOREWORD

The Port of Geelong Authority, a commercially oriented statutory authority of the State of Victoria, has jurisdiction over the waters in Corio Bay, the Geelong outer harbour and over all port facilities, foreshore and offshore works.

The Authority has taken a leading role in pursing the waterfront reform process, under the auspices of the Waterfront Industry Reform Authority and in co-operation with stevedoring employers and the Association of Employers of Waterside Labour.

The Authority is endeavouring to develop a flexible, multi-skilled workforce through the provision of a framework which will allow opportunities for career advancement and increased training.

In 1989, the Standing Committee on Employment, Education and Training adopted the view that training should be broad-based. As such, training should not be restricted to the provision of technical skills and knowledge, but should include social and work skills, occupational health and safety skills and cognitive and problem-solving skills. Thus, a thrust towards generic skills was recommended, which would allow members of the workforce to be both more adaptable and mobile, through the acquisition of portable skills. It was considered by the Standing Committee that such basic training could cross a range of related occupations, in addition to being able to be complemented by training modules, which would address the specific work skills required.
SUMMARY

The framework for the *Certificates in Workplace Education* was designed in March 1991, following an extensive *Skills Analysis Survey* carried out by the Victorian Port Authorities in 1990.

The three certificates contained in the course concentrate on the development of broad-based generic skills through the application of andragogical learning theory. The Certificates, which are competency-based, assist the convergence between general and vocational training. They place emphasis on the importance of experiential work and life learning and are designed to remove the barriers to learning, experienced by many members of the workforce.

The design and development of curriculum for the fifty-six learning units contained within the Certificates has been supported by the Victorian Education Foundation to the extent of $110,710 and GOTECH Ltd, the Commercial arm of the Gordon Technical College, TAFE, Geelong.

In July 1991, the one year pilot for each of the three levels, which range from basic education to first level supervision, commenced. The fifty-one participants who were released from their workplace duties for three hours per week to attend classes agreed to contribute an equivalent amount of personal time, or more if necessary, to achieve the desired learning outcomes and to demonstrate achievement of identified generic competencies.
Whilst the pilot regularly involved formative evaluation, in October 1991, an interim evaluation of the program was carried out, involving participants from each of the three levels. The findings revealed a need to rewrite some of the Level 2 and Level 3 mathematical and statistical content in the learning units and to make them more relevant to everyday workplace tasks and activities.

In June 1992, a final evaluation was undertaken. Throughout the year, twenty-six participants continued to attend classes on a weekly basis.

The summative evaluation has revealed that, in addition to gaining higher level personal and interpersonal skills, mathematical skills and oral and written communication skills, many participants have been able to identify an increase in their levels of confidence and a direct relevance of the course to both personal and workplace needs.

In July 1992, all the graduates from Level 1 progressed to Level 2 and all but two of the graduates from Level 2 progressed to Level 3. Other employees from across the Authority also joined both levels.

On 2 September 1992, twenty-three participants graduated from the course at a formal ceremony held at the Port of Geelong Authority.
The *Certificates in Workplace Education* have been recommended for accreditation by the Transport and Storage Industry Training Board (Victoria); Western Metropolitan College of TAFE, the Designated Provider for General Studies and the Course Assessment Panel established by the Vocational Education and Training Accreditation Board.

The course is expected to receive statewide accreditation in December 1992.
DEDICATION

This report is dedicated to the course participants from the Port of Geelong Authority, who made the implementation of the *Certificates in Workplace Education* possible.
# TABLE OF CONTENTS

Acknowledgements ............................... x
Special Mention ................................ xi

1 INTRODUCTION ................................. 1
  1.1 Evaluation ................................ 1
  1.2 Focus of Evaluation ....................... 3
  1.3 Purpose of Evaluation ................. 4
  1.4 Evaluation Methodologies ............... 4
      Data Collection - Informal Evaluation .... 5
      Data Collection - October 1991 .......... 6
      Data Collection - June 1992 ............ 8
  1.5 Evaluation - Victorian Education Foundation 9
  1.6 Evaluation - Transport and Storage ITB .... 9

PART I - CONTEXTUAL ISSUES

2 IN CONTEXT OF AWARD RESTRUCTURING .... 10
3 THE CERTIFICATES IN WORKPLACE EDUCATION 13
  3.1 Background ................................ 13
  3.2 Course Offering ......................... 14
  3.3 Course Participation .................... 15
3.4 Course Attrition
3.5 Course Completion
3.6 Course Extension
3.7 Further Pilots
4 COURSE DESCRIPTION
4.1 Aims and Objectives
4.2 Course Content
4.3 Structure and Duration
4.4 Satisfactory Completion
4.5 Recognition of Prior Learning
4.6 Prerequisites for the Course
4.7 Individually Managed Learning
4.8 Assessment
4.9 Satisfactory Unit Completion
4.10 Group Training
4.11 Separate and Integrated Provision
5 NEED FOR GENERIC COMPETENCIES
6 IDENTIFICATION OF GENERIC COMPETENCIES
6.1 Ports of Victoria
6.2 Establishment of a Generic Framework
6.3 National Training Board
6.4 Adoption of NTB Guidelines
6.5 Correlation with Australian Standards Framework
6.6 ALAN Scales
PART II - VIEWS OF PARTICIPANTS

9 ADOPTION OF ANDRAGOGY 55
10 SOURCE OF TRANSCRIPTS 59
11 REASONS FOR UNDERTAKING COURSE 60
12 LEVEL OF INTRINSIC REWARD 64
13 SELF-DIAGNOSIS AND IDENTIFICATION OF NEEDS 68
14 AREAS OF PERSONAL CHANGE 73
15 PARTICIPANT MOTIVATION 75
16 HELPING RELATIONSHIPS 78
17 DEMANDS ON PERSONAL TIME 80
18 PERCEIVED COURSE RELEVANCE 85
19 STRUCTURE, DESIGN AND CONTENT 91
20 GROUP-BASED LEARNING 93
21 RECOMMENDATIONS FOR IMPROVEMENT 98
22 RELATIONSHIP TO SCHOOL EXPERIENCES 101
23 RECOMMENDATION OF COURSE TO OTHERS 107
PART III - ACHIEVEMENT OF COURSE OBJECTIVES, CONCLUSION, RECOMMENDATIONS

24 ACHIEVEMENT OF COURSE OBJECTIVES 109

24.1 To help remove the barriers to further education and training, experienced by many members of the workforce 110

24.2 To recognise work and life experiences 112

24.3 To provide formal recognition for competencies achieved in relation to broad-based generic skills 114

24.4 To enable participants to have the skills, knowledge, competence and confidence to better perform their duties 115

24.5 To articulate into other courses 118

24.6 To help provide career opportunities through the Award Restructuring Process 119

25 CONCLUSION 121

26 RECOMMENDATIONS 126

REFERENCES 128

APPENDIX 130

Course Matrix 130
ACKNOWLEDGEMENTS

I am grateful for the support received from:

Department of Employment, Education and Training
Department of Labour
Division of Further Education, Ministry of Employment, Post-Secondary Education and Training
Moorabbin College of TAFE
National Training Board
Port of Geelong Authority
Public Transport Corporation
State Training Board
Transport & Storage Industry Training Board (Victoria)
Victorian Education Foundation
Victorian Trades Hall Council
Western Metropolitan College of TAFE

The many unions, union officials, union delegates, union members and others, who have actively promoted the introduction of the Certificates in Workplace Education.
SPECIAL MENTION

Without the ongoing support of many dedicated individuals, the continual development of the
Certificates would not have been possible.

Gail Rooney, Executive Manager, Human Resources
Port of Geelong Authority

Peter Morgan, Chairman and Chief Executive Officer
Port of Geelong Authority

Robyn Francis, Executive Director
Transport & Storage Industry Training Board (Victoria)

Colin Oates, Corporate Training Manager
Public Transport Corporation

Alan Darker, Human Resources Manager
Henderson's Automotive (Geelong)

Ian Kennedy, Manager Business Development
Victorian Education Foundation

Helen Smith, Manager Education Development
Victorian Education Foundation

Ian Daykin, Director
Gordon Technical College

Geoffrey Skardon, General Manager
GOTEC Ltd, Gordon Technical College

The participants in the pilot programs at the Port of Geelong Authority, Henderson's Automotive
(Geelong) and the Women's Access Department of the Gordon Technical College.
I extend my sincere thanks to the members of the Project Team. Without such exceptional dedication, the course would not have been so very well implemented.

Suzanne Bozorth-Baines
Co-ordinator, Geelong Basic Education Program

Julia Bates
General Studies, Gordon Technical College

Lynne Beyer
Women's Access Department, Gordon Technical College

Jean Coburn
Head, Applied Languages Unit, Gordon Technical College

Jenny Dalton
Head, Learning Skills Unit

Lesley Edwards
Special Programs, Gordon Technical College

Adrian Hann
General Studies, Gordon Technical College

Jeanette John
Co-ordinator, Geelong Basic Education Program

Glenn Kelly
Electrical Department, Gordon Technical College

Marilyn McIntosh
Learning Skills Unit, Gordon Technical College

Julia Metcalf
GOTEC Ltd, Gordon Technical College

Paul Paraen
Applied Languages Unit, Gordon Technical College

Gordon Portway
Science Department, Gordon Technical College

John Radalj
Learning Skills Unit, Gordon Technical College

Margaret Scott
Women's Access Department, Gordon Technical College

Ray Townsend
Learning Skills Unit, Gordon Technical College

Jillian Whelan
Office & Administrative Studies, Gordon Technical College

Rodney Wilde
General Studies Department, Gordon Technical College
Lastly, but equally as importantly, those who did so much work behind the scenes to make the course possible.

**ADMINISTRATION**

Susan Hanley  
GOTEC Ltd, Gordon Technical College

**ARTWORK**

Karen Henderson  
General Office, Gordon Technical College

**COMPUTER GRAPHICS**

Peter Mounsey  
Media Production Unit, Gordon Technical College

**COVER DESIGN**

Brian Tanner  
Geelong Regional Commission

**DESKTOP PUBLISHING**

Beryl Brown  
Media Production Unit, Gordon Technical College

**PRINTING**

Murray Brown  
Allan Bartlett  
David Millar  
Media Production Unit, Gordon Technical College

**WORD PROCESSING**

Catherine Cheyne  
GOTEC Ltd, Gordon Technical College
1 INTRODUCTION

1.1 Evaluation

Evaluation has been termed a "process of self-renewal" (Gardner, 1965) for, as Arden Grotelueschen et al write:

Evaluation seeks to provide both the excuse and the means for engaging in a process of self-examination whose end is continuing improvement. Institutions and programs must find ways both to reflect upon what they are doing and to ask how it might be done more effectively. The answer may not lie in massive changes but rather in quiet, gentle steps which can add up to improved quality of program offerings.

(Grotelueschen et al, 1976, p 3)

Whilst evaluation encompasses a set of techniques and strategies which may be of benefit during the development and teaching of a program, it is only through direct feedback from the participants of the program, the actual learners, that the characteristics of individual needs and the extent of self-renewal come to the fore, as John Gardner affirms:

Exploration of the full range of (her) his own potentialities is not something that the self-renewing (wo)man leaves to the chances of life. It is something (s)he pursues systematically, or at least avidly, to the end of (her) his days. (S)he looks forward to an endless and unpredictable dialogue between (her) his potentialities and the claims of life - not only the claims (s)he encounters but the claims (she) invents.

(Gardner, 1965, pp 11-12)

As rapid societal and technological changes occur, our educators and curriculum planners must be sensitive to the ways that educational programs must change and adapt, so that the needs of individuals, the needs of the community and the needs of industry may be met.
Whilst educators may evaluate the learning content of such programs, the materials used and the methods applied on an informal basis, as with many activities, formal evaluation is frequently endorsed but rarely pursued.

Groteluschen et al argue that there are three reasons for evaluation: The first reason is ascribed to the evaluation being "mandated" or mandatory; the second reason is for "justification" of what is being done; the third reason is to "improve" or "change" a program (pp 20-21). It is for the third reason that this evaluation is being carried out.

Malcolm Knowles provides two reasons for evaluation:

1. Improvement of organizational operation, including such aspects as its planning process, structure, decision-making procedures, personnel, physical facilities, finances, recruitment, training, public relations, and administrative management;

2. Improvement of its program, including such aspects as objectives, clientele, methods and techniques, materials, and quality of learning outcomes.

(Knowles, 1970, p 223)

In accordance with the writings of Homer Kempfer, this evaluation concentrates on the growth of the individual and improvement to the program:

The basic purpose of adult education is to stimulate growth and improvement. Whatever other worthy purposes exist are only facets of the all-inclusive effort to assess present conditions as a basis for achieving better ones. Evaluation that does not lead to improved practice is sterile.

(Kempfer, 1955, p 399)

As such, the second reason offered by Knowles has been applied.
1.2 Focus of Evaluation

The evaluation is focused on the *Certificates in Workplace Education*, which provide an articulated course for the development of broad-based generic skills.

In March 1991, the framework for the course was designed, following an extensive *Skills Analysis Survey* carried out by the Victorian Port Authorities in 1990. The *Certificates in Workplace Education* were piloted at the Port of Geelong Authority, Geelong, Victoria between July 1991 and July 1992, under the auspices of the Transport and Storage Industry Training Board (Victoria), with financial support received from the Victorian Education Foundation.

Due to breadth of inquiry, the amount of data collected, the extent of analysis, and the range of findings, the evaluation has been divided into three parts:

**PART I**  
CONTEXTUAL ISSUES

**PART II**  
VIEWS OF PARTICIPANTS  
(*including past participants and union representatives*)

**PART III**  
ACHIEVEMENT OF COURSE OBJECTIVES  
CONCLUSION  
RECOMMENDATIONS
1.3 Purpose of the Evaluation

The purpose of the evaluation is to assist in future planning and design of the *Certificates in Workplace Education*.

1.4 Evaluation Methodologies

Through a detailed analysis of a number of contextual issues, it is hoped to provide a conceptual framework on which to build future recommendations.

After studying recorded transcripts of interviews with course participants over the one year pilot program, it is hoped to more accurately identify the needs of the individual learner whilst, simultaneously, exploring the adoption of andragogical theory.

By seeking external opinions on the course, it is hoped to validate the course content, its application and, importantly, its relevance to the national agenda.
1.4.1 Data Collection - Informal Evaluation

Informal evaluation has been ongoing since the inception of the course in March 1991. Judgements have repeatedly been made about the worth of the program, its relevance and the extent to which it meets the needs of individuals and industries.

Since the teaching commenced in July 1991, feedback from participants has been regularly invited. Those teaching the course have willingly shared their joys on how well certain classes have progressed; at other times they have expressed their concerns over some participants' needs not being fully met, or, the instructional goal not being realised.

As Project Manager, I have constantly sought feedback from the teachers (facilitators) and the students (participants) on the course content, learning methodologies and, in particular, the level of entry criteria and desired learning outcomes.

I have also been in regular contact with Gail Rooney, Executive Manager, Human Resources, Port of Geelong Authority, who has received first hand reports from the participants, their foremen, their supervisors and their managers.
By applying on-going evaluative measures, immediate rectification of some problems which surfaced, such as required time for completion of a learning unit, was possible, particularly by the more experienced teachers.

1.4.2 Data Collection - Formal Evaluation - October 1991

It was considered at the time of designing the pilot program that an interim evaluation would be necessary, prior to a final evaluation being carried out on conclusion of the one year pilot. An interim evaluation was carried out in October 1991.

The purpose of the interim evaluation was to obtain feedback on the pilot program directly from the participants. By including those directly involved in the learning process at an early stage, it was hoped to identify whether or not their needs were being met. Also, it was realised that their valuable comments would help to ascertain the appropriateness of the entry level criteria and defined learning outcomes; the relativity of the content; the value of the chosen methodologies and the structure of the tasks. It was anticipated that their views would provide an indication of the demands the course was placing on their personal time and whether or not such demands were being satisfactorily addressed.
The teachers across all three levels of the program were in regular contact. Each teacher provided extensive feedback to myself on attendance, level of achievement, contributions by participants and any concerns that arose. Also, after each session, an attendance role, frequently accompanied by verbal comments, was given to the Human Resource Manager at the Port of Geelong Authority.

In view of the extensive feedback received, which was acted upon by all concerned, it was decided to concentrate the interim evaluation on the participants:

The opinions and feelings of participants in a program, while they are completely subjective, are a primary source of information on which to base an evaluation.

(Knowles, 1970, p 231)

The methodologies for data collection were two-fold. All participants were invited to complete a written questionnaire, also a sample of one third of the participants were interviewed. Each interview was recorded on audio tape. The total interviewing time for the interim evaluation was thirteen hours. Each recorded interview was later transcribed by a word processing operator, which resulted in full transcripts being available for analysis.

Following the interim evaluation, recommended changes to the program were communicated to the participants, curriculum writers, teachers, members of management at the Authority, union representatives and others interested in the developmental process.
The findings from the interim evaluation indicated a need to rewrite the Level 2 business mathematics unit, and to considerably lower the level of mathematics in the Level 3 mathematical and statistical units.

The participants sought ways of applying their mathematical skills to the workplace; they wanted to know how to solve daily problems that involved mathematical and statistical applications and they wanted to use mathematics in analysis.

In general, the Level 3 participants in the pilot program, which included both blue and white collar workers, did not require a very high level of mathematics, but the knowledge and skills to apply what they knew to a broad range of situations, most of which were outside a school textbook.

1.4.3 Data Collection - Formal Evaluation - June 1992

In June 1992 a final evaluation was carried out, with the objectives being identical to the interim evaluation. The final evaluation was a more comprehensive process, involving recorded interviews with all participants.

For the purpose of this report, the findings from both the interim evaluation and the final evaluation will be presented jointly.
1.5 Evaluation - Victorian Education Foundation

Within the initial allocation of funding received from the Victorian Education Foundation of $110,710, funding for the purpose of evaluating the pilot program at the Port of Geelong Authority was included. Thus, to meet this requirement, an extensive evaluation is being carried out.

1.6 Evaluation - Transport & Storage ITB (Victoria)

In 1991 an allocation of $15,000 of the 1990/91 Commonwealth Adult Literacy Research funds was made available to the Transport & Storage Industry Training Board (Victoria) to examine "integrated" and "separate" basic education in the workplace. The focus of the evaluation was on the *Certificates in Workplace Education* offered at the Port of Geelong Authority and an industrial relations program developed at the Port of Melbourne Authority. The summary in relation to the pilot program read:

> The CWE was introduced because of Port management's desire to raise the skill levels of its workforce. The initiative has generated good will. Workforce communication and morale have improved. Management's leadership has played a decisive role in the program's success. Program objectives are broadly accepted and there is a wide belief at the Port of Geelong Authority that the CWE is helping to improve productivity and provide career opportunities by improving levels of general education. There is debate about the sequence of the modules and content of some units. Employees with low levels of literacy are not participating. The program does not cater for them. The quality of tuition and facilities is good. Attempts have been made to provide flexible entry points, to recognise prior learning, and to assist articulation to some other programs. Modifying the program to be consistent with (currently evolving) state and national frameworks for generic skills, literacy and language should be a priority.

(McGregor, 1992, p 22)
PART I

CONTEXTURAL ISSUES
2 IN CONTEXT OF AWARD RESTRUCTURING

Australia is in the throes of Award Restructuring, which demonstrates both the domestic and international challenges facing our country. Our Government argues that to become more competitive, we must encourage our entire workforce to be more innovative, more highly skilled and, in return, our workers more appropriately rewarded.

Such a reform process will necessitate the commitment and involvement of people from all levels of the workplace, in both public and private sectors. A reform of this magnitude will have the potential to change not only the labour market as we have known it over the years, but also the country’s education and training sectors.

Thus, for Award Restructuring to succeed, it must not be limited to the larger centres, the large employers and their employees, but it must encompass the entire workforce. To achieve success, major reforms will need to occur, which will impact on TAFE and higher education systems. Not only will Government instrumentalities play an important role in the process, but so too will private enterprise. Such reforms should lead to an improved quality of education and training and an enhanced provision of access to such education and training.
The Government has developed strategies to achieve these goals which address macro economic policies, long-term industry plans and micro economic measures for the workplace, which are designed to encourage efficiency and productivity.

Perhaps one of the most important incentives for the adoption of Award Restructuring and training reform by the Australian workforce is the opportunity to advance along a hierarchical career path through the acquisition of new skills.

In outlining the structure for reform, the Standing Committee (1989) emphasised the need to develop national standards for competencies; to adopt a core curriculum based on industry-established skill standards; to seek accreditation across all states; to award certificates to workers following successful completion of training programs and to enable credit transfer and articulation between training and educational institutions across the country.

The Committee identified strong support from both employers and, importantly, unions, for more training and a greater emphasis on the quality of training. Further, support was shown towards competency-based training, whereby performance standards can be attained within a more flexible time period.
As the goals for Award Restructuring are translated into action, TAFE is considered to be a key provider of a curriculum which will not only include a new dualism of education and productivity, but employers, educators and unions working together, towards national training reform.

Through a more holistic process, workers will be valued for what they can give through experiential workplace learning, life experience and through personal and group skills expansion.

Workers will possess greater skills which will lead to greater involvement in decision-making and, in consequence, greater work satisfaction. Barriers to education and training will be removed and new opportunities will be created. TAFE’s role as an agent of economic development will become more widely recognised and more clearly defined in consequence of Award Restructuring. Also, TAFE’s effort in numeracy, literacy, communication and workplace education will continue to advance, necessitating a greater focus on competencies, skills and knowledge in curriculum development, with the need to more actively include competency-based training and assessment, the recognition of prior learning and attention to individual learning needs.
3 THE CERTIFICATES IN WORKPLACE EDUCATION

3.1 Background

In 1990, the Victorian Port Authorities carried out a comprehensive Skills Analysis Survey, which encompassed some 1,600 workers across the state and some 600 questions, relating to both generic and technical skills.

In March, 1991, I was seconded to the Port of Geelong Authority as a Training Consultant for a three month period to design a training program for the Authority's 240 employees. Based on the findings of the 1990 Skills Analysis Survey, and through interviews with employees across the Authority, I found that many workers possessed high level technical skills, but low level generic skills. Through subsequent research, I was able to identify both job specific and generic training needs. Due to the need for generic skills development, I designed the framework for the Certificates in Workplace Education, which comprise fifty-six stand alone learning units.
3.2 Course Offering

Following support from members of management, representatives from the fourteen unions involved, the Equal Employment Opportunity Committee and Victorian Trades Hall Council, the course was offered to employees at the Authority.

In a circular to all staff, dated May 1991, information on the Certificates in Workplace Education was provided:

A major equal employment opportunity and training initiative for the Port of Geelong will be the implementation of a workplace education program, which will enable employees to gain the skills, knowledge, competencies and confidence to better perform their duties. The content of the Certificate will help to provide career opportunities through the provision of broad-based generic skills.

The need for development of general skills is highlighted by the training requirements of skills based classification structures. In order to provide career paths for employees, the acquisition and utilisation of general skills is necessary. To be able to undertake skills based training towards new levels, many employees may require further development in such areas as mathematics, oral and written communication. ...

If you are interested in participating in the Workplace Education Program, then you may volunteer. A tear off section is provided at the end of this paper.

All personnel who elect to participate in the Workplace Education Program will be interviewed. This will ensure everyone has chosen the most suitable level. This interview will be done in the workplace.

(Port of Geelong Authority Circular, May 1991)

As a result of the above information, many employees put their names forward to undertake the new course. Employees were invited to indicate which level they wished to nominate for and, at the subsequent interview with myself, their entry level knowledge and skills were assessed.
3.3 Course Participation

Fifty-one employees commenced the course in July 1991. Nine commenced Level 1; 22 commenced Level 2 and 20 commenced Level 3. In addition to the Port of Geelong Authority employees, two participants attended Level 1 through the WorkStart program, under the auspices of the Department of Labour.

Employees were released from their normal work commitments for three hours each week to attend classes, which were held at the Port of Geelong Authority. In addition, they were expected to contribute an equivalent amount of personal time, or more if necessary, to meet the course requirements.

Between July 1991 and July 1992, the Certificates in Workplace Education were piloted at the Port of Geelong Authority, under the auspices of the Equal Employment Opportunity Committee.
3.4 Course Attrition

Before commencing the course at the Port of Geelong Authority, it was explained that employees may withdraw at any time during the year if they so wished or, when they felt their needs had been met. During the piloting of the course, as anticipated, some participants withdrew.

The reasons for withdrawal included seven employees accepting an 'enhanced retirement package'; one cited personal commitments; one cited demands of a new position within the Authority; one cited lack of relevance to personal needs. Other employees continued to attend the course, but elected to not complete all the units.

Although support from the Learning Skills Unit at the Gordon Technical College was offered to all participants, one participant withdrew due to insufficient literacy skills whilst another cited extensive workload combined with insufficient reading and writing skills.

3.5 Course Completion

On 2 September 1992, 23 employees of the Port of Geelong Authority graduated with a Certificate in Workplace Education. Six were awarded a Level 1 Certificate; 11 were awarded a Level 2 Certificate and six were awarded a Level 3, Advanced Certificate.
3.6 Course Extension

In July 1992, a second program commenced, for completion in July 1993. All the graduating Level 1 participants commenced Level 2 and 15 employees commenced Level 3, with 13 progressing from Level 2.

3.7 Further Pilots

Under the auspices of the Department of Employment, Education and Training (DEET), with financial support being received through their TASK program, during 1992 four further pilot programs commenced. Three groups started training at Henderson’s Automotive (Geelong) in February 1992, where selected learning units are integrated into the Vehicle Industry Certificate. A later pilot commenced at Henderson’s Automotive (Geelong) in June 1992 for employees from non-English speaking backgrounds. These courses are delivered in the workplace.

In March 1992 a pilot program in the Women’s Access Department, Gordon Technical College, where mathematical units are integrated into the recurrently funded Maths for Women course commenced. This program, which is delivered at the College, is offered to women returning to study.

Within each of the pilot programs, tuition is been delivered by qualified teachers.
4 COURSE DESCRIPTION

The Certificates in Workplace Education are designed to remove discrimination in the workplace through the provision of generic skills, which encompass personal and interpersonal skills, mathematical and statistical skills and oral and written communication skills.

4.1 Aims and Objectives

The Certificates in Workplace Education have six specific aims:

- To help remove the barriers to further education and training, experienced by many members of the workforce.
- To recognise experiential and work life learning.
- To provide formal recognition for competencies achieved in relation to broad-based generic skills
- To enable participants to have the skills, knowledge competencies and confidence to better perform their duties.
- To articulate into other courses.
- To help provide career opportunities through the Award Restructuring process.
4.2 Course Content

Extracts from the Adult Literacy and Numeracy Competency Scales (Griffin and Forwood, 1991) have been included to assist in the determination of generic benchmarks within the Certificates, following approval being received from the Department of Employment, Education and Training, Canberra.

Content from the Certificates in Workplace Education should enable participants to better perform their duties through improved communication, mathematical, personal and interpersonal skills.

They should create a path to further education and training, for, without such a firm foundation of knowledge, skills, competencies and confidence, many employees would be denied the opportunity for advancement. Further, they should enable all employees to gain future access to new classification levels through Award Restructuring, by undertaking further study and/or training in they so wish.

4.3 Structure and Duration

The Certificates in Workplace Education are divided into three levels, with each comprising a nominal 234 hours of learning. Each level provides a base on which to build further skills and knowledge.
Included in each level are three learning modules, and within each of these there are six independent learning units, making a total of fifty-four units, plus two optional mathematical units, to enable participants to concentrate on either business or technical mathematics.

Units may be specifically selected vertically or horizontally to meet individual needs or the needs of a particular industry. For example, Module 1, Calculations, Levels 1, 2 and 3, alternatively, units may be selected independently from the full range of fifty-six. Please refer to the course matrix which is included at the end of the report.

4.4 Satisfactory Completion

To satisfactorily complete each level within the Certificates, a nominal 350 hours of relevant workplace practice and/or experience should also be demonstrated. Therefore, the notional total learning time for each level is 584 hours. Specific competencies have been defined for each level within the Certificates of Workplace Education for both on- and off-the-job learning.

Where participants are unable to gain access to on-the-job training, or, where specific learning units are selected for integration into other courses, it is recommended that a Statement of Attainment be provided.
4.5 Recognition of Prior Learning

While many individuals do not hold formal qualifications, they have gained valuable skills and knowledge through their experiences and work life education. In order to accelerate the acceptance of these competencies, major emphasis has been placed on recognition of prior learning.

Detailed criteria are available for each learning unit. These cover both the entry requirements to the unit, the learning outcome, units of competency and recommended elements and sub-elements.

4.6 Prerequisites for the Course

There are no academic prerequisites for the course, but successful applicants should have gained a level of competency that will enable the achievement of course objectives. In some cases, this may require a course in English when English is a second language, or a course in basic literacy, prior to commencement of the *Certificate in Workplace Education*. 
4.7 Individually Managed Learning

To assist in the achievement of defined competencies, the Certificates introduce the concept of Individually Managed Learning (IML), which, based on andragogical theory, empowers learners to be self-directed through specifically identifying their learning needs. When such needs are identified, they can be readily met, for example, by a participant undertaking a preceding learning unit in order to achieve the recommended entry criteria.

Participants are encouraged to determine their existing skills and knowledge through self-appraisal or guidance from a mentor, prior to their undertaking an interview for assessment purposes. To assist in this process, assessment sheets and test banks, relating to the identified elements and sub-elements, will be available for each of the fifty-six learning units.

4.8 Assessment

The course assessments, which are based on demonstration of competency, include practical demonstration, written tasks, short tests, oral and recorded presentations and participation in a broad range of activities, relevant to the individual's place of work. Assessment of competency is carried out both on- and off-the-job.
4.9 Satisfactory Unit Completion

To satisfactorily complete each learning unit, all the listed competencies and their elements must be achieved by the participant. Except in the case of credit transfer or recognition of prior learning, assessment for each unit will be ongoing and will include a number of detailed work requirements.

4.10 Group Training

Where the learning content is being delivered to a group, it is recommended that the maximum number of participants be restricted to ten at Level 1, due to the extent of individual tuition that is normally necessary. For both Levels 2 and 3, the recommended group size is between 15 and 20 participants.

4.11 Separate and Integrated Provision

The Certificates in Workplace Education may be offered as separate stand-alone Certificates or, alternatively, selected units may be integrated into other training programs.
5 NEED FOR GENERIC COMPETENCIES

In 1990, the International Literacy Year, the Deveson Report argued:

"Literacy, numeracy and other communication and general learning skills are an essential and important element in award restructuring. Unless workers and those seeking jobs have these skills, they will be denied access to training and career advancement."

(Deveson in Dawkins, 1990, pp 3-4)

In 1991 Patrick Griffin and Anne Forwood developed the Adult Literacy and Numeracy Competency Scales, in citing Workplace Australia (1991) they write:

"In an economic climate where restructuring of the workforce has become a national priority, a person's ability to speak, listen, read, write, think critically and enumerate have become crucial skills for adults wishing to enter or remain in an ever changing workforce."

(Griffin and Forwood, 1991, p 6)

The authors argue that with this realisation comes the importance of the need to develop literacy and numeracy programs and use available resources in order to "maximise gains in literacy" (p 6) for adults in Australia. In further demonstrating the need for, and expansion of, literacy and numeracy programs, it is claimed:

"In specific occupational studies, reports have indicated the proportion unable to read safety signs, memos and manuals, rights and responsibilities in the workplace. These issues raise concern about safety, self esteem and productivity."

(Griffin and Forwood, 1991, p 6)
To narrow the gap between the middle-class and the working class, a new curriculum is necessary, one that will prevent the split of the nation into two societies; one with a large proportion of deferential, poorly education people, the other with the educated elite (Jones, 1982).

The report produced by the Australian Education Council Review Committee titled *Young People’s Participation in Post-Compulsory Education and Training* (1991) or the Finn Review, as it has become known, puts forward recommendations on the achievement of six key competencies by all young people.

- language and communication;
- mathematics;
- scientific and technological understanding;
- cultural understanding;
- problem-solving; and
- personal and interpersonal characteristics

(Commonwealth of Australia, 1991, p x)

In *Employment-Related Key Competencies for Postcompulsory Education and Training: A Discussion Paper*, prepared by the Mayer Committee (1992), consideration was given to the inclusion of three additional areas of competence: "Creativity (including the Arts), Family and Household Management and Information Technology" (p 2).

In specifically relating to workplace language and communication, the Committee writes:
Work to date indicates that workplace language and communication can be divided into four kinds of activity:

- Collecting, analysis and organising ideas and information
- Expressing information and ideas to others
- Interacting with others one to one
- Working in a team

(Mayer Committee, 1992, p 14)

In addressing mathematics in the workplace, the Committee divides the identified activities into four key areas: evaluating, handling information, planning and designing (p 16).

The Finn Review stresses that the identified Key Competencies should be able to be developed by young people irrespective of the “education or training pathway they follow” (p x).

To further help the achievement of the Key Competences by all young people, the Committee identified a set of national curriculum principles, to be made available through a range of learning styles:

These principles emphasise the need for a comprehensive and flexible post-compulsory curriculum which offers an appropriate mix of general and vocational education, allows for a range of learning styles, maximises students’ choice and is structured in terms of clear outcomes.

(Commonwealth of Australia, 1991, p xi)

In addressing the "Common and Agreed National Goals for Schooling in Australia", ten goals are identified. Goal number six, which includes several broad-based generic skills, has been documented as:
To develop in students:

a the skills of English literacy, including skills in listening, speaking, reading and writing;
b skills of numeracy, and other mathematical skills;
c skills of analysis and problem solving
d skills of information processing and computing;
e an understanding of the role of science and technology in society, together with scientific and technological skills;
f a knowledge and appreciation of Australia's historical and geographic context;
g a knowledge of languages other than English;
h an appreciation and understanding of, and confidence to participate in, the creative arts;
i an understanding of, and concern for, balanced development and the global environment; and a capacity to exercise judgment in matters of morality, ethics and social justice

(Commonwealth of Australia, 1991, p 9)

The Finn Review, like the earlier Blackburn Report, focuses on the need for a revolution in curriculum theory and practice.
6 IDENTIFICATION OF GENERIC COMPETENCIES

6.1 Ports of Victoria

In 1990 the three Victorian Ports Authorities carried out a major skills survey titled *Working Well in the Nineties: Skills Analysis Survey*, which included some 600 technical and general questions and involved approximately 1,600 workers across Victoria.

The survey questions were formulated by volunteer skills experts from the three Ports, and, before use, were further developed by a tripartite working party which also involved management and union representatives. Workplace Workshops were held, which enabled the identified competencies to be rated by complexity, as a means of structuring the skills classification structure. When studying the *Skills Analysis Survey* in March 1991, I found the following generic skills were included:

**GENERAL COMMUNICATION**

**General Communication**

Speak and understand English
Read and understand simple written material, eg work instructions, WorkCare forms, etc
Understand written and/or verbal technical instructions relating to job
Fill out forms
Write reports, memos, submissions, letters, etc
Proof read and edit reports and correspondence
Listen, understand and remember key points from discussions and presentations
Organise and present information to groups in the workplace and public forums
Organise agendas and chair meetings
Act as minute secretary at meetings
Liaise with external bodies such as emergency services, contractors, customers ...
Deal with client inquiries and complaints
Receive and pass on detailed messages and instructions
Mathematical Skills
Apply basic mathematics (addition, subtraction, multiplication, division) to solve problems
Apply mathematical functions such as algebra, trigonometry, averages, statistics, etc

Understanding the Workplace
Understand the principles of Equal Employment Opportunity policies as they apply to work area
Understand the Occupational Health and Safety legislation, regulations and practices, as they apply to work area
Identify training and development requirements
Successfully resolve conflict in the workplace
Reach agreement with others by using appropriate negotiation skills
Determine when information should be treated as confidential
Manage demands on time, to meet work objectives
Receive visitors and direct them to appropriate persons or areas
Maintain records and reference materials

Core Trade Skills
Read and interpret sketches, plans, charts, specifications and diagrams

ORGANISATIONAL SKILLS

Human Relations Skills
Work with others as a group to create an effective work environment
Modify behaviour and approaches in dealing with different people and different situations
Reach mutual agreement, fulfilling needs of all parties
Use both formal and informal channels of communication

Change Management Skills
Understand the social, economic, political, technological and legal trends that affect the organisation
Consider new ideas which may lead to improvements within the organisation
Understand and effectively influence people who may resist change
Effectively implement change programs and initiatives
Understand how personal and organisational power operates

Organisational Knowledge Skills
Understand the organisational structure and the broad function and roles of each unit
Knowledge of how and from whom to request information
Utilise relevant administrative procedures and policies
Interpret management information reports, eg statistical information and reports, computerised database searches, etc

Decision Making/Problem Solving Skills
Accept responsibility for assigned work and make own decisions
Recognise when a problem exists, or could develop and clearly explain its nature and the likely consequences
Gather information relevant to solving a problem
Review information and draw conclusions
Establish alternatives and identify priorities
Assess the likely outcomes of decisions made and the critical stages of implementation
Planning and Implementation Skills

Develop feasible short and long term plans and strategies for achieving goals and objectives
Identify and quantity the resources required to meet goals and objectives
Coordinate people and other resources to accomplish work objectives
Assign and schedule work, provide clear instructions and delegate responsibility where and when required
Monitor work in progress and take remedial action where necessary
Develop work/office systems and practices in own work area

Team Management

Bring a group of employees together to establish a cohesive team
Set and explain goals, priorities and resource constraints
Create and maintain employee enthusiasm, energy and co-operation
Adopt a leadership style appropriate to a given situation
Identify strengths and development needs of employees
Provide on-going feedback on work performance
Provide constructive career counselling for employees

HUMAN RESOURCES

Planning/Development

Develop training and development programs to meet organisational needs
Conduct training and development programs

Policy/Procedures

Interpret and apply principles and policies such as EEO, Affirmative Action and Industrial Democracy

Occupational Health and Safety

Interpret and apply Occupational Health and Safety legislation, policies and practice

INFORMATION PRESENTATION

Media Skills

Act as a spokesperson with the media

Writing Skills

Write information and/or promotional material such as newsletters and brochures
Present legislative and technical information in a format that is easily understood
Prepare speeches, explanatory memoranda and press releases

Design and Graphics

Design and produce materials such as graphs, tables, overhead transparencies
SUPPORT SERVICES

Understand Records Management System, eg storing, indexing and filing procedures, both manual and computer-based
File information using relevant filing system
Maintain files in good order, be familiar with procedures and schedules for disposal, retrieval and storage
Classify and allocate correspondence and identify appropriate "action"
Destroy and archive obsolete or non-recurrent documents in accordance with disposal schedules

Office Equipment

Operate standard office equipment, eg overhead project, fax, photocopier, etc

6.2 Establishment of a Generic Framework

After analysing the generic competencies which had been identified, I was able to classify them into three hierarchical levels and, in turn, design the framework for the Certificates in Workplace Education (1991).

The Certificates in Workplace Education contain fifty-six broad-based generic competencies, which can be traced to the 1990 Skills Analysis Survey.
The Units of Competency for Level One are:

**Personal and Interpersonal Skills**
- Establish a routine
- Set goals and prepare action plans
- Demonstrate confidence and work with groups
- Assess situations and predict outcomes

**Mathematical Skills**
- Add, subtract, multiply and divide whole numbers and fractions

**Graphics and Statistics**
- Apply calculations to charts and graphs

**Oral Communication Skills**
- Communicate in the workplace
- Demonstrate appropriate pronunciation and grammar
- Apply effective listening and memory skills
- Interpret basic instructions
- Demonstrate telephone skills
- Participate in group discussions

**Written Communication Skills**
- Communicate through cursive handwriting
- Demonstrate writing skills
- Read and interpret simple material
- Take notes and record information
- Write and interpret messages and instructions
- Fill in basic forms

The Units of Competency apply to both on- and off-the-job training.
The Units of Competency for Level Two are:

**Personal and Interpersonal Skills**
- Manage time effectively
- Identify priorities and meet demands
- Interpret and modify group behaviour
- Demonstrate an objective approach

**Mathematical Skills**
- Apply calculations to business mathematics
- Apply calculations to technical mathematics

**Graphics and Statistics**
- Interpret and prepare charts and graphs

**Oral Communication Skills**
- Use an expanded vocabulary
- Speak with confidence
- Apply listening, questioning and memory skills
- Interpret and give technical instructions
- Effectively liaise with external groups and organisations
- Present information to groups

**Written Communication Skills**
- Interpret text and data
- Demonstrate effective writing skills
- Read a range of text and data
- Summarise text and data
- Write reports, memos and letters
- Complete forms, documents and records

The Units of Competency apply to both on- and off-the-job training.
The Units of Competency for Level Three are:

**Personal and Interpersonal Skills**
- Plan and control
- Motivate and influence others
- Build teams and provide leadership
- Solve problems and make decisions

**Mathematical Skills**
- Apply calculations to business mathematics through case studies
- Apply calculations to technical mathematics through case studies

**Graphics and Statistics**
- Compile and present basic statistics

**Oral Communication Skills**
- Evaluate strengths and weaknesses in language
- Apply effective oral communication skills
- Demonstrate effective interviewing and counselling skills
- Train and develop employees
- Use electronic media
- Participate at meetings and apply meeting procedure

**Written Communication Skills**
- Edit text and data
- Apply advanced writing skills
- Apply advanced reading skills
- Apply research skills
- Write formal reports and submissions
- Manage manual and computerised records

The Units of Competency apply to both on- and off-the-job training.
6.3 National Training Board

In 1991 The National Training Board, Canberra released the document titled *National Competency Standards: Policy and Guidelines*, which defines a competency to comprise:

A competency comprises the specification of the knowledge and skill and the application of that knowledge and skill within an occupation or industry level to the standard of performance required in employment.

(National Training Board, 1991, p 7)

For this reason, and as the required standards of performance vary across industry, the Units of Competency contained in the *Certificates in Workplace Education* do not specify the "standard of performance required in employment". They do, however, specify the standard of performance required for off-the-job training.

In defining a competency, the National Training Board writes:

The concept of competency focuses on what is expected of an employee in the workplace rather than on the learning process; it embodies the ability to transfer and apply skills and knowledge to new situations and environments.

(National Training Board, 1991, p 18)

An unit of competency is defined as:

A unit of competency is a discrete product. It comprises a *title*, a short description of its purpose where appropriate, and the elements of competency, together with their associated performance criteria.

(National Training Board, 1991, p 18)
Elements of competency are ...

the basic building blocks of the unit of competency and, as such, continue the description of the key purpose of the unit itself.

(National Training Board, 1991, p 19)

At a meeting with Megan Etheridge, Deputy Manager, Standards Development, National Training Board in October 1991, I was advised that, as generic competencies did not exist, these should be developed through the *Certificates in Workplace Education*, with support from the Transport and Storage Industry Training (Board) Victoria.
6.4 Adoption of NTB Guidelines

In accordance with this recommendation, the fifty-six generic competencies were developed along the guidelines provided by the National Training Board, as such, elements of competency are embodied into each unit. For example, the Unit of Competency for the first unit in Level 1 reads:

Unit of Competency       ESTABLISH A ROUTINE

Element 1       Analyse a workplace routine
Element 2       Document and prioritise a workplace routine
Element 3       Demonstrate effective time usage
Element 4       Analyse and sequence workplace tasks or activities

To further specify the content, recommended sub-elements are also provided for each Unit of Competency, for example:

Analyse a workplace routine

Sub-element 1       Identify effective and ineffective routines to enhance time management skills
Sub-element 2       Sequence daily major activities
Sub-element 3       Identify major time wasters
Sub-element 4       Analyse time effectively spent and time wasted
Sub-element 5       Apply analytical skills to a familiar situation or task
The two-volume documentation on the *Certificates in Workplace Education* curricula contains full details of the units of competency, the elements and the recommended sub-elements for each of the fifty-six generic competencies identified.

### 6.5 Correlation with Australian Standards Framework

On 30 July 1992, Peter Hannigan, Manager, Policy and Research, National Training Board, Canberra, confirmed an indicative generic alignment between the *Certificates in Workplace Education* and the *Australian Standards Framework*, stressing:

> Generally, this would apply, however, it may not apply to some industries, such as tourism, due to the high levels of communication skills required ...

> It may not apply to some manufacturing industries where the technical skills are high, but the communication skills are very low.

(Peter Hannigan, NTB, July 1992)

The general alignment between the *Certificates in Workplace Education* and the *Australian Standards Framework* is:

- CWE LEVEL 1   ASF LEVEL 2
- CWE LEVEL 2   ASF LEVEL 3
- CWE LEVEL 3   ASF LEVEL 4
6.6 ALAN Scales

In 1991 the *Adult Literacy and Numeracy Competency Scales* were published. The Project Team developing the Scales included Dr Patrick Griffin, Anne Forwood and Rosemary Jewell, in addition to Robyn Francis from the Council of Adult Education and Rosie Wickert from the University of Technology (Sydney) as Consultants.

Through extensive liaison with educators in academic institutions, schools, TAFE colleges and involving industry, workshop training settings as well as public service centres, the detailed Competency Rating Scales were identified.

The authors claim that other than the *Australian Second Language Proficiency Ratings (ASLPR)*, (Ingram and Wylie, 1991), which concentrate on communication in the English language and numeracy development by adults, no documentation has been prepared for general literacy or numeracy.

Griffin and Forwood explain that the *ALAN Scales* (1991) are designed to "provide a broad description of progress"; a "framework for reporting" and a "common language for reporting", stressing that "they are not the actual tool for assessment" (p 6).
The *Adult Literacy and Numeracy Competency Scales* (1991) have been divided into five classifications:

**Literacy: Reading**

A  Beginning  
B  Recognition  
C  Access of basic information  
D  Understanding of familiar contexts  
E  Identification of the general idea  
F  Identification and connection of detailed information  
G  Interpretation and generalisation from complex information  
H  Integration and analysis  
I  Subtlety and insight

**Literacy: Writing**

A  Beginning writer/non-experienced  
B  Words and simple sentences  
C  Recording and conveying simple information  
D  Purposeful and independent in familiar context  
E  Developing complexity in style and structure  
F  Competent conventional writer  
G  Awareness of audience and management of complexity  
H  Variation in style; presenting sustained arguments  
I  Command of range in style and register

**Numeracy: Basic Operations** (examples only)

A  Associate quantity with numbers up to ten  
B  Understand notion and direction; group objects by tens and ones  
C  Basic operations  
D  Use fractions and decimals in everyday tasks  
E  Use estimation, place value and calculate percentages  
F  Estimate, check results, use common fractions  
G  Compute averages, use decimal fractions  
H  Perform multiple operations, convert fractions, decimals, percentages  
I  Use factors, transpose simple formula, divide common or mixed numbers  
J  Use estimation, ratio, simple formulae, calculate circumference, square roots
Numeracy Measurement (examples only)
A Use time and decimals (coins, bank notes, etc) for everyday tasks
B Recognise geometric shapes, use time, date, temperature and decimals in everyday transactions
C Use time-planning skills, identify geometric shapes, use price, quantity etc
D Use metric system, distinguish between perimeter, volume, area, formulate a personal budget
E Use dimensions, Celsius, measurement
F Understand geometric terms, compute averages, estimate metric measure, construct simple graphs
G Apply percentage calculations, calculate area, capacity, petrol consumption
H Measure area and volume, determine interest charges, compute using standard measurement
I Solve measurement problems, convert between Fahrenheit and Celsius

Numeracy Quantitative Information Processing
A Time and basic numerical value
B Order, changes and scales of measure
C Common relationships and operations
D Planning and organising with quantitative information
E Interpretation and analysis
F Evaluate and apply numerical information
G Extract and manipulate numerical information
H Insight, inference and critical skills
I Numerical reasoning and inquiry

I was introduced to the Adult Literacy and Numeracy Competency Scales in mid-1991 by Robyn Francis, who, since initially being involved in their development, had assumed the position of Executive Director, Transport & Storage Industry Training Board (Victoria). Robyn suggested the Scales be used in the development of curriculum for the Certificates in Workplace Education.

In mid-June 1991, I commenced analysing the content of the Scales. Based on the fifty-six competencies, identified from the 1990 Skills Analysis Survey carried out by the Ports of Victoria, I found much of the content could be adapted for use within the three levels of the new Certificate course.
In 1992 units of competency, elements and sub-elements were identified for each of the fifty-six units within the course. After extensive analysis, application and evaluation, relevant content from the *Adult Literacy and Numeracy Competency Scales* (1991) was incorporated. Approval for the use of content from the *ALAN Scales* was received from the Department of Employment, Education and Training, Canberra.

### 6.7 Adult Basic Education Accreditation Framework Project

In 1992 the *Draft Competence Statements for Adult Reading and Writing* and the *Draft Competence Statements for Adult Mathematics* were published. Within the reading and writing competence statements there are four classifications:

- Literacy for Self-Expression
- Literacy for Practical Purposes
- Literacy for Knowledge
- Literacy for Public Debate

Within the mathematical competence statements there are five classifications:

- Measurement
- Space
- Number
- Data
- Algebra

Within each of the classifications, there are four levels which, in general, correspond with the Australian Standards Framework.
During the development of the Draft Competence Statements, information on the *Certificates in Workplace Education* was provided to Sharon Coates, Project Manager and David Goldsworthy, Senior Consultant, Adult Basic Education, from the Division Further Education, Ministry of Education and Training.

Three members of the *Certificates in Workplace Education* Project Team were directly involved in the development of the competence statements. Jeanette John and Suzanne Bozorth-Baines assisted with the development of competence statements for adult reading and writing; John Radalj assisted with the competence statements for adult mathematics.

A general correlation may be drawn between the levels within the *Certificates in Workplace Education* and the levels within the *Adult Basic Education Accreditation Framework Project* competence statements:

<table>
<thead>
<tr>
<th>CWE Level 1</th>
<th>ABEAFP Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWE Level 2</td>
<td>ABEAFP Level 3</td>
</tr>
<tr>
<td>CWE Level 3</td>
<td>ABEAFP Level 4</td>
</tr>
</tbody>
</table>
6.8 The Mayer Committee

In 1992 the Mayer Committee identified four major activities in relation to workplace language and communication:

- Collecting, analysing and organising ideas and information
- Expressing information and ideas
- Interacting with others one to one
- Working in a team

(Mayer Committee, 1992, p 14)

For each strand, sample competencies are provided, along with a possible workplace example.

**Collecting, analysing and organising ideas and information**

At lower levels of difficulty, this strand might include competencies such as:

- explaining in one's own words the meaning or oral, written or pictorial instructions (eg concerning danger in the workplace)
- collecting information to meet a given need by identifying and using appropriate sources of information (eg price lists, signs or people)

At the higher levels, this strand might include competencies such as:

- preparing a report (eg on an occupational health and safety issue) which involves: identifying a need for information; drawing on a range of sources; synthesising the collected information and organising it into a form appropriate to the need; evaluating the usefulness of the information and sources used
- explaining the tone and intention of a written, spoken or graphic communication (eg a proposed advertisement) and determining the implication of these for the effectiveness of the communication.

**Expressing information and ideas to others**

At lower levels of difficulty, this strange might include competencies such as:

- choosing the appropriate information to complete a given form (eg a job application) and completing the form accurately and clearly
- presenting a series of points in a logical order on a familiar topic (eg explaining how to perform a task to a co-worker)
At higher levels, this strand might include competencies such as:

- presenting a report using technology such as a desktop publishing ... (eg a proposal to change working methods)

- editing written materials produced by others so that the intention is clear and the language and presentation are appropriate to the intention and audience (eg a workplace newsletter)

- making an oral presentation to an audience using graphic aids to inform them of information about a complex problem in a way that assists them to reach a conclusion or decision (eg a decision about choosing a computer software program)

**Interacting with others one to one**

At lower levels of difficulty, this strand might include competencies such as:

- determining and responding to a person's expectations (eg dealing with a customer in a shop)

- initiating a conversation about a work-related matter (eg using a telephone)

At higher levels, this strand might include competencies such as:

- liaising between two organisations to arrange a common activity (eg preparing for a meeting between two workplace groups)

- making arrangements with an unfamiliar organisation for the provision of a service (eg planning a short training program)

- mediating between co-workers (eg solving a conflict)

**Working in a team**

At lower levels of difficulty, this strand might include competencies such as:

- performing structured tasks appropriately as part of a team effort (eg working with others to assemble an object)

- agreeing on the division of group tasks and carrying out an agreed task (eg discussing one's role in a team and completing photocopying and collating)

- working with other members of a team to decide why the team did not meet a given goal (eg a production deadline)

At higher levels, this strand might include competencies such as:

- establishing a team, allocating roles and responsibilities within it and monitoring progress towards agreed goals (eg managing a team responsible for organising a training session)

- clarifying goals for a team involved in a complex co-operative activity (eg preparing a newsletter)

(Mayer Committee, 1992, pp 14-15)
The Committee identified four recurring patterns of activity in relation to mathematical applications in the workplace, which they describe as:

*Evaluating*
- by assigning costs and benefits (eg money, time or materials)

*Handling information*
- needed to undertake a task, making appropriate use of mathematical concepts, expressions, representations and technology

*Planning*
- in order to ensure that tasks are undertaken and successfully completed within identified constraints

*Designing*
- by conceiving of a means of achieving a particular process

(Mayer Committee, 1992, p 16)

There appears to be a close correlation between the findings of the Mayer Committee and the content of the *Certificates in Workplace Education*.

In analysing the proposed strand for Language and Communication, the competency has been defined by the Committee as:

Establishing a team, allocating roles and responsibilities within it and monitoring progress towards agreed goals ...

(Mayer Committee, 1992, p 23)

Whereas, in the *Certificates in Workplace Education*, the corresponding units of competency and the elements contained therein are:
LEVEL TWO

UNIT OF COMPETENCY   INTERPRET AND MODIFY GROUP BEHAVIOUR

Element 1     Distinguish between a work group and a work team
Element 2     Analyse effective and ineffective team behaviour
Element 3     Identify effective team building skills
Element 4     Demonstrate effective work team membership

LEVEL TWO

UNIT OF COMPETENCY   IDENTIFY PRIORITIES AND MEET DEMANDS

Element 1     Relate motivation to goal achievement
Element 2     Identify and prioritise achievable goals
Element 3     Apply goal setting strategies to goal achievement

LEVEL THREE

UNIT OF COMPETENCY   BUILD TEAMS AND PROVIDE LEADERSHIP

Element 1     Identify leadership styles
Element 2     Relate leadership to team building
Element 3     Apply leadership skills
7 RELATIONSHIP TO OTHER COURSES

7.1 Existing Courses

An examination of the generic competencies contained in the *Certificates in Workplace Education* reveals a close match between the communication skills taught in many courses at the Certificate, Advanced Certificate, Associate Diploma and Diploma levels, where, in Victoria, the *TAFE Communication Skills - Core* and *Communication Skills - Options* apply.

An analysis of the correlation between the content of the *Certificates in Workplace Education* and the *TAFE Communication Skills - Core* indicates a close relationship between:

<table>
<thead>
<tr>
<th><em>Certificates in Workplace Education</em></th>
<th><em>Communication Skills - Core</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreting and Giving Technical Instructions</td>
<td>Giving and Receiving Instructions</td>
</tr>
<tr>
<td>Interpreting Text and Data</td>
<td>Collecting and Processing Information</td>
</tr>
<tr>
<td>Developing Research Skills</td>
<td></td>
</tr>
<tr>
<td>Writing Reports, Memos and Letters</td>
<td>Writing for Specific Purposes</td>
</tr>
<tr>
<td>Interviewing and Counselling Skills</td>
<td>Participating in Interviews</td>
</tr>
<tr>
<td>Developing Writing Skills</td>
<td>Analysing Argument and Constructing a</td>
</tr>
<tr>
<td>Elements 2, 5 and 6</td>
<td>Point of View</td>
</tr>
<tr>
<td>Participating at Meetings and Meeting Procedure</td>
<td>Participating in Meetings and Discussions</td>
</tr>
<tr>
<td>Developing Telephone Skills</td>
<td>Using the Telephone</td>
</tr>
</tbody>
</table>
Interpreting and Preparing Charts and Graphs
Interpreting and Giving Technical Instructions
Presenting Information to Groups

Preparing and Interpreting Graphic Aids

Presenting Information to Groups

Speaking to a Group

Certificates in Workplace Education

Applying Advanced Writing Skills
(Technical and Non-technical)
Learning Writing Skills
(Spelling, Grammar, Punctuation)
Managing Time Effectively
Planning and Control
Identifying Priorities and Meeting Demands
Developing Motivational Skills and
Influencing Others
Participating at Meetings and Meeting
Procedure

Communication Skills - Options

Industry Option 1
Technical Writing and Report Writing
Industry Option 6
Structure of Language: Style, Syntax and Spelling
Industry Option 10
Time Management
Industry Option 11
Motivation and Job Satisfaction Skills
Industry Option 18
Formal Meetings, Procedures, Roles, Agendas, Minutes

The content of several units in Levels 2 and 3 of the Certificates in Workplace Education closely relates to the generic skills content in the four core modules of the Certificate in Supervision.

Certificates in Workplace Education

Identifying Priorities and Meeting Demands
Developing an Objective Approach
Listening, Questioning and Memory Skills
Writing Reports, Memos and Letters
Elements 1 and 2
Solving Problems and Making Decisions
Evaluating Strengths and Weaknesses in Language
Influencing Others through Effective Communication

Certificate in Supervision

Module 1
Supervision Communication
Certificates in Workplace Education  
Managing Time Effectively  
Planning and Control  
Identifying Priorities and Meeting Demands  
Liaising with External Groups and Organisations  
Writing Reports, Memos and Letters  
Completing Forms, Documents and Records  
Planning and Control  
Developing Motivational Skills and Influencing Others  
Building Teams and Providing Leadership  
Interviewing and Counselling Skills  
Training and Developing Employees  
Interpreting and Modifying Group Behaviour  
Developing an Objective Approach  
Interpreting and Giving Technical Instructions  
Building Teams and Providing Leadership  
Influencing Others through Effective Communication  
Participating at Meetings and Meeting Procedure  

Certificate in Supervision  
Module 2  
Personal Organisation Skills  
Module 3  
Working with the Employee  
Module 4  
Working with the Work Group  

Further correlation was identified between content in the Certificates in Workplace Education and both the Vehicle Industry Certificate and the Engineering Production Certificate.

Certificates in Workplace Education  
Communicating in the Workplace  
Writing and Interpreting Messages and Instructions  
Filling in Basic Forms  
Interpreting and Giving Technical Instructions  
Gaining Confidence and Working with Groups  
Assessing Situations and Predicting Outcomes  

Vehicle Industry Certificate  
Module 3  
Communication Processes  
Job Instruction  
Groups in the Workplace
Certificates in Workplace Education  
Communicating in the Workplace  
Developing Telephone Skills  
Writing and Interpreting Messages and Instructions  

Engineering Production Certificate  
Communication Component of Communication and Industrial Relations

In addition to the subjects and courses listed, there is also a close match between units within the *Certificates in Workplace Education* and other generic skills content, for example, that which is included in the *Certificates in Occupational Studies* and in courses auspiced by the *Australian Traineeship Scheme*.

### 7.2 TAFE National Communication Modules

On recommendation received from Sonnie Hopkins, the State Co-ordinator, National TAFE Communication Skills Project, an analysis of the available TAFE National Modules has also been carried out. The findings reveal a close link between modules for which the curriculum was available. As further communication modules are developed, these will also be examined.

<table>
<thead>
<tr>
<th>Certificates in Workplace Education</th>
<th>National Communication Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Telephone Skills</td>
<td>Workplace Communication</td>
</tr>
<tr>
<td>Taking Notes and Recording Information</td>
<td>Element A</td>
</tr>
<tr>
<td>Filling in Basic Forms</td>
<td></td>
</tr>
<tr>
<td>Understanding Basic Instructions</td>
<td></td>
</tr>
<tr>
<td>Gaining Confidence and Working with Groups</td>
<td>Element B</td>
</tr>
<tr>
<td>Developing Telephone Skills</td>
<td></td>
</tr>
<tr>
<td>Writing and Interpreting Messages and Instructions</td>
<td>Element C</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificates in Workplace Education</td>
<td>National Communication Modules</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Participating in Group Discussions</td>
<td>Work Team Communication</td>
</tr>
<tr>
<td>Presenting Information to Groups</td>
<td>Element A</td>
</tr>
<tr>
<td>Writing Reports, Memos and Letters</td>
<td>Presenting Information</td>
</tr>
<tr>
<td>Interpreting and Giving Technical Instructions</td>
<td>Element A</td>
</tr>
<tr>
<td>Element B</td>
<td></td>
</tr>
<tr>
<td>Interpreting and Modifying Group Behaviour</td>
<td>Team Building Communication</td>
</tr>
<tr>
<td>Solving Problems and Making Decisions</td>
<td>Element A</td>
</tr>
<tr>
<td>Building Teams and Providing Leadership</td>
<td>Element B</td>
</tr>
<tr>
<td>Listening, Questioning and Memory Skills</td>
<td>Interviews</td>
</tr>
<tr>
<td>Element A</td>
<td>Element B</td>
</tr>
<tr>
<td>Interviewing and Counselling Skills</td>
<td></td>
</tr>
<tr>
<td>Influencing Others Through Effective Communication</td>
<td>Negotiation Skills</td>
</tr>
<tr>
<td>Element A</td>
<td></td>
</tr>
<tr>
<td>Participating at Meetings and Meeting Procedure</td>
<td>Meetings</td>
</tr>
<tr>
<td>Element A and B</td>
<td></td>
</tr>
<tr>
<td>Developing Research Skills</td>
<td>Presenting Reports</td>
</tr>
<tr>
<td>Writing Formal Reports and Submissions</td>
<td>Element A</td>
</tr>
<tr>
<td>Element B and C</td>
<td></td>
</tr>
</tbody>
</table>
8 AVC TRAINING SYSTEM

In March 1992 the Report of the Employment Skills Formation Council, National Board of Employment, Education and Training was published. The Report recommends a staged strategy for achieving Australia's training needs of 90 per cent of young people completing Year 12 or equivalent by 2001, whereby more vocational options for Years 11 and 12 are developed and better adult-learning facilities provided, to enable achievement of key competencies.

The key areas of competence are generic competences which underpin the acquisition of vocational and occupation-specific competencies. Vocational competency standards, which are ratified by the National Training Board (NTB), are the mechanism through which a CBT system operates to ensure that vocational education and training is delivered to meet the needs of industry.

(ESFC, 1992, p vii)

The Report emphasises the need for vocational training to relate to the Australian Standards Framework (ASF) levels 1 to 4 and proposes the establishment of an Australian Vocational Certificate Training System:

- there should be four vocational certificate levels equating with Australian Standards Framework (ASF) level 1 to 4. These levels do not necessarily correspond with award occupational classifications;
- each certificate level to be achieved on a competency basis. Time should only be seen as an indicative average, before or after which competency can be achieved
- certificates should be issued to people successfully completing training for ASF levels 1, 2, 3 or 4 to be nationally consistent Australian Vocational Certificates;
- there should be a common system of competency assessment to exist for each level; ...
- a progression of training is available from one level to the next; and
- provision is made for recognition of prior learning and competence achieved by any means in the assessment of competence.

(ESFC, 1992, p 1)
In July 1992, documentation on the *Certificates in Workplace Education* was given to Laurie Carmichael, Chair, Employment Skills Formation Council. In August 1992, a recommendation was made by Laurie Carmichael that the course be piloted under the new *Australian Vocational Certificate Training System*. 
PART II

VIEWS OF PARTICIPANTS

(including past participants and union representatives)
9 ADOPTION OF ANDRAGOGY

Before exploring a number of andragogical issues, I think a brief description of andragogy might be of benefit to the reader.

In 1970, when discussing the needs and goals for individuals, Malcolm Knowles stressed the immediate mission for every adult educator, namely, to help the individual learners to satisfy their needs for goal achievement. To expand on this, when an individual is asked what his or her needs are, the common response will be the attainment of a specific competence, for example "to be able to write better" or "to be able to speak in public".

Knowles considers such responses to relate to the individual's interests, rather than specific needs, and thus differentiates between the two. In determining needs, Knowles argues that these relate to the "goals of human fulfilment" (p 23).

In citing three prevalent needs, Knowles raises the "prevention of obsolescence" (23), which comes about from most adults being only educated when they were young, and the assumptions that such education would be sufficient for their life. However, with rapid social and technological change, this assumption is no longer valid.
The knowledge and skills acquired during youth soon become obsolete, thus, individuals must be helped to develop the attitude that learning is not for the young, but is a lifelong process. In order to achieve such lifelong learning, adults, therefore, need to know how to apply the skills of self-direction.

Knowles identifies a second need, and that is the achievement of self-identify through the development and skills and knowledge in order that individuals may reach their full potential.

A third need is for individuals to achieve maturity. Overstreet (1949) considers that a maturing person has "linkages with life" (p 43) which become stronger and richer, due to intrinsic encouragement of their growth.

To cope with the impact of ever-increasing change, individuals must be shown how to achieve the necessary competencies to avoid obsolescence and to confidently contribute to a technologically advanced society.

How do we, as educators, help society to cope? Traditionally, it was thought that the principles and techniques of teaching children would equally apply to adult learners; it is now known that this is not the case. In 1970 Malcolm Knowles used the term andragogy, to distinguish the teaching of adults from the teaching of children, which is known as pedagogy.
In 1983, Stephen Brookfield, formerly Professor of Adult Education at the University of British Colombia, when discussing Knowles wrote:

The writer who has become most identified with the application of humanistic adult learning theory to the practice of adult education is Malcolm Knowles. The concept which is central to Knowles's thought is that of andragogy.

(Brookfield, 1983, p 151)

Andragogy is premised on four assumptions which relate to adult psychology:

1. their self-concept moves from one of being a dependent personality toward being a self-directed human being;
2. they accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning;
3. their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles; and
4. their time perspective changes from one of postponed application of knowledge to immediacy of application and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance-centeredness.

(Knowles, 1980, pp 44-45)

The following section of the evaluation will endeavour to address the level of success on the adoption of andragogical theory throughout the pilot program; a theory which requires the teacher or facilitator to assist in the learning process, but not to remove the overall responsibility and direction of learning from the adult concerned. Further, andragogical theory encourages a helping relationship, which is characterised by "a respect for the integrity and independence of the adult(s) involved" (Brookfield, 1983, p 152).
The issues raised in this part of the evaluation will include:

- Reasons for undertaking the course
- Level of intrinsic reward
- Self-diagnosis and identification of needs
- Areas of personal change
- Participant motivation
- Helping relationships
- Demands on personal time
- Perceived course relevance
- Structure, design and content
- Group-based learning
- Recommendations for improvement
- Relationship to school experiences
- Recommendation of course to others
10 SOURCE OF TRANSCRIPTS

In the main, the transcripts used for analysis were prepared from both the interim evaluation, carried out with participants at the Port of Geelong Authority, Levels 1, 2 and 3 in October 1991 and the final evaluation, which was undertaken in June 1992.

Between these two evaluations, a third evaluation, auspiced by the Transport and Storage Industry Training Board (Victoria), and financed by an allocation received from the 1990/91 Commonwealth Adult Literacy Research funds, was also carried out.

Prior to David McGregor, the Project Officer appointed by the Transport and Storage Industry Training Board (Victoria), commencing interviews across the Authority, it was agreed that, to avoid unnecessary duplication and withdrawal of employees from their work, transcripts resulting from interviews carried out by him would be available for inclusion into the final evaluation report. Where extracts from such transcripts are incorporated, acknowledgment is made.

The willingness of the participants, past participants, foremen, supervisors and members of management at the Authority to share their thoughts on the piloting of the Certificates in Workplace Education has enabled a most comprehensive and valuable evaluation to be made.
11 REASONS FOR UNDERTAKING COURSE

In 1977 Jennifer Rogers cited some unfavourable clichés as to why adults enter the learning situation:

They come 90 per cent because they get a half day off work and they say that a respite from heavy labouring is worth it, even if it is education. The other reason they come is that they want to know enough about industrial relations to outwit management. It amuses some of the more left-wing brothers to think that management is actually paying for them to be here. It's an added piquancy, if you like.

(Rogers, 1977, p 11)

Over the years, such negative comments may well have surfaced in the minds of many, particularly those persons who were not directly involved in the educational process.

Rogers adds that adults frequently have more than one motive for undertaking a class, although, when speaking to an interviewer, participants "may be reluctant to single out one reason as being more important than another"; some "may even wish to hide a motive of which they think an interviewer might disapprove", also, they, "themselves may be unaware of some of their real motives" (Rogers, 1977, p 12).

In discussing factors in participation, Cropley (1989) argues that most adults regularly engage in "learning projects" (p 145), citing the United States as an example, where "they spend on average about 500 hours a year on such activities" (p 145).
This leads to the question of why people participate in adult education:

Many studies of motivation for participation in adult education view it as defined by the goals people hope to reach by means of participation, such as job advancement, acquisition of a new skill, or development of new friendships.

(Cropley, 1989, p 145)

Important in the motive for participation is the "readiness to adopt a certain course of action" and the weighing of the "perceived costs" against the "expected benefits" (Cropley, 1989, p 145):

... in the present context a benefit might be the learning of a new skill, a cost might involve loss of television viewing time ...

(Cropley, 1989, p 145)

Such an example is relevant to the structure of the Certificates in Workplace Education, where new skills, knowledge, attitudes, competence and confidence are integral to the aims of the course. However, to achieve these, the participants must contribute a comparable amount of their personal time, more if necessary, to achieve the desired learning outcomes of the course.

When participants in the pilot at the Authority were asked why they entered the generic workplace education course, their responses, naturally, varied. Many cited the need to better their educational standard and to achieve new skills:

Q   What made you decide to enter the program?

R   To better my education standard. (Level 1 participant)

R   Mainly oral communication skills. I need more practice in that, to communicate properly with people. (Level 1 participant)
I believe I need to upskill, mainly in mathematics and English. (Level 2 participant)

Well, I'd already planned to get into some education and get back into it again and this was the perfect opportunity. (Level 2 participant)

To extend my knowledge. (Level 2 participant)

To brush up on my school work. To make me more aware. (Level 2 participant)

Several sought to extend their formal qualifications:

I was thinking of extending a few certificates that I've got. To try and get me back into the study mode. (Level 1 participant)

I'm only here for three years, so, the more paper I've got when I leave here the better off I'm gonna be, I suppose. (Level 3 participant)

Others wished to improve their work skills:

It's just that, mainly, to get myself activated again, get the brain going because there are a lot of questions and maths mainly, because I was never good at it, you use maths outside, on the job. (Level 2 participant)

I wanted to concentrate on maths more than anything else, because I am responsible for doing the Board and Chief Executive's budget ... (Level 3 participant)

Basically to improve my work skills. (Level 3 participant)

Some wanted to raise their level of confidence:

I wanted to consolidate the skills that I already have and I wanted to gain some more and the maths in particular, I felt that I needed upgrading in that area. I've really felt lacking in confidence for about three years, I just wanted a bit of background to cope with that. (Level 3 participant)

Whilst others provided more personal reasons, such as self-improvement:

Self-improvement and that's about it, totally selfish. (Level 2 participant)

To improve myself, mainly. (Level 2 participant)

I suppose the main thing for me was the fact that I'd been out of school for so long and I've got two young children now. I'm finding that the stuff that they bring home from school is just so different to what I was used to doing, that I thought it was a good opportunity to brush up on the education. I suppose it's helping me both at home and here at work. (Level 2 participant)
Although, some joined the course with unclear motives:

R Probably to go over some of the things that I have done over the past years, I think, may be to help me a little bit in some of those areas. (Level 1 participant)

R Main reasons for undertaking the course were just the interest of seeing what was going to come out of it. Basically, I didn't think much about it when I started, but it was an avenue open to me, so I took it and thought I'd see where we go, which is basically why I did it. (Level 2 participant)

R I wanted to see what it was about, really. (Level 2 participant)

R I don't know really, I wasn't going to. ... I want to go on and do another course, so I was hoping this might try to make things a little bit easier. (Level 3 participant)

The motives for participants undertaking the general skills course are different from what would be found if it were a technical course, where concentration on industry or enterprise specific skills would be paramount.

A course concentrating on generic competencies, such as personal and interpersonal skills, mathematical skills, and oral and written communication skills is seen to focus on the importance of the individual's intrinsic growth.
12 LEVEL OF INTRINSIC REWARD

In discussing the principles of adult education, Morgan et al (1976) emphasise the interests and needs of mature learners. Adult education, they claim, emphasises the adult's ability to solve problems which involve reason and judgement. Adult education focuses on the value of past experiences, the patterns of behaviour, loyalties, aptitudes and environments.

Morgan et al further argue that the 'mind set' of the learner plays an important role in adult education. If the learner has personal biases, suspicions, prejudices, distrusts and a closed mind, these will form a block to effective learning. Thus, it is important for the teacher or facilitator of adults to encourage within each learner a 'mind set' that is willing to consider new ideas and new methodologies, even though the learner may choose to not actually adopt them.

It is further argued that for effective adult learning, the desire to learn must be prevalent. Such learning desire may arise from an interest in a subject for its own sake, or, it may come from a feeling of need for new knowledge or new skills. The desire to learn may also result from association with teachers or colleagues, especially those who are admired or respected.

In accordance with these theories, Morgan et al claim that the teacher of adults must be able to arouse a desire to learn by adopting appropriate methodologies
and materials. As learning may be an emotional problem as well as an intellectual one, the student must genuinely want to achieve the learning goal. The adult learner needs to be fully aware of what is required for goal achievement; what he or she should read; what tasks are to be carried out; what assignments are to be completed and what research and writings are necessary.

Integral to the learning process is the learner’s sense of achievement; his or her sense of comfort in the learning environment and satisfaction with the course as a whole.

In an attempt to gauge the extent of course satisfaction and intrinsic reward, a number of questions were asked:

Q Are you enjoying the course?
R Yes, very much so. I look forward to it each week.
Q Is it what you expected?
R I think it’s um, particularly with the maths, I was expecting a harder, not to be as enjoyable as it’s been, perhaps, so I’ve enjoyed it more than that I thought I would have because arithmetic not being my strongest subject. (Level 1 participant)

Q Are you enjoying the course?
R Yes.
Q Is it what you expected?
R No, nothing like I expected, no. I was thinking more of the old school room, you know, sit there and do what you’re told, that’s what I was expecting. It’s a lot more laid back than what I thought it would be. (Level 1 participant)

Q Were your goals satisfied, you went through Level 1 as a foundation for Level 2?
R I am quite happy with it, I have no regrets at all. (Level 1 participant)
Q  Have you enjoyed the course?
R  I have enjoyed it. Setting the time aside, I haven't found easy, but I'm in that sort of job where I have done a lot of work when there has been a bit of slack time at work too. I do get a bit more time than a few others, so I have used time during work, when I have been able to complete some units. Even now, I have finished and I don't think too many would have. ... It has taught me things. As I said before, even though you don't realise it, you are doing things by instinct, that perhaps before you wouldn't of. To me, it has been very helpful.
   (Level 2 participant)

Q  Do you like the classes?
R  Yes.

Q  What do you particularly like about them?
R  I can go home and sit down and get out my cheque book and sort of say, "Ah, right, this is how it's done." Or, when I walk into a shop and there is 20 per cent off, well, I know what they are talking about. I can relate a lot easier to it.
   (Level 2 participant)

Q  Are you enjoying the course?
A  Yes I am. I enjoy it a lot. I find that I am able to understand things a lot easier now than when I was at school. Probably because I'm a lot more mature, I don't know.
   (Level 2 participant)

Q  Have you enjoyed the course?
R  Yes, very much.

Q  What was the best thing to come out of it, do you think?
R  It's interesting. It's the interaction with the other employees that has been of most benefit to me personally, probably the position I am in keeps me away from the outside workers. I only see someone if they are coming to see the boss, and the Christmas lunch. So I don't see them any other time and it has given me a better understanding of the situation. I hope that mixing with me has given them a better understanding of administration.
   (Level 3 participant)

Specific questions were asked about the teachers in the program:

Q  Do you like the teachers in the program?
R  They've got a sense of humour, which they desperately need with all of us. I think they have a good ability to impart their knowledge over and good teaching skills. I don't think all teachers could teach to adults like us. I really don't think that a lot of teachers could handle the situation the we're in. So yeah, I'm pretty happy with the teachers, I think they do a good job.
   (Level 2 participant)
Q  Do you like the classes?
R  Yes.
Q  What do you like about them?
R  The teachers are good and I think everybody else basically, and it's good, we're learning at the same time. And, I suppose because we are all that bit more older, and more interested in what we are doing, than when we were at school or whatever. (Level 2 participant)

Q  What do you actually like about the teachers?
R  They treat us as adults, for one. There is no problem of you asking ... that you say you have a problem can you give us a hand. They are only too willing to come and help you. (Level 2 participant)

Questions were also asked about the venue:

Q  What do you think of level five as a classroom?
R  I don't think it would really matter. The best part about being here is you don't have interruptions. I think if you were out at the workplace, you're liable to have interruptions of people coming in and out. .... You would lose a lot more time. Whereas here, if people decide they want to have a cup of tea, go and sit back down and continue doing their work. If they feel they want to have a break, well they can go for their 15 minute break and go outside and have a cigarette or whatever. (Level 2 participant)

Q  What do you think of this area as a classroom?
R  Yeah, excellent, yeah.

Q  Some felt that we should have had the classes down at Rippleside. What do you think?
R  No, no. This is nice, it's comfortable, it's a good atmosphere. Myself, personally, I like it for what I'm doing. (Level 2 participant)
13 SELF-DIAGNOSIS AND IDENTIFICATION OF NEEDS

In his writings, Malcolm Knowles (1970) raises the question, 'In what areas do people appear to find life's meaning?'. According to Knowles, we have only one pragmatic guide, meaning must reside in the things for which people strive, the goals which they set for themselves, their wants, needs, desires and wishes, or, as Eduard Lindeman writes:

"Viewed from the standpoint of adult education, such personalities seem to want among other things, intelligence, power, self-expression, freedom, creativity, appreciation, enjoyment, fellowship, ... Briefly they want to improve themselves; this is their realistic and primary aim."

(Lindeman, 1961, pp 13-14)

According to Titmus (1989), the "most powerful principle behind adult education for work is that of economic self-interest" (p 95):

"An individual studies to improve his or her own competence for the rewards it reaps in money or status."

(Titmus, 1989, p 95)

Knowles (1970) discusses the importance of 'self-diagnosis' of learning need, arguing that the attitude of the self-directing adult is normally in conflict with traditional practices, wherein the teacher diagnoses the learning content.

Naturally, the adult will learn that which he or she is required to, however, the level of motivation will be far greater when the individual identifies a genuine need to learn.
Perhaps self-diagnosis has been the key to the success of the pilot of the Certificates in Workplace Education. Participants came forward on a voluntary basis, following their independently identifying both their level of ability and their individual learning needs, then, seeking a place in the training program.

In andragogy, emphasis is placed on the importance of self-diagnosis by the individual. Knowles breaks self-diagnosis into three important phases:

1. Constructing a model of the competencies or characteristics required to achieve a given ideal model of performance ...
2. Providing diagnostic experiences in which the learner can assess his present level of competencies in the light of those portrayed in the model ...
3. Helping the learner to measure the gaps between his present competencies and those required by the model, so that he experiences a feeling of dissatisfaction about the distance between where he is and where he would like to be and is able to identify specific direction of desirable growth. ...

(Knowles, 1970, p 42)

Andragogical theory also prescribes the need for self-evaluation of learning, whereby the facilitator assists the learners obtain evidence on their progress toward the attainment of their educational goals.

When asked questions on their perceived learning needs and level of generic skills, participants, in the main, were eager to self-disclose and were able to readily articulate their self-concept and provide constructive self-evaluation:

Q  Are you a good reader?
R  No.
Q  When you read, what do you like to read?
R  I find it very hard to sit down and read a whole book. I'll pick up a newspaper and read a short story, a magazine and read a short story. I'll read something that will interest me. I can't read a whole novel in that sense. I've never been able to do it. I've never really enjoyed it.
Q  Are you able to read most of the words?
R  Yes, I'm able to ready 90 per cent of the words.
Q  How about writing, do you enjoy writing?
R  Writing is the same. I'd have to put everything down and go through and check it again with a dictionary. The smaller words I find harder to write. I come from a European background, in my language, you read it, you write it, you spell it in one way.
Q  Do you think the units have given you sufficient background to go on to pursue the written skills?
R  No. I think I need a lot more support. I need to go back and do more basic work, I think. Being a person that doesn't read a hell of a lot, I find it difficult spelling smaller words than larger ones. ... This is what you were talking about, pertaining to the person's needs. That is one of my needs which I feel I need to work on. (Level 1 participant)
Q  Are you a good reader?
R  Yes.
Q  What sort of things do you like to read?
R  Any sort of books.
Q  How about writing. Do you think you write well?
R  No. I can sit and read a book for hours and hours, but I can't write. (Level 1 participant)
Q  How about maths, do you think you are good at maths?
R  I just struggle through.
Q  Has your maths ability changed?
R  It has.
Q  Were you able to do all the maths problems?
R  With perseverance.
Q  Which ones were the hardest?
R  The fractions, decimals, addition, multiplication. (Level 1 participant)
Q Are you a good reader?
R Ah, a good reader, but not a good speller.
Q Are you good at maths?
R I'd say just medium.
Q Has your maths ability changed since you started the course?
R Yes. It would have, my maths would have been below average and I think now it would be up to average, with the general skills that we've been learning.
(Level 2 participant)

Q Are you a good reader?
R I'd have to say I'm probably average.
Q What do you like to read?
R Probably the newspaper, mainly.
Q How about writing? Do you think you write well?
R No. I'm a shocking writer. I couldn't even tell you the last time I wrote a letter.
(Level 2 participant)

Q Which tasks have been hard to do, and which have been easy?
R General calculation I find quite easy because I was always pretty good at times tables, but fractions, I hate fractions.
(Level 2 participant)

Q Are you a good reader?
R Fair. I'm not very good English-wise. I'm an atrocious speller. You know the education I've had.
Q What do you like to read? What sort of books?
R Sort of, like, adventure type things and that. A bit of everything and anything, virtually.
Q How about writing, do you think you're a good writer?
R No.
Q Why not, do you think?
R Because my English is very poor.
(Level 2 participant)
Q  Do you enjoy writing?
R  Not really.
Q  Not really?
R  Not much of a letter writer, no.
Q  Which would be your stronger subject, maths?
R  I don't know if I've got a stronger subject. See all this is new. All this is a relearning process, and I'm going to use it as that. Once I've finished with this, then I'll probably look at doing something else, that I wanted to do before, like a business course or something like that. HSC is another thing I want to do.
Q  Has your maths changed since you started the course?
R  Oh yeah, I can work out percentages and fractions. (Level 2 participant)
Q  Are you a good reader?
R  Depending on the topic, I suppose. I wouldn't say I'm a good reader.
Q  What sort of things do you like to read?
R  That's clear cut, it's just mainly sport.
Q  How about writing, do you like to write?
R  Not particularly. I can get by; my wife has to go through it and put a few 'es' or 'is' here and there. I'm a big one for missing out full stops. (Level 2 participant)
Q  Are you a good reader, do you like to read?
R  Yeah, I don't get a good chance now. I used to read a lot as a kid.
Q  What do you like to read?
R  The paper and magazines and that's about it. Books, not as much.
Q  How about writing?
R  I hate writing.
Q  You hate writing?
R  This is the big weakness. Maths I'm quite happy with, I'm not bad at maths. I consider myself, you know, fairly good at maths. Sometimes I struggle, but after a while I pick up on what we're supposed to be doing. But it's the essays ... I'm not good.
Q  So you're a mathematician you think?
R  I've been writing a letter to a friend up in Sydney for about four months. I still haven't sent it. It's kind of outdated now. I just totally put it off. If I can do something else. If there's a good film on tonight, I'll do that. (Level 3 participant)
14 AREAS OF PERSONAL CHANGE

The dominant reasons for adult learning are personal achievement and self-fulfilment. With such reasons come a number of identified goals and, with the achievement of such goals, personal change.

When asked questions relating to personal change, participants gave mixed responses. Most respondents felt they had gained more confidence, which, for some, also impacted on their attitude to further education:

Q  Do you think you've personally changed since starting the course? Do you have more confidence?

R  Yes, I have a different outlook to studies once again, yes, for sure, it encourages you to get back into studies. It's not such a block now.
   (Level 1 participant)

R  Yes, definitely.
   (Level 1 participant)

R  Yes, I think I am more better at discussion and not so introverted, if that's the right word.
   (Level 1 participant)

R  Yes, my confidence was pretty low when I started, but I think it has improved.
   (Level 1 participant)

R  Yes, I have gained confidence in the way I speak to a person, and the way I approach a person, and the way I listen to what he is saying and I watch for what his reactions to what I say back to him.
   (Level 1 participant)

R  Yes. I have learnt to speak up and to be heard. It has helped me realise things that needed to be released within myself, to find out who I really was.
   (Level 1 participant)

R  I am gaining more confidence. What we are doing is really good, because I have never been able to do it. I can sit down and write ... and say that will do, but now I understand it. This is good ...
   (Level 2 participant)

R  Oh yes, definitely more confidence. I can sort of sit down with a pen and paper and say, 'Oh yeah, that's what I need, that's the figure I want to come up with and that's what I want.
   (Level 2 participant)
For me, personally, the thing I'm learning is that I'm quite capable of being a part of the class and having the confidence enough to complete the work that has been given to me. (Level 2 participant)

Yes, I'm heaps more confident as far as mathematical skills go. I can't believe that I've actually been able to answer some of the questions in the book. (Level 2 participant)

The thing is, maybe, I am more confident with other people who have been in the group and also other people who are outside the group, which is different to dealing with people in the group, my confidence in dealing with people has helped me. (Level 3 participant)

Yes. I probably speak up with the guys more than I used to. I think I'm probably fairly assertive anyway. (Level 3 participant)

Well, I do really believe that I have gained a little bit more confidence. Whereas, before the last class, I had never done any report writing and with the classes we have been doing over the last few weeks, and the format on how to put down reports, I got very eager about it and finished the homework within the hour. (Level 3 participant)

Other participants considered that they were more highly motivated:

I'm more motivated to do what I've set out to do. On a work side of it, not at the moment. (Level 1 participant)

I'm more motivated. You start to feel better about yourself, because you're learning things and you say, well, I can do this. (Level 1 participant)

Whilst some could not identify personal change:

No, I'm a little bit wiser, but I don't think I've changed. (Level 2 participant)

No, I don't think I've personally changed. I am pretty confident anyway. But I have picked up a lot which has helped me at work. (Level 2 participant)
15 PARTICIPANT MOTIVATION

What motivates people to regularly attend a course? Whilst a general pattern of behaviour may be identified by typologies, in adult education, like psychology, "there are theoretical and empirical typologies" (Boshier, 1989).

In 1961 Houle created a theoretical typology, based on interviews with twenty-two learners, proposing that participants were goal, activity or learning oriented:

The goal oriented were purported to use edification as a means of accomplishing fairly clear-cut objectives; the activity oriented were those who took part because they found a meaning in the circumstances of the learning which had no necessary connection, and announced purposes of the activity. The third, the learning oriented, sought knowledge for its own sake.

(Houle, 1961 in Boshier, 1989, p 148)

Such typological orientations may equally be ascribed to participants in the pilot program, for example, in relation to goal orientation:

Q Will you continue with your studies?
R Yes, I hope to. I would hope to go straight on to two, that's what I planned starting Level 1. (Level 1 participant)

Q Will you complete every unit to qualify for the certificate?
R Yes, you would be silly, as I said to (name) when he said he was giving it a miss, I said, you are bloody mad. You don't do something for 90 per cent of the time and let it go for a mere 10 per cent, do you? You are this far, you keep going. (Level 2 participant)

Q Do you think you are more motivated?
R I'm pretty motivated, because I haven't wanted to miss a class and any time we are doing something else, I've always made sure that, you know, I make this top priority ... (Level 2 participant)
Others attended for the value of the activity:

Q  Do you look forward to the classes each week?
R  Yes.

Q  Do you think that effects your work?
R  Yes, it gives you a more positive attitude. They're giving you the opportunity to study to better yourself and to put input into their time.
   (Level 1 participant)

Q  Do you look forward to the classes each week?
R  Yes, I do. You get away and do something different.

Q  Do you think that effects your work?
R  You look forward to Tuesday, yes. The rest of your work, again it is on a personal basis, you feel you're down here, somewhere, it's very hard at the moment, we are in the situation where your job is on the line ...
   (Level 1 participant)

Q  Do you look forward to the classes each week?
R  Yes.

Q  Why is that?
R  Because I just think it is something different from the normal work routine, for a start off.

Q  Are you happier now that you are achieving more?
R  Yeah, I suppose, I look forward to it and I get a kick out of getting homework back.
   (Level 2 participant)

The responses also indicate that the third orientation, that of "seeking knowledge for its own sake", is a prevalent motivator:

Q  Do you look forward to the classes each week?
R  I do. Yeah, I really do.
Q: Why is that?
R: Well, mainly because I am learning. If I wasn’t learning, I wouldn’t be coming back. (Level 2 participant)

Q: Do you look forward to the classes each week?
R: Yes.
Q: Why is that?
R: Just because it is something else to learn. There is something more there that I can get something out of, I think that’s the main reason. I sort of wanted to do the course to learn something, and the opportunity is there to learn, so I want to grab it while it is there. (Level 2 participant)

Q: Have you been able to attend each class?
R: No, not every class for work reasons or for being on holidays mainly, yeah.
Q: Were you able to catch up?
R: Yes. More so because I enjoy maths and I’m interested in maths and therefore, I make the time or the effort to catch up, that’s why. (Level 3 participant)
16 HELPING RELATIONSHIPS

In order to facilitate learning, many educational theorists emphasise the "centrality of learner-centred education" (Brookfield, 1982, 152), a notion closely aligned to andragogical theory. In 1977 Lyra Srinivasan linked the concept of the "helping relationship" to the earlier insights of psychotherapist Carl Rogers:

A relationship in which at least one of the parties has the intent of promoting the growth, development, maturity, improved functioning, improving coping and life with others. The other, in this sense, may be an individual or a group.

(Rogers, 1961, pp 39-40)

Such helping relationships are, naturally, fostered by teachers and facilitators of learning. Importantly, they may also be provided by persons outside the educational setting, by family members, friends and colleagues:

Q  Has your family been supportive?
R  Yes, my wife has been. With the spelling. I always bound her in spelling. I will spell it and ask her it that is the right way to spell it. If it's not, she will spell it for me.
    (Level 1 participant)

Q  Has your family been supportive?
R  My daughter has. She has helped me a little because she is at the age where she has left school and been doing a lot of computer work, and she has been able to help me a little bit ... but I suppose 90 per cent of it I have done myself.
    (Level 1 participant)

Q  Has your immediate supervisor been supportive?
R  Yes. I can give you a typical example. Yesterday we had a job to go to in Melbourne (during class time) which they needed, well they offered me first refusal of going up there, and I said what do you need to do. What he needed to do, someone else could have done without any problems, only he didn't need me as an individual to help him.
    (Level 1 participant)
Q Has your family been supportive?
R Yes. The wife has been interested in it. She helps out with everything. (Level 2 participant)

Q Have your colleagues been supportive of your studies?
R My foreman allows me to come once a week and makes sure I am not in a job where it is going to stop me from coming, so yes, he has. Fellow workers, I don't know, one of them comes to the course anyway. The others don't really know what is going on. (Level 2 participant)

Q Do you get help outside the classes?
R Yes, there is another bloke, (name). We are sort of at a similar level, he is probably a bit brighter than me, but I go over it and I think if that is not quite right, or, I'm on the right train, that I'll go over to him and say, "well, what answer did you get?". And he'll say, "this one", and I'll say, "good, well at least I know it's right". (Level 2 participant)

Q Do you get any help outside the classes?
R Yes.
Q From whom?
R From my wife. She's only just finished doing a number of courses with the Gordon. So she was up with all the maths. So if I sort of had a problem at home, when I was doing homework, we'd go though some of her old school work. (Level 2 participant)

Q Do you get help outside the classes?
R I've sat around with some of the other blokes and just worked on a couple little bits ourselves. But, basically, I'd go home and sit down and do my homework, at home and that. Do it while it was still fresh in my mind too. (Level 2 participant)

Q Have your colleagues been supportive of your studies?
R You find that you have a good rapport with other fellows in the group, that has really changed, because before this you might have known them just as Harry or George or whatever. But you find yourself asking, "Have you done the homework", and that sort of stuff, and it does bring you closer together. (Level 2 participant)
17 DEMANDS ON PERSONAL TIME

Participants joined the pilot program on the understanding that they would contribute an equivalent amount of personal time per week, namely three hours, or more if necessary, in order to achieve the defined learning outcomes for each unit undertaken.

As units were developed, the notional learning time for each was taken into account, based on participants progressing from the entry level criteria for the unit to the objectives or learning outcomes to demonstration of competency.

It is important to raise here the fact that some participants, although initially highly motivated to undertake the course, did state that the ongoing demands on their personal time were amongst their reasons for withdrawal.

At both the interim evaluation, conducted in October 1991 and the final evaluation, conducted in June 1992, questions were asked in regard to the extent of time contributed by course participants, on both a weekly and average basis. Participants were also asked their views on the agreed time commitment.

The responses from the majority of participants during both the interim evaluation and the final evaluation indicated that, on average, the notional learning time per unit correlated with the agreed time allocation.
Although for some units, such as those in the mathematical and written communication skills modules, the time was more extensive. Also, some participants, naturally, needed to contribute a greater amount of time to achieve the learning outcomes than others.

Q  How long do you put in outside the class for homework?
R  Depends on what the homework is. Two or three hours per night. It was for fractions and decimals. (Level 1 participant - October 1991)

Q  On average, how much time would you spend on homework?
R  It would range from an hour to six hours (per week), depending on what I am doing. If it is easy, I can do it quick, but if it is a challenge, I have to take my time.

Q  Do you enjoy it?
R  Yes, although, sometimes I throw the book around and get angry, but then I will leave it for a while and come back to it. (Level 1 participant - June 1992)

Q  Have you been able to regularly set time aside for out of class work?
R  Yes, for sure.

Q  What, two hours straight, or broken up?
R  I break it up, two to three hours, yes, I break it up.

Q  Have you minded putting in that time yourself?
R  No, because it has been beneficial to myself. So I look on it like that. (Level 1 participant - June 1992)

Q  Have you been able to regularly set time aside for out of class work?
R  Yes I have each week. When I am in the mood and that, I do at least two hours, but may be other times, I might do more.

Q  Two hours in one straight block?
R  I do a little bit here and a little bit there. If I do it all at once, I lose my concentration a bit, doing it all at once. (Level 1 participant - June 1992)
Have you been able to regularly set time aside for homework?

Yes, I have actually. I just take the time, say between 7 o'clock and 8 o'clock, I just pick up my book, and I have to do some writing and this is what I need to do. I just do it. Just take time out to do it.

On average, how much time do you take to do homework?

Well, average between three, four, five hours through the year. Like the last few units ... of reading workplace notices and things like that ... three to four nights, at least three hours a night.
(Level 1 participant - June 1992)

How much time would you have spent on homework across the whole year, three hours?

No, less for Level 1. It has been a good foundation. I found it quite easy overall, so I probably did an hour or so each time.

Is it a good grounding?

Yes, it is. After coming back after seventeen or so years being out of secondary education.
(Level 1 participant - June 1992)

Whilst participants seeking to obtain a full Certificate at either Level 2 or Level 3 needed to select a business or technical mathematical course option, one participant was concentrating on both units:

How long do you spend out of class on homework?

Because I'm doing both lots of maths, I'm probably putting in about ten hours a week, I'd say. Maybe not quite that much, may be eight hours I suppose.
(Level 2 participant - October 1991)

This commitment was exceptional, however, the participant saw a direct benefit from both areas and sought to undertake the two. Responses indicate, however, that other Level 2 participants also experienced a time variance:

How much time did you spend on the maths problems?

I would probably have spent five or six hours over the weekend.

Did you mind having to do that?

No, not really. I haven't, sort of, sat down and thought that it was a real grind, wishing I'd been somewhere else, sort of thing.
(Level 2 participant - October 1991)
On average, how much time have you spent on homework each week?

It's hard to say, some of the units you might only spend one and a half hours to two hours, but as I said earlier, some of the units, it's nothing to spend six hours or even more on some of the units.
(Level 2 participant - June 1992)

Well, last night I just glimpsed as I sat down. I did research for about one and a half hours last week, and another two to three hours. Once again, it's whether you enjoy it or not, and because I haven't minded doing this subject, I am putting in the work. It's just relevant to what you like, I suppose ...
(Level 2 participant - June 1992)

Time also varied amongst the Level 3 participants:

How long would you spend outside the classes for homework?

I've been able to stick with three hours for everything except maths. I don't really have a set note aside, I have to salvage time for other commitments. But, I guess, that would be more like four or five hours.
(Level 3 participant - October 1991)

How long do you normally put in outside the classes?

Well, I usually end up putting in more than three hours.
(Level 3 participant - October 1991)

On average, how much time do you take for homework each week, looking right across the year?

Well, some weeks I can't seem to fit it in and then there are other weeks when I might do one or two hours, and other weeks when I could spend up to four or five hours.
(Level 3 participant - June 1992)

Whilst, in the main, participants were able to cope with time arrangements to enable their contribution of personal time, some did identify time and work-related problems:

Have you been able to readily set time aside for out of class work?

Yes and no. With overtime, it is really hard.

On average, how much time have you spent on homework each week?

I would fit it in where I can, a few hours. It might be at work, it might be at home.
(Level 2 participant - June 1992)
Q  Have you been able to readily set time aside for out of class work?
R  It's a bit hard sometimes. You put in a day's work and by the time you get home, you don't want to do it ... Sometimes its OK, if you are sort of interested in it, you sort of find the time to do it, but sometimes, I find it gets you down a bit.  
(Level 2 participant - June 1992)

Although two participants did express difficulty in undertaking the out-of-class learning component, without exception, the responses indicate the participants' willing acceptance of a personal commitment to the course, in addition to their paid time release from the workplace. Thus, a further indication of the extent of intrinsic motivation by the majority of participants is made.
18 PERCEIVED COURSE RELEVANCE

The importance of the acquisition of broad-based generic skills in vocational training and award restructuring has frequently been cited. During the International Literacy Year, 1990, Ivan Deveson wrote:

> Literacy, numeracy and other communication and general learning skills are an essential and important element in award restructuring. Unless workers and those seeking jobs have these skills, they will be denied access to training and career advancement.

(Deveson in Dawkins, 1990, pp 3-4)

Similarly, in citing *Workplace Australia* (1991), Patrick Griffin and Anne Forwood argued:

> In an economic climate where restructuring of the workforce has become a national priority, a person's ability to speak, listen, read, write, think critically and enumerate have become crucial skills for adults wishing to enter or remain in an ever changing workforce.

(Griffin and Forwood, 1991, p 6)

The Australian Education Council Review Committees report, *Young People's Participation in Post-Compulsory Education and Training* (1991) identified six key generic competencies:

- language and communication;
- mathematics;
- scientific and technological understanding;
- cultural understanding;
- problem-solving; and
- personal and interpersonal characteristics.

(Commonwealth of Australia, 1991, p x)
In 1992 the Mayer Committee recommended that three levels of performance be used to describe each of the key competency strands. Importantly, the Committee also identified four kinds of generic activities in relation to workplace language and communication.

Also in 1992 the Report of the Employment Skills and Formation Council, National Board of Employment and Skills Formation Council claimed:

*The key areas of competence are generic competences which underpin the acquisition of vocational and occupation-specific competencies.*

(ESFC, 1992, p vii)

Traditionally, workplace education has focused on technical training, including apprenticeship provision and, more recently, traineeship offerings. Such traditional practices have clearly impacted on the identification of 'relevance' of generic skills to workplace training.

When interviewed, some participants had difficulty in relating generic skills development to their daily work activities, albeit that such general skills as personal and interpersonal skills; mathematical applications; oral and written communication skills would be used on a daily basis.

Such responses indicate a differentiation between the self and the other, where, within the inner consciousness, an identified split is made between the extrinsic 'knowledge for the worker' and the intrinsic 'knowledge for self-growth'.
Q Do you think the course is relevant to your everyday workplace or future needs?
R To me it is relevant in my situation, because I'm benefiting from it. The work that I do doesn't take up much adding up or subtracting, I'm either cleaning or helping a fitter and turner.
(Level 1 participant)

Q Which units have been the most relevant to your work?
R None.
Q What about the oral communication section?
R Yes, maybe the communicating.
(Level 1 participant)

Q Which units have been the most relevant to your work?
R I wouldn't say any of them are relevant. We don't do much of that.
Q What about some of the communication units?
R I suppose you could make relevance to it. Oral communication would be relevant to it, absolutely.
(Level 2 participant)

Q Which units were the most relevant to your work?
R I found it hard to relate most of it to my work, but they were a help in other areas.
(Level 3 participant)

The lack of relationship to daily work undertakings was also expressed by some not undertaking the course:

Q Are your colleagues supportive?
R It is surprising how many of the blokes from the floor don't agree with it at all. They chastise us if you're doing it.
Q These are your colleagues?
R Yes, they think it is a waste of time.
Q What do you say to them?
R I just don't enter the argument. I say, "If you don't like it, you don't like it, I do. I want to do it." They can't understand. It's weird, but there are only a few. ... One says, "it's got nothing to do with the workplace, so why do it?"
Q  Do you tell them it has a lot to do with the workplace, to achieving a higher skills classification level, for example.

R  Well, that was my argument in the workshop ... I don't plan to stay on the shop floor all my life. But you have got the blokes that have been on the shop floor for 15-20 years, they think it is a waste of time.
   (Level 2 participant)

Many participants, however, did see a direct relevance to their workplace activities, and thus identified a convergence between personal and work-related generic skills:

Q  Which units have been the most relevant to your work?

R  I think probably, possibly, oral communication, that was quite helpful because we do a lot of that, relating, particularly when the foreman gives you instructions. One of my failures was to ignore what he said to me. Sometimes I had to think very hard, now, what on earth did he want. What was he implying? What did he say to me? Occasionally, I have had to contact him again and ask, "am I doing this right?". I did have a problem and I think, may be, this has helped me a little.
   (Level 1 participant)

R  Note writing, messages and instructions. The work that I do doesn't require calculations, it doesn't require me to use a lot of English, other than communication ... its more oral communication than written.
   (Level 1 participant)

Q  Do you think the course is relevant to your everyday workplace needs?

R  Yes I think so, this far.

Q  What way is that?

R  Well, like if you're delivering or measuring materials, you're going back to those dividing things into and working out where you want to cut things, so it's relevant to the workplace.
   (Level 1 participant)

Q  Do you think the course is relevant to everyday workplace needs?

R  Yes. Where you have your maths with the work we do, you're always measuring and you have to work out how much you might have, say concrete, and you have to work out how much concrete you need and you need to work that out. You get to know the formulas by doing your maths and that.
   (Level 1 participant)

R  Certainly, in parts of the maths, we've already used that. I mean, in the case at Shell, where we had to work out the volume of a steel pole, which was to be filled with concrete and with the maths that Margaret had taught, we were able to use a formula, so yes, it is.
   (Level 2 participant)
Q Which units have been the most relevant to your work?
R I suppose the time management, the earlier ones we did.
(Level 2 participant)

R Communication skills, because it has helped me in my work.
(Level 3 participant)

Q Do you think the course is relevant to your everyday workplace needs?
R Yes, I do.

Q Why do you say yes, any specific reasons?
R It helps your preparation. The managerial skills at the beginning, most of them were a consolidation of what I had actually done in courses and seminars.
(Level 3 participant)

Q Which units have been the most relevant to your work?
R I think mainly the report writing and the communications. I felt I was a little bit lacking in those skills.
(Level 3 participant)

When writing his research findings, David McGregor, Project Officer, Transport and Storage Industry Training Board (Victoria) cited a comment from a discontinued participant:

Even though I've only done half of it I still look at some of the things I did and actually utilise them. I think that even for the number of hours I've put in, I've obviously got something out of it. I'm sure it's helping me do my job.
(Discontinued participant in McGregor, 1992, p 13)

Some participants related the course content to their future needs and goal achievement:

Q Do you think the course is relevant to your everyday workplace needs?
R Sections of it. Some of it is relevant to today's work. Other parts are relevant to future work, and, if you're looking at furthering yourself within the workplace, I think most of it is. All of it is relevant to helping me get that further upper hand.
(Level 2 participant)

R Not everyday workplace, but future needs.
(Level 2 participant)
R No, not my situation. But I hope it is for my future needs. It may when they restructure the place, I hope they do, then I can use it. At least I've done this course. I'm trying to improve myself, albeit promotions.
(Level 2 participant)

Several participants directly related the course to personal relevance, internal growth and identified self-needs:

Q Which units have been the most valuable to you personally?

R The hardest ones. They helped me because I usually think I am so stupid, I couldn't do it, but they taught me an important lesson. If I just put them down for a few days, or even a few weeks, when I go back to them I can do them. I need a bit more patience and tolerance though.
(Level 1 participant)

R Maths was, vocabulary, the subjects along those lines. Writing skills, communication are things that are relevant to me.
(Level 2 participant)

R The communication skills was the most valuable. All of them were good. Oral communication and the one about media ... 
(Level 3 participant)
19 STRUCTURE, DESIGN AND CONTENT

A key focus of the evaluation was to obtain the participants' views on the structure, design and content of the course. Thus, the following chapters concentrate on these important areas. Feedback was also invited from participants on the learning units.

The pilot program was based on time release of three hours per week, per level. Whilst, at each level, the majority of participants considered the amount of time allowed to undertake the course to be appropriate, others were adamant that more time, for example, four hours per week, should be offered:

Q  Do you think the time of three hours per week is enough?
R  No. I'd like to do more; spend more time on it, because of the time break, even if it was just twice (a week), that would be really good, it would keep the brain going. (Level 1 participant)
R  No, I think four would probably be enough. Three is just cutting it a bit too fine, to try to cover the amount that we are doing. ... Even just that extra hour a week would make a big difference. (Level 2 participant)
R  I'd have to honestly say no, but, given the other side, what I must be costing the Port, I think it is reasonable. Three hours certainly gives you enough time to get a grip on what is being taught. For some of the things we are having a little bit of a problem, it's not long enough. I think it's a good medium in between. (Level 2 participant)
R  No, I don't, with the current weight of work that has been given to us (Level 3 maths), we would have to double it, so that we have time to comprehend it. (Level 3 participant)

It should be pointed out that since this time, the content of the Level 3 mathematical units has been considerably reduced.
When asked about the overall course content, participants from each of the three levels gave favourable responses:

Q  *How do you feel about the content? Do you think we are right in what we are including?*

R  Well, like I said at the start, I really wanted to educate and upskill myself with mathematics and English. The psychology part of it (personal and interpersonal skills), well, I suppose that's part of teaching anyway. It suits me.  
(Level 2 participant)

Q  *How about the units, do you enjoy working from them?*

R  Yes, they're good, because you can go at your own pace.  
(Level 1 participant)

R  Yeah, because not everyone works at the same pace. I mean, you can see it in the class, some are a lot quicker than others. At least that way we're taking it home, you're not rushed there, those that are generally interested can take it home and it is there. Some of them write in the books themselves. I've been using note pads so I've got them at home for future reference now, even if the kids want to have a look through them. Yeah, I think it is a good idea.  
(Level 2 participant)

R  Yeah, they're good. It's good having everything in a book as a future reference for later on too. It's not something you just fill out, hand it to the teacher and receive a mark at the end of the course. You've got that there with you and it's in correct terms. It's written in the correct terms so you can understand it.  
(Level 2 participant)
20 GROUP-BASED LEARNING

The evaluation has revealed the exceptional value which the participants place on group-based learning. Such combined developmental processes have quite clearly impacted on their attitudes to the learning process and the levels of both individual and group-based motivation. By assuming a collective identify, the group membership has demonstrated a powerful force in the lead up to goal achievement.

According to Malcolm Knowles (1970), an adult defines him or herself largely by life and work experiences. When placed in a situation where such experience is not being used, the adult learner feels his or her worth has been minimised.

The levels of experience that adults bring to the learning situation have implications for the technology of andragogy. As adults bring to the learning situation more extensive experience than children, emphasis can be placed on methods for tapping this valuable resource, for example, group and class discussions, case studies, role plays, simulation exercises, demonstration by learners, etc (Knowles, 1970)

There is a direct shift in emphasis in andragogy away from the transmitted techniques so prevalent in youth education - the lecture, assigned readings, and canned audio-visual presentation - toward the more participatory experiential techniques. Indeed, 'participation' and 'ego-involvement' are boldfaced words in the lexicon of the adult educator, with the assumption often being made that the more active the learner's role in the process, the more he is probably learning.

(Knowles, 1970, p 45)
A practice in andragogy is to provide learners with an opportunity to free themselves from preconceptions about the learning process and to encourage them to become more objective about themselves and those around them.

Draves (1984) refers to group interaction and what adult learners bring to the group. From the perspective of the pilot programs, group interaction has been one of the most positive attributes of the learning experience for all participants. When interviewed, participants frequently referred to the extent of group cohesion; the strong bonds that had been formed and how much they had gained from group interaction; group problem-solving; group decision-making and, perhaps most importantly, group support.

Participation and "ego-involvement" (Knowles, 1970, p 45) are valuable components of the learning process:

Q  Do you enjoy working as part of a group?

R  Yes, I've found it good with the group because of some of the things, like the graphs last week, with the tide gauges. I've worked on the water and I've got my certificates with driving boats. I knew all about the tide gauges, time-tables, so I used them as one of the graphs, where as the others weren't too sure on it and you had to try and explain that it was on a twenty-four hour clock. If you've got ten people who don't understand that, and one teacher trying to point out everything, showing ten people because they're all at different areas and some get ahead a little bit, where I've done that and I was able to give her a little bit of a hand and say, well, 'that's a twenty-four hour clock ...'.

Q  Do you feel you learn more independently, with the help of the teacher or as a member of the group?

R  As a member of the group.  
(Level 1 participant)
Q  Do you enjoy working as part of a group?
R  Yes.
Q  Do you enjoy the group discussions?
R  Yes.
Q  How do you think you learn the most, independently, with a teacher or as a member of a group?
R  All three. If there you are learning the basics of what you need to know, like the line graph, how to read it and understand it. In the group if I can’t see something, the person next to me will be able to tell me that’s how it goes. (Level 1 participant)

The individual differences which make up the learning transaction in the group process are identified, discussed and positively used:

Q  Do you enjoy working as part of a group?
R  Yes, definitely. I think it's very important to work as a group. Class participant brings you out of yourself as well, and you learn things from others, not just the teacher. (Level 1 participant)
Q  Do you enjoy the group discussions?
R  Yes. You get a lot of input, different views, not so narrow-minded is it, when you've got someone else's view and you don't have to agree with them; you can be constructive and chuck it around the class. (Level 1 participant)
Q  Do you enjoy working as part of a group?
R  Yes, I like it.
Q  Do you enjoy the group discussion?
R  Yeah, I think it is good. You pick up a lot out of a good discussion. Everybody's own ideas, instead of you going in that way, with your own ideas, and think’ 'Well, hang on, he is sort of right, sort of thing’, or, 'This could be an easier way of doing it'. You pick up a lot more out of it. (Level 2 participant)

In deconstructing the group learning process, participants are able to articulate the impact of extrinsic motivation:
Q  Do you get help from others during the class?
R  Oh yeah. I find that it sort of develops into a group, even though you're sitting there with your own unit and that, it might be unintentional, but you find that you're saying to the bloke next to you, you find if there is two of you, or three, one both sides, you sit there and you nut it out between you. So it sort of becomes like a mini-group. (Level 2 participant)

Participants demonstrated a sense of belonging, which has resulted from positive group-based experiences:

Q  What do you like about the group?
R  I think, well particularly Level 2, for just us in the group, we are all about the same level. Everybody seems to be from the workforce (blue collar); they're all the same level and they seem to be able to get the same thing out of it.

Q  You're a happy group?
R  Everybody knows each other. We've all met at certain times while we've been at work. (Level 2 participant)

Q  Do you enjoy working as part of a group?
R  Yes, certainly, because with working groups, everyone who works at the Port of Geelong works in groups, so it's just a natural thing to be working with other people. (Level 2 participant)

The importance of dialogue and group interaction as powerful tools in the learning process is expressed by participants from each of the three levels:

Q  Do you enjoy working as part of a group?
R  Yes.

Q  Do you enjoy the group discussions?
R  Yes.

Q  How do you feel you do your best, working by yourself, working as a group or from the teacher?
R  With the people, not working with the teacher, because we can discuss how we feel about it. (Level 1 participant)

Q  Do you enjoy the group discussions?
R  Oh yeah. I think it is a lot easier learning with groups discussions since you are at work, than maybe when you were at school.
Q Do you like the group interaction?
R Yes.
Q How about the group discussions?
R Yes. We can ask questions and discuss them. There was one problem on home loan formulas. There was group discussion amongst the whole group about that, because it affected everyone. (Level 3 participant)

Draves (1984) writes that the participants are the most "dynamic and variable element" (p 54) in the adult learning situation. How very true this is. Not only do adults bring with them a wealth of life experiences, they also bring their beliefs; their fears; their failures; their concerns; their aspirations; their social standing and, within an industry environment, their factions; their cliques and their - assumed and actual - hierarchical standing in the organisation.
21 RECOMMENDATIONS FOR IMPROVEMENT

In an effort to improve the structure, design and content of the course, participants were invited to comment on, and evaluate the course and the units.

Several responses focused on improvements in unit layout:

Q    How could we improve the course?

R    Possibly have your questions one side and another page to work it out. (Level 1 participant - October 1991)

R    I suppose one thing, it's just a personal thing. I think instead of writing out your homework on a separate piece of paper, there could be space left in the books. (Level 2 participant - October 1991)

In relation to the course structure, some participants suggested starting with the maths units, in preference to the 'heavy' personal and interpersonal skills units. These were actually intended to be the lightest of all, but, due to their psychological base, and the newness of content for participants, particularly at Levels 1 and 2, unfortunately, they seemed to have had to opposite effect. All the personal and interpersonal skills units have since been rewritten.

Although, in the interim evaluation, such comments were made as:

R    To make the start of the course a bit more enjoyable, so that it doesn't feel as though you are going too deep into a new thing. Probably more mathematics, maybe, you know, a little bit of maths or some other subjects, so that it is not so much as ... not the initial ones like decision making, which I think was a little bit too heavy to initially start a course, because it was all new and, as I said, I think it scared a few people off, who would probably now prefer to stay if they knew what we were doing.

The thing is, if you're doing schooling, people like myself who haven't been to school for 15 years, are more at ease going into things like mathematics, which we were aware of when we were at school, or things that when we left, we are still doing. Whereas, things like communications and all that, that wasn't really part of the scene at school, we were more involved in technical things. (Level 2 participant - October 1991)
Others stressed the need to start with communication skills:

R I think, changing, like the basic English and grammar, would be better first, because you’ve sort of got to be able to read and write and do all that before you start the units. That’s what I would have thought you’d done first, instead of leaving it till last.
(Level 3 participant - October 1991)

One participant explained the need for an orientation to the course and additional teaching time:

R Well, I really think you could improve the course by having an orientation at the start and maybe an extra hour of teaching time.
(Level 2 participant - October 1991)

Another stressed the need to incorporate computer assisted learning into the course:

R Everything at the Port has gone computer. The bosses have all got computers. So one of the requirements if you want to try and get up the ladder would be to get a basis in computers.
(Level 2 participant - October 1991)

Another participant identified a fully self-paced, individualised learning approach:

R You know about the thing of Level 2 to do Level 3, I mean, a lot of the guys could have gone into Level 3 straight away. They wouldn’t have to do another year of the course. So probably having the three levels, having to work right through it to get three years when one person could do it in one year, another person takes three years to do it. Some of the units, you could do a Level 2 unit and a Level 3 unit in the one week or something.
(Level 2 participant - October 1991)

During the interim evaluation in October 1991, many participants expressed their concerns in relation to the Level 2 Business Maths unit; the Level 3 Business and Technical Maths units and Level 3 Statistics:
I don’t think the case studies are that good an idea, maybe more examples of like, the maths behind the case studies. Because, you’re doing case studies and you’ve got to find the maths involved and that can be the way things are working, pretty confusing.
(Level 3 participant - October 1991)

In consequence of such comments, each unit has been edited and, in the main, rewritten, by different authors. All suggestions by course participants, such as ‘warm-up exercises’ have been incorporated.

One participant sought more extensive feedback when his work was corrected:

By giving us better comments when we finish, a little bit more encouragement, so that when we hand the book in, instead of saying good, satisfactory or whatever, actually tell us how we have gone.
(Level 1 participant - June 1992)

Another participant suggested the provision of course electives:

Maybe, in the next round or next course, there might be elective subjects ... like using a word processor, or things like that.
(Level 3 participant - June 1992)
22 RELATIONSHIP TO SCHOOL EXPERIENCES

In writing on how adults learn, Draves (1984) stresses the importance of the teacher of adults knowing how adults learn. He also draws attention to the importance of knowledge of the impact of "emotional characteristics" (p 7) which adults bring to the learning situation. Many adult education theorists also support this theory (Knowles, 1970; Kidd, 1973; Rogers, 1977; Macdonald, 1979).

Draves raises the detrimental effects that schooling has had on the motivational levels of many adult learners, a concern earlier discussed by Jennifer Rogers:

> Whatever his (her) social class, every adult student comes to further education with a well-developed set of expectations about what it will be like. Inevitably these expectations are governed very largely by the student's experience of education as a child, and these experiences will considerably influence the way the teacher is able to conduct the class.

(Rogers, 1977, p 53)

In 1985 Connel et al contrasted educational opportunities for children from working class families with children from middle class families, strongly arguing the lack of opportunity for the former. The authors put forward a number of arguments on the continuing traditions which are part of the secondary school system and incisively question curriculum reform, school organisation, and the effect that past school experiences have on adults.
Connel et al refer to an interview with Elizabeth and Frank Jones. Elizabeth, whose father was a wharf labourer, did not achieve at school. She was considered stupid, and this was thought to be the cause of a reading difficulty which emerged in Grade 2 and still affects her. Elizabeth hated school and left as soon as she could legally do so. Frank’s experience was possibly worse:

I’m a bad speller, I just freeze up if I’ve got to fill out a form ... I was a terrible dunce at school, and I was almost expelled because I got that way. I couldn’t do it, and the teachers were not like they are today. They just made you do things and if you couldn’t do it ... instead of trying to explain it they would cuff you under the ear. I got frightened and then froze up inside. That’s how, I think. And from then on, I didn’t care.

(Jones in Connell et al, 1985, p 37)

Frank was placed in the ‘opportunity class’ for slow learners, which he described as “a dreadful thing, you were scorned and you were pointed out”. He left school as soon as he could and did not go near another educational institution until he had his own children.

In discussing Frank’s history, Connell et al write:

The main thing his schooling gave him was a lifelong anxiety about writing, and he has had to pass up several chances for better jobs - seeing apprentices he has trained promoted over his head - because there was no way he could handle the paperwork.

(Connell et al, 1985, p 37)

I have included details of Frank Jones’ interview as it reminds me of some past schooling experiences which were shared during interviews throughout the pilot program. Due to confidentiality, these have not been included, however, the following extracts from transcripts will provide an indication of the negative feelings which some participants in the program expressed:
Q Which level did you get to at school?
R Form 1.

Q What were your reasons for leaving?
R They told me to.
   (Level 1 participant)

Q How does the course compare with your own school experiences?
R I can’t remember now.

Q Which level did you get to at school? Can you remember?
R Nearly three.

Q Did you like it (school)?
R No, I hated it.
   (Level 1 participant)

In response to the same questions, other participants said:

R Very different. It’s not the basic be quite, do it yourself sort of thing ...

Q Which level did you get to at school?
R Form four.

Q What was your reason for leaving?
R I didn’t make it through form four. I finished form four and I failed and I wasn’t interested in schooling and I wanted to get out ...
   (Level 1 participant)

R I can remember back in the school days, you sat there, I never liked school ...
   (Level 2 participant)

R I think it is a lot easier, mainly because of the fact that I can relate to it and it’s not, "Yes sir, no sir" and all that sort of thing. It’s more relaxed.

Q What level did you achieve at school?
R Form four.
Q What were your reasons for leaving?
R In those days it was ... that was the year, if you were doing an apprenticeship, you finished school.
(Level 2 participant)

Another Level 2 participant explained how the concentration on trade-based learning, as offered by technical schools, neglected to provide the necessary generic skills for career advancement:

Q Which level did you achieve at school?
R I completed year 11, but I went to a technical school. They are more trade-based than anything else. So there are no career paths or anything like that. No career structure set up. You just went to school and then you finished and that was it. Their responsibility finished with you at the end of the school day and vice versa, that was the end of teachers, you didn't have to worry about teachers until Monday, so you thought, anyway.
(Level 2 participant)

A Level 3 participant gave a similar response:

Q How does the course compare with your own school experiences?
R It is a lot more relaxing ... I don't feel under pressure or anything like that ...
Q Which level did you get to at school?
R Well, it was form five in those days, technical school.
Q Did you go on to further qualifications then, certificate, diploma?
R No, I did my apprenticeship then and did a lot of night school in my apprenticeship. That was only in that field - structural steel.
Q Would that have strengthened your maths at all?
R No, not really.
In discussing schools to "train the workforce in useful skills and techniques", Connell et al raise similar concerns to those expressed by the Level 2 participant, writing:

Technical education was increasingly marginalized, and avoided by successful students. The main school system established a rather different relationship with the labour market: it was used, not so much to increase the usefulness of employees, as to increase their market price and to make a social selection among them. (Connell et al, 1985, p 22)

Some participants made a direct comparison between their past school experiences and the pilot workplace education program.

Q Are you enjoying the course?
R Yes.

Q Is it what you expected?
R No, nothing like I expected, no. I was thinking more of the old school room, you know, sit there and do what you're told, that's what I was expecting. It's a lot more laid back than what I thought it would be. (Level 1 participant)

Also, in response to the same question:

R Yes, I am. I enjoy it a lot. I find that I am able to understand things a lot easier now than when I was at school. Probably because I'm a lot more mature, I don't know. (Level 2 participant)

A similar response was given by another Level 2 participant:

Q Do you like the classes?
R Yes.
Q  What do you like about them, particularly?
R  The teachers are good, and I think everybody knows everybody else, basically and it’s good, we’re learning at the same time. And, I suppose because we are all that bit more older, and more interested in what we are doing, than when we were at school or whatever. (Level 2 participant)

Such responses indicate a relationship between maturity and 'readiness to learn'. They also show that, despite some negative school experiences, adult learners can be motivated to learn when andragogical theory is applied to the learning situation. Importantly the comment, "it’s good, we’re learning at the same time", demonstrates, in a positive manner, the impact of emotions on the learning process.
23 RECOMMENDATION OF COURSE TO OTHERS

Perhaps the best way to evaluate a program is to ask the participants whether or not they would recommend it to others.

In response to the question, "Would you recommend the course to others?", the overwhelming response from participants was "Yes"; "Yes, definitely"; "Yes, absolutely" and, "I already have". Some participants spoke of situations where the course would benefit their colleagues, others referred to the importance of gaining a formal certificate:

Q Would you recommend the course to others?
R Yes. I think it may well benefit the younger people in the future of their work life, particularly if the pilot scheme can really get going, and once you get it, the person has an aim or goal in life, particularly getting a certificate at the end of the course. (Level 1 participant)

R Yes.
Q Why is that?
R The knowledge you get out of it probably is the most important thing. The ability to do other things and challenge yourself. I just really think it is worthwhile doing the course. (Level 2 participant)

R Yes.
Q Why is that?
R Because I've so far gained a bit out of it and I've loved it. I've actually spotted the other blokes and I said to them, "you should be doing the course". Whether they take it up next year, I don't know, because one is a little bit older than me. I think he'd appreciate it. (Level 2 participant)

R Certainly
Q Why is that, any specific reason?
R Because it is an opportunity, free of charge, in work time. You don't have to give any of your own time to come and further your education. A little bit of homework, which is really ... only half to one hour's work. That is all you need to do. (Level 2 participant)
One participant made a link to the need for learner motivation:

R   Yes, so long as they are motivated.
    (Level 2 participant)

Whilst another related his recommendation for others to undertake the
program to their personal situations whilst at school, adding the importance of
education:

R   I think it’s a good thing. It’s probably a pity it wasn’t around three or four years ago. I
    think the need has always been there. People have left school for different reasons.
    Sometimes it’s financial, sometimes it’s, you know, I think education is a good thing.
    (Level 2 participant)

The graduation ceremony held at the Port of Geelong Authority on 2
September 1992, when Gordon Technical College Certificates were presented
to the successful graduates, revealed the importance of recognition for broad-
based generic skills. For some participants, it was the first formal education
Certificate to be received.
PART III

ACHIEVEMENT OF COURSE OBJECTIVES

CONCLUSION

RECOMMENDATIONS
24 ACHIEVEMENT OF COURSE OBJECTIVES

The Certificates in Workplace Education have six specific aims, which are:

* To help remove the barriers to further education and training, experienced by many members of the workforce.

* To recognise work and life experiences.

* To provide formal recognition for competencies achieved in relation to broad-based generic skills.

* To enable participants to have the skills, knowledge, competence and confidence to better perform their duties.

* To articulate into other courses.

* To help provide career opportunities through the Award Restructuring process.

Each of these will be addressed separately.
24.1 To help remove the barriers to further education and training, experienced by many members of the workforce.

By completing the pilot program, participants have removed the barriers to further education and training. All those who completed Level 1 have progressed to Level 2; all but two graduates of Level 2 have progressed to Level 3. One participant from Level 3 has commenced a university course, others have indicated their wish to commence further studies in the near future.

On undertaking the program, many participants drew on the need to improve their education, their knowledge and their skills. Reasons for joining the workplace education pilot at the Port of Geelong Authority also included specific reference to the acquisition of mathematical and communication skills; a need to extend formal qualifications; improvement of work skills and self-improvement. Several participants indicated that, having left school early, or, having not continued with further education and training, they desired to enhance their career opportunities through the acquisition of broad-based generic skills.

When asked the reasons for undertaking the program, some participants replied:

R  Personal achievement, I think, mainly because I hadn't done enough at school. When I was at school, I wasted a bit of time and I didn't get enough education, so I thought this is a good opportunity to upskill my schooling, which I hadn't done. (Level 1 participant)
In response to the same question, another replied:

R To improve myself, basically I think ... I'd already had a go at trying to do study outside the workplace and failed and I thought this might give me a better opportunity, with being a part of work ...
(Level 2 participant)

Participants were asked if, following the program, they would consider attending the Gordon Technical College or Deakin University to further their studies. Many responses indicated that, through the program, levels of educational ability, self-knowledge, intrinsic worth and confidence had significantly increased, as a Level 1 participant related:

Q Would you now consider going to the Gordon or Deakin for further studies?
R On a part-time basis, yes.
Q Would you have considered that before starting the course?
R No, because I didn't think I was good enough.
(Level 1 participant)

In reply to the same question, a Level 2 participant responded:

R Yes, I'm thinking of seriously going and doing ... something on the computers, a bit more advanced course on the computers.
(Level 2 participant)

The emphasis of the program on the development of general education is affirmed by a Manager at the Authority:

The CWE is not necessarily geared towards the workplace here at the PGA. ... It's our effort towards increasing the general standard of education, rather than on-the-job training, or improving their level of education. It's school, really.

(PGA Manager in McGregor, 1992, p 13)
Another Manager commented:

A lot of people would like to get more skills but are hesitant, it's been too long since school. This is a good leg in that direction. It helps them get back into formal learning.

(PGA Manager in McGregor, 1992, p 14)

In relation to the participants' attitudes to furthering their education, one teacher, involved in both curriculum development and workplace delivery, said:

A real benefit of the course is that the participants overcome their prejudice toward schooling as something you do in the first 15 years of your life and that's it. They're now motivated to return to schooling. A number of them are school dropouts, naughty boys, the ones that were made to stand outside classroom(s). Their changed attitude towards adult learning and their motivation towards learning as an adult really astounds me.

(Teacher in McGregor, 1992, p 14)

Thus, for the participants, past school experiences, albeit some extremely negative, no longer inhibit access to further education and training.

24.2 To recognise work and life experiences

The Certificates in Workplace Education emphasise recognition for experiential learning. Whilst many individuals do not hold formal qualifications, they have gained valuable skills and knowledge through their work experiences:

Q  Will this be your first formal certificate, or, do you have trade qualifications?
R  I have a lot of DLI Certificates ... DLI tickets, all that sort of stuff, crane driving tickets. (Level 2 participant)

Q  Do you write well?
R  My boss tells me I do. I seem to write a lot of letters to him. (Level 2 participant)
and, through their life experiences:

Q  Are you a good reader?
R  I read dozens and dozens of books.
Q  What sort of books?
R  Travel books, some are biographies, providing that the author is of my interest. I'm very keen on steam railways. I have many books on steam railways, we have many books at home and I love reading. (Level 1 participant)

Q  Are you a good reader?
R  Yes. I do a lot of letters.
Q  A lot of friends?
R  No, through certain hobbies and things that I do. I've got to communicate with people all around Australia.
Q  What sort of hobbies?
R  Initially I did the family tree and that involved a lot of letters. Then I got into collecting all the photos of all my ancestors. That means also writing to people, if they don't have a photo, maybe their cousin or whatever may. I've been fairly successful.

Now I'm into, because my direct ancestors did a lot of buildings in Geelong, tracing all their buildings and that's a very big project that I'm doing at the moment. (Level 2 participant)

Through the evaluation, it became apparent that each participant brought a range of knowledge, skills and attitudes to the learning situation, the majority of which may be traced to experiential learning.

To assist entry level identification, detailed criteria are available for each learning unit and for each level. These cover both the entry requirements to the unit, the learning outcome, units of competency and recommended elements and sub-elements. Participants self-select a level within the program, or specific learning units, which they feel will best meet their needs.
Where learning reinforcement is necessary, participants may gain access to any one of the fifty-six learning units, in addition to receiving private tuition through the Learning Skills Unit at the Gordon Technical College.

To assist in the achievement of defined competencies, the program introduces the concept of individually managed learning, which empowers learners to specifically identify their learning needs. When such needs are identified, they can be readily met, for example, by a participant undertaking a preceding learning unit in order to achieve the recommended entry criteria.

Participants are encouraged to determine their existing skills and knowledge through self-appraisal or guidance from a mentor, prior to their undertaking an interview for assessment purposes. On commencement of the one year pilot program, many participants gained direct entry to the program at either Level 2 or Level 3.

24.3 To provide formal recognition for competencies achieved in relation to broad-based generic skills.

In order to provide formal recognition for competencies achieved, the Certificates in Workplace Education have been accredited by the Gordon Technical College, TAFE, Geelong.
A draft submission for statewide accreditation was made to the Vocational Education and Training Accreditation Board on 5 September 1991.

In June 1992, the Transport and Storage Industry Training Board (Victoria) recommended to course for accreditation. In August 1992 Western Metropolitan College of TAFE, the Designated Provider for General Studies, recommended the course for accreditation. On 1 September 1992, a VETAB Course Assessment Panel also recommended the *Certificates in Workplace Education* for statewide accreditation. It is expected that the course will be accredited by VETAB in December 1992.

24.4 To enable participants to have the skills, knowledge, competence and confidence to better perform their duties.

On 14 May 1992, Peter Morgan, Chairman and Chief Executive Officer wrote:

As part of the Port of Geelong Authority Strategic Plan, June 1991, the Port of Geelong Authority has a commitment to developing a more skilled and productive workforce by providing a training program of skill enhancement, available to all employees. A key part of the training program is the Certificate of Workplace Education.

The pilot program has sought to increase the generic skill levels of participants, and to heighten their levels of confidence and self-esteem. In regard to specific workplace activities, some participants said:
Q Has the course changed the way you work at all?
R Yes, in a situation where I try and plan what I do before I go and do it. Make a list of what I need. I think back on what I have used before and what I need, I needed this, this, and this to do that job before. (Level 1 participant)

Q What were your main reasons for undertaking the course?
R The main reasons, well, I lacked a few skills in communications and writing areas, which I wanted to improve to help me with the position I am in at Rippleside.

Q As foreman?
R Yes, that's right. So I thought the course could offer me that.

Q Were your reasons satisfied and your goals met?
R I think 90 per cent, yes. ...
(Level 3 participant)

Whilst, in discussing self-esteem, some responses were:

Q Have any of the units changed the way you work? Talking to people, discussing things?
R It has taught me to be more open with people and to speak up, instead of being afraid of what everyone else is going to think.

I communicate more, even outside the workplace, and I'm feeling happy, my self-esteem has gone up.
(Level 1 participant)

Q What were your main reasons for undertaking the course?
R I had no confidence or self-esteem and I needed to build up.

Q Were your reasons satisfied and your goals met? Do you think you have gained more confidence?
R Yes, I have gained more confidence. I still need that little bit more, because I still haven't got the full confidence I need, so I haven't fulfilled it completely. Probably by doing the next one (level) I will.
(Level 1 participant)
In addressing workplace skills, one PGA Manager said:

The CWE is not an expense. It's an investment in the future. It's going to gradually increase the level of skills in our workforce, which is very important for productivity in the future.

(PGA Manager in McGregor, 1992, p 16)

This view was shared by another member of management:

It's an investment that if we don't make, someone else will have to. We'll all have to pay in the end - even if it's thorough lost opportunity.

(PGA Manager in McGregor, 1992, p 16)

In David McGregor’s evaluation of the *Certificates in Workplace Education*, one participant summarised a number of feelings in a very succinct manner:

It helps you do your job better by making you a better communicator, or writer, or thinker, or better with numbers. It helps you to be a better worker by giving you a better education, better general skills.

(Participant in McGregor, 1992, p 13)

Whilst a Supervisor remarked:

Anyone who improves their education must improve themselves, and this must reflect on their work.

(PGA Supervisor in McGregor, 1992, p 13)

Also on a positive note:

(Name) has become very interested in the potential computers have for his job and has been investigating uses and requisitioning equipment. There's been an improvement in communication too.

(PGA Foreman in McGregor, 1992, p 13)
In a similar vein, a further PGA Manager added:

The course has made a difference in (name)'s motivation and ability to think laterally. I'm now able to give tasks that aren't quite as structured as before.

(PGA Manager in McGregor, 1992, p 13)

24.5 To articulate into other courses.

When the draft accreditation documentation was prepared, credit transfer was recommended between units within the *Certificates in Workplace Education* and:

- Communication Skills - Core
- Communication Skills - Options
- TAFE National Communication Modules
- Certificate in Supervision
- Engineering Production Certificate
- Vehicle Industry Certificate

(see pp 48-52)

Units from the *Certificates in Workplace Education* are currently been integrated into the *Vehicle Industry Certificate*, via Henderson's Automotive (Geelong) and the *Engineering Production Certificate*, via Silcraft Pty Ltd, Corio. Further, selected mathematical units are being integrated into the recurrently funded *Maths for Women*, conducted by the Women's Access Department for women returning to study.
On 13 July 1992, Peter Corkran, Acting Head, Victorian TAFE Off-Campus Network wrote:

... I believe that it (the course) has tremendous potential and add our support in seeking accreditation to allow the course to be run as a recurrently funded TAFE course.

As such the course has the potential to replace much of our basic education materials with the added advantage of providing students with credits towards an accredited course. This is, obviously, in addition to unemployed who could build skills for employment.

24.6 To help provide career opportunities through the Award Restructuring process.

On 5 August 1992, Gail Rooney, Executive Manager Human Resources, Port of Geelong Authority wrote:

The interest of the Port of Geelong Authority in generic education developed through the award restructuring process and the requirement for skill enhancement to progress through the career paths. The recognition of the importance of generic skills developed as the range of skills in the workplace were identified. ...

As a result of the skills analysis (1990), it was apparent that there was a range of generic competencies identified and the workforce identified a training need. The Certificate in Workplace Education has met the competencies of the skills analysis in this workplace.

At all times the award restructuring process in the three Victorian Ports has been undertaken a full consultation with unions covering the workplace. The Ports have also sought Government endorsement through the Industrial Relations Taskforce.

In further support of the correlation between generic skills development and Award Restructuring, a PGA Manager explained:
(At the time of the skills survey we had) a general realisation that in terms of award restructuring and career paths there were great opportunities for training. But did we have the basis for them to take full advantage? Isn't there a general skill level assumed to be there? When you look at people's levels of literacy, it's not there. So shouldn't we recognise that to begin with, as a starting point, and move on from there? ... We recognised that there was a need for basic literacy.

(PGA Manager in McGregor, 1992, p 19)

It is only with the ability to demonstrate broad-based generic competencies, that employees will be able to take advantage of the Award Restructuring process. It is only then that they will competently and confidently undertake further education and technical training, which will result in their achieving higher skills classification levels as they ascend the hierarchical career path.

Perhaps the best was to demonstrate this is to cite a response made by a Level 2 participant:

Q  What were your main reasons for undertaking the course?
R  To improve my chances of, I suppose, getting up the ladder in my career, which has actually happened, so it has made a big difference to me. I have changed my position and I have a more responsible position, so I suppose a lot of the credit, I mean, I give credit to myself too, but also the course has helped me to get there.

Q  Were your reasons satisfied and your goals met?
R  Yes.
   (Level 2 participant)
25 CONCLUSION

With the introduction of Award Restructuring and, particularly since 1990, the need for generic skills development across the Australian workforce has come to the fore. Without doubt, the Victorian Port Authorities were leaders in the field of recognition of the correlation between the acquisition of generic skills and the development of further vocational skills.

Their findings are supported by a number of educational theorists, including Ivan Deveson who, also in 1990, wrote:

Literacy, numeracy and other communication and general learning skills are an essential and important element in award restructuring. Unless workers and those seeking jobs have these skills, they will be denied access to training and career advancement.

(Deveson in Dawkins, 1990, pp 3-4)

The three level Certificates in Workplace Education provide for basic numeracy and literacy at Level 1 and general skills at a certificate level at Level 2, which will enable credit transfer between the existing Core Communication Skills Modules and many of the TAFE National Communication Modules.

Level 3 of the course includes first-level supervisory skills, which in turn, with some relevant Level 2 units, will lead to credit transfer between the four core modules of the Certificate in Supervision.
The new course, based on andragogical theory, has been extremely well received by participants, members of management and union representatives at the Port of Geelong Authority.

When participants were asked in what ways they had personally changed, many cited higher levels of confidence, which positively impacted on their attitudes to the workplace and to further education.

Participation in the program requires a commitment of personal time, notionally three hours per week, to enable the desired learning outcomes and defined generic competencies to be achieved. Whilst the time commitment, naturally, varied amongst participants, it was agreed that, on average, the duration of out-of-class work was as expected. Some participants at each level exhibited very high motivational levels to new learning, which required a more lengthy out-of-class time commitment, for example, when a Level 2 participant was undertaking both Business and Technical Mathematics, although the course does only require one to be selected as a chosen course option.

The reaction to group-based learning by the majority of participants was exceptional. Group-based activities, group cohesion and collective problem-solving and decision-making have clearly contributed to the success of the program. Many participants explored their new sense of belonging, whilst others identified the importance of dialogue and group interaction as powerful tools in the learning process.
When discussing course improvement, some participants cited the need for a layout which enabled greater space for writing in the learning units; some suggested a revision of the unit sequencing, with either communication skills or mathematical skills preceding the personal and interpersonal skills. Others suggested an orientation program, to enable participants to become more familiar with the content, prior to starting their new learning experience.

Many participants contrasted the enjoyment of the new learning situation with negative feelings which they had experienced in relation to past schooling. When asked if they would recommend the *Certificates in Workplace Education* to others, the participants overwhelmingly said that they would. This is substantiated by the fact that all those who completed Level 1 in mid-1992 have commenced Level 2, whilst all but two who completed Level 2 have commenced Level 3.

The success of the course is due to the enthusiasm of the members of management at the Port of Geelong Authority; the support given by the Victorian Trades Hall Council and other unions; the commitment of the participants, their families and their friends; the dedication of the members of the Project Team and, importantly, the financial assistance given by the Victorian Educational Foundation and GOTEC Ltd, the commercial arm of the Gordon Technical College.
The evaluation revealed the achievement of course aims and objectives. Such achievement is also supported by the findings of David McGregor, Project Officer, Transport and Storage Industry Training Board (Victoria), whose summary on conclusion of his evaluation reads:

The CWE was introduced because of Port management’s desire to raise the skill levels of its workforce. The initiative has generated good will. Workforce communication and morale have improved. Management’s leadership has played a decisive role in the program’s success. Program objectives are broadly accepted and there is a wide belief at the Port of Geelong Authority that the CWE is helping to improve productivity and provide career opportunities by improving levels of general education. There is debate about the sequence of the modules and content of some units. Employees with low levels of literacy are not participating. The program does not cater for them. The quality of tuition and facilities is good. Attempts have been made to provide flexible entry points, to recognise prior learning, and to assist articulation to some other programs. Modifying the program to be consistent with (currently evolving) state and national frameworks for generic skills, literacy and language should be a priority.

(McGregor, 1992, p 22)

In response to the summary, it is pointed out that neither potential participants, nor Level 1 course participants, exhibited an extremely low literacy level. All Level 1 participants demonstrated reading skills and writing skills, including one participant who withdrew from the program. Where it has been recognised that participants have needed additional support, at Levels 1, 2 or 3, they have been encouraged to attend the Learning Skills Unit at the Gordon Technical College.

Whilst the literacy levels across the Port of Geelong Authority are high, and the majority of the employees are native speakers, it is realised that this is not the case in many industries. For this reason, consideration must be given to the development of a preliminary level, to enable functional literacy to be acquired to further equality of access to the course.
Consideration should also be given to an ESL program, to accommodate the needs of speakers from non-English speaking backgrounds, as in the current pilot program at Henderson’s Automotive (Geelong).

In regard to the emerging national agenda, on recommendation received from Laurie Carmichael, Chair, Employment and Skills Formation Council, a proposal has been submitted to the Department of Employment, Education and Training for the *Certificates in Workplace Education* to be piloted under the new *Australian Vocational Certificate Training System*. 
26 RECOMMENDATIONS

The recommendations provided relate to both the final evaluation of the pilot program of the *Certificates in Workplace Education* and the evaluation carried out under the auspices of the Transport and Storage Industry Training Board (Victoria).

1. To ensure that each of the fifty-six learning units is able to 'stand alone', to enable unit and module sequencing to fully meet identified learner and industry needs.

2. The preparation of a video program, to introduce the course and to include samples of content, delivery and applicability to a range of industries and audiences, including persons with special needs.

3. Conversion of the learning units to self-paced learning, to ensure greater access between enrolments and to enable access by all employees, for example, shift workers.

4. Development of a preliminary level, to concentrate on functional literacy and numeracy.

5. *Conversion of Levels 1 and 2 of the course to ESL*, to meet the needs of participants from non-English speaking backgrounds.
6 Ongoing modification of the course to enable correlation with national generic competencies, as they are identified.

7 The seeking of further credit transfer into all relevant courses.

8 The preparation of entry level criteria assessments and learning unit performance assessments, to enable ready identification of levels of competency and to assist in the recognition of prior learning.

9 The development of train-the-trainer kits, including video applications, to enable teachers, private providers, industry-based trainers, supervisors, instructors and assessors to successfully implement units from the course.

10 Conversion of all units to open learning, to enable greater access across the country and equality of opportunity for a wider range of participants.

11 Conversion of all units to computer-manager learning and computer-assisted learning, to facilitate a multi-media approach to the learning process.

12 The continued seeking of funding, on a national basis, to implement the above recommendations and to develop the course as an AVC pilot.
REFERENCES


Brookfield, S, Adult Learners, Adult Education and the Community, Milton Keynes, Open University Press, 1983


Connell, R et al, Making the Difference: Schools, Families and Social Division, Sydney, Allen and Unwin, 1982 (6th impression)


Draves, W, How to Teach Adults, Manhattan, Kansas, Learning Resource Network, 1984


Griffin P and Forwood, A, Adult Literacy and Numeracy Competency Scales, Coburg, Phillip Institute of Technology, 1991


Hannigan, P, National Training Board, Canberra, July 1992


Ingham, E and Wylie, E, Australian Second Language Proficiency Ratings, (ASLPR), Mount Gravatt, Qld, Griffith University, 1991

Jones, B, Sleepers, Wake! Technology and the future of work, Melbourne, Oxford University Press, 1982

Jones, F in Connell, R et al, Making the Difference: Schools, Families and Social Division, Sydney, Allen and Unwin, 1982 (6th impression)


Kidd, JR, How Adults Learn, Chicago, Association Press, 1973


Macdonald, C, "Research Document into Individualized Learning", Melbourne, Education Department of Victoria, TAFE, September 1979

Mayer Committee, Employment-Related Key Competencies: A Proposal for Consultation, Melbourne, Owen King, 1992
Port of Geelong Authority, Circular to Employees, Geelong, May 1991
CERTIFICATES IN WORKPLACE EDUCATION PROJECT
GORDON TAFE

Paper presented by Lyn Wakefield, Training and Instructional Design Consultant
at the AUSTAFE Inc Conference held in Canberra 26-29 September 1993

HISTORY OF THE PROJECT

In 1990, a tripartite working party established by the Victorian Port Authorities identified technical and generic competencies for the workforce. The identified competencies became the basis for an extensive Skills Analysis Survey, carried out across Victorian Ports, which included some 600 general and technical questions and involved approximately 1,600 workers.

In early March 1991, the Port of Geelong Authority approached GOTEC Ltd, the commercial arm of the Gordon Technical College, Geelong, for assistance. The Authority sought to develop a skills enhancement training plan, that would enable the identified generic competencies to be addressed and further industry-specific training provided.

At the initial briefing by Gail Rooney, Executive Manager, Human Resources, it was explained that in order to develop a more highly skilled and productive workforce, training in broad-based generic skills was a priority. A course of training, available to all members of the workforce and providing ready articulation between levels, was requested. From a detailed analysis of the research findings, resulting from the 1990 Skills Analysis survey, and subsequent interviews across the Port of Geelong Authority, it was found that many employees possessed high level technical skills, but lacked the general knowledge and skills needed for further education and training.

In late March 1991 the framework for the Certificates in Workplace Education was established following extensive consultancy, which included interviews with cross-sections of the workforce including union representatives. Support for the initial design and development of the course was provided by the Victorian Education Foundation to the extent of $110,710.

Initially, pilot programs were planned to be implemented at both the Port of Geelong Authority and the Port of Melbourne Authority. However, due to the extensive developmental work and course monitoring required, it was decided to only implement one pilot at the Port of Geelong Authority for all three levels within the Certificates in Workplace Education. Access to training through the Certificates in Workplace Education was offered to all employees, under the direction of the Equal Employment Opportunity Committee and with the support of Victorian Trades Hall Council.
As the course developed, its broader application across all industries became apparent. This was supported by the extensive interest that the course generated across the country, where, in many industries including the Transport and Storage, Paper, Cement Manufacturing and Textile, Clothing and Footwear Industries, and the Water and Water Treatment Authorities, the need for the provision of generic skills had already been identified.

The Project Team developing the content for the *Certificates in Workplace Education* comprised twenty highly qualified, experienced teachers from a broad range of disciplines. Included were teachers of basic education, ESL, psychology, mathematics, science, business studies and humanities.

In addition to writing the curriculum, each team member trialled the learning units, which included the performance objectives; the conditions under which such performances were assessed and the standards which were defined. Also trialled were the recommended entry criteria for each learning unit; the learning outcomes and performance criteria; the work requirements; the assessment procedures and many of the recommended learning strategies.

From the development of the framework for the *Certificates in Workplace Education* in March 1991, to the time of the course being accredited on 1 June 1993, twenty-seven months elapsed. During this time the product was trialled across a two year period. Included in the major pilots were the Port of Geelong Authority, where training commenced in July 1991, Henderson’s Automotive (Geelong), where training commenced in February 1992 and the NSW State Transit Authority, where training began in October 1992.

For the course to be accredited by the Vocational Education and Training Accreditation Board (VETAB), on-the-job competencies were also necessary. As national generic competencies had not been identified, development of the on-the-job competencies was undertaken in conjunction with the National Rail Corporation Ltd, Sydney. After acceptance of the on-the-job competencies for each of the fifty stand-alone units of learning, the *Certificates in Workplace Education* were accredited on 1 June 1993 and subsequently placed on the National Register.

Following evidence of need for the development of a generic skills course by the Transport and Storage Industry Training Board, and subsequent endorsement of such need by other Industry Training Boards, the extensive opportunities for the product were identified.

In August 1992, Laurie Carmichael, Chair, Employment and Skills Formation Council, recommended that the *Certificates in Workplace Education* be submitted to the Department of Employment, Education and Training as an AVC pilot.
On 3 September, 1992, the Public Transport Corporation, under the auspices of the Transport and Storage Industry Training Board (Victoria), forwarded a concept proposal to DEET, Canberra, for the adaptation of the *Certificates in Workplace Education* to the *AVC System* on a national basis. A key feature of the proposal is the conversion of the fifty units to CML and CAL. On 28 April, 1993, the AVC piloting of the *Certificates in Workplace Education* was endorsed by the National Public Transport Training Board, also the Competency Standards Body. The pilot, which is expected to initially be implemented at the Public Transport Corporation, is expected to concentrate on the development of a 'convergence' between general and vocational education competencies. Further, it should enable a training program to be created for entry-level training across common workplace competencies for industries throughout Australia.

**AUSTRALIAN STANDARDS FRAMEWORK**

Due to the variance in generic skills across different industries, in July 1992 the National Training Board, Canberra, advised an indicative alignment between levels within the *Certificates in Workplace Education* and the *Australian Standards Framework*.

![Diagram of alignment between CWE and Australian Standards Framework](image-url)
AIMS AND OBJECTIVES

The *Certificates in Workplace Education* have eight specific aims:

- To assist in the achievement of generic workplace competencies.
- To improve opportunity of access across the workplace.
- To help remove the barriers to further education and training.
- To recognise work and life experiences (recognition of prior learning - RPL).
- To enable participants to have the skills, knowledge, competence and confidence to better perform workplace duties.
- To provide formal recognition for competencies achieved in relation to broad-based generic skills.
- To articulate into other courses.
- To help provide career opportunities through Award Restructuring and Enterprise Agreements.

UNITS OF LEARNING

The *Certificates in Workplace Education* comprise 50 self-paced, stand-alone units of learning as shown on the off-the-job course matrix which appears on the following page. Each unit is generic and underpins a specific workplace unit of competency. Units may be undertaken in any order and/or specifically grouped or customised to meet individual or enterprise need.

Each unit of learning, which is described in the training syllabus, comprises a unit description, unit aims, duration, recommended entry criteria, learning outcomes, performance criteria, work requirements, assessment, recommended resources and learning strategies. The training syllabus also contains off- and on-the-job Human Resource Statements for those involved in the facilitation of training and assessment. Physical Resource Statements are currently being prepared in consultation with the Vocational Education, Training and Employment Commission (VETEC), Queensland.

The course is based on adult learning theory, with emphasis on group participation and teamwork. Each unit concentrates on an integrated, multi-sensory approach to learning, combining oral and written communication skills, interpretation, analysis, evaluation and problem-solving.

Each level within the course takes a notional 240 hours to complete and includes a recommended minimum of 120 hours of workplace release for instruction and learning assistance.
## Certificates in Workplace Education

**Generic Skills Framework - Off-the-job Units of Learning**

### Personal and Interpersonal Skills

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module 1</strong></td>
<td><strong>Module 2</strong></td>
<td><strong>Module 3</strong></td>
</tr>
<tr>
<td>Time Management</td>
<td>Establishing a routine 6 hrs</td>
<td>Managing time effectively 6 hrs</td>
</tr>
<tr>
<td><strong>Module 2</strong></td>
<td><strong>Module 3</strong></td>
<td>Planning and control 6 hrs</td>
</tr>
<tr>
<td>Goals and Motivation</td>
<td>Setting goals and learning to achieve these 6 hrs</td>
<td>Identifying priorities and meeting demands 6 hrs</td>
</tr>
<tr>
<td><strong>Module 4</strong></td>
<td><strong>Module 5</strong></td>
<td>Developing motivational and influencing others 6 hrs</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Assessing situations, and predicting outcomes 6 hrs</td>
<td>Participating as an effective team member 8 hrs</td>
</tr>
<tr>
<td><strong>Module 6</strong></td>
<td><strong>Module 7</strong></td>
<td>Building teams and providing leadership 8 hrs</td>
</tr>
<tr>
<td>Graphics and Statistics</td>
<td>Relating mathematics to the workplace 30 hrs</td>
<td>Developing mathematical skills (business or technical) 36 hrs</td>
</tr>
<tr>
<td></td>
<td>Applying calculations to charts and graphs (inc. maps, sketches and plans) 30 hrs</td>
<td>Applying mathematics to problem-solving (business or technical) 36 hrs</td>
</tr>
<tr>
<td><strong>Module 8</strong></td>
<td><strong>Module 9</strong></td>
<td>Compiling and presenting basic statistics 30 hrs</td>
</tr>
<tr>
<td>Oral Communication Skills</td>
<td>Communicating in the workplace 18 hrs</td>
<td>Expanding vocabulary (technical and non-technical) 12 hrs</td>
</tr>
<tr>
<td><strong>Module 10</strong></td>
<td><strong>Module 11</strong></td>
<td>Evaluating strengths and weaknesses in language (inc. media applications) 12 hrs</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Developing speech and expression 18 hrs</td>
<td>Becoming a more confident speaker 18 hrs</td>
</tr>
<tr>
<td><strong>Module 12</strong></td>
<td><strong>Module 13</strong></td>
<td>Influencing others through effective communication 18 hrs</td>
</tr>
<tr>
<td>Speech and Expression</td>
<td>Listening and remembering 12 hrs</td>
<td>Developing and giving technical instructions 12 hrs</td>
</tr>
<tr>
<td><strong>Module 14</strong></td>
<td><strong>Module 15</strong></td>
<td>Training and development skills 18 hrs</td>
</tr>
<tr>
<td>Listening and Questioning</td>
<td>Interviewing and counselling skills 12 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 16</strong></td>
<td><strong>Module 17</strong></td>
<td>Participating in group discussions (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td>Instruction and Training</td>
<td>Providing customer service 12 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 18</strong></td>
<td><strong>Module 19</strong></td>
<td>Presenting at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Improving customer service 6 hrs</td>
<td>Participating in group discussions (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 20</strong></td>
<td><strong>Module 21</strong></td>
<td>Participating at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Presentations and Meetings</td>
<td>Providing customer service 12 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 22</strong></td>
<td><strong>Module 23</strong></td>
<td>Presenting at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Written Communication Skills</td>
<td>Writing and interpreting text and data 16 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 24</strong></td>
<td><strong>Module 25</strong></td>
<td>Participating at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Reading for the Workplace</td>
<td>Applying advanced reading skills 12 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 26</strong></td>
<td><strong>Module 27</strong></td>
<td>Presenting at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Summarising and Research</td>
<td>Writing and interpreting text and data 16 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 28</strong></td>
<td><strong>Module 29</strong></td>
<td>Presenting at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Writing for the Workplace</td>
<td>Developing writing skills (inc. reports, memos and letters) 42 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 30</strong></td>
<td><strong>Module 31</strong></td>
<td>Presenting at meetings and meeting procedure 18 hrs</td>
</tr>
<tr>
<td>Forms, Documents and Records</td>
<td>Completing forms, documents and records 6 hrs</td>
<td>Presenting information to groups (inc. HR and Industrial Relations) 18 hrs</td>
</tr>
<tr>
<td><strong>Module 32</strong></td>
<td><strong>Module 33</strong></td>
<td>Presenting at meetings and meeting procedure 18 hrs</td>
</tr>
</tbody>
</table>
| The hours shown are indicative average of time before the desired learning outcomes can normally be achieved.

The Certificates in Workplace Education comprise three levels, each of which take an average of 240 hours to complete and includes a recommended minimum of 120 hours of workplace practice. Units of Learning may be undertaken in any order and/or specifically grouped to meet individual or enterprise needs. Alternatively, units may be selected independently from a range of modules.

To qualify for a Certificate at Level 1, 2 or 3, all 16 modules within the level would need to be completed or Recognition of Prior Learning (ROP) received, in addition to the nominal 350 hours of relevant workplace practice and/or experience being demonstrated. Where specific units are selected, both the learning outcomes and their related on-the-job competences must be achieved. When the full requirements for a Certificate are not met, a Statement of Attainment should be provided.

© 1993 GOTECC Ltd
## CERTIFICATES IN WORKPLACE EDUCATION

**Generic Skills Framework - On-the-job Units of Competency**

### PERSONAL AND INTERPERSONAL SKILLS

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>Level 1</td>
<td>Use a routine for tasks/job</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 2</td>
<td>Level 2</td>
<td>Plan and organise own work</td>
<td>30 hrs</td>
</tr>
<tr>
<td>Module 3</td>
<td>Level 3</td>
<td>Plan and organise work</td>
<td>30 hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>Level 1</td>
<td>Work effectively as a team member</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 2</td>
<td>Level 2</td>
<td>Maintain team competency</td>
<td>30 hrs</td>
</tr>
<tr>
<td>Module 3</td>
<td>Level 3</td>
<td>Facilitate team problem-solving</td>
<td>30 hrs</td>
</tr>
</tbody>
</table>

### MATHMATICAL SKILLS

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 4</td>
<td>Level 1</td>
<td>Use calculations to solve problems</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 5</td>
<td>Level 2</td>
<td>Use business or technical mathematics to solve problems</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 6</td>
<td>Level 3</td>
<td>Apply business or technical mathematics to learn problem-solving</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 4</td>
<td>Level 1</td>
<td>Work in groups and teams</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 5</td>
<td>Level 2</td>
<td>Interpret and prepare charts and graphs</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 6</td>
<td>Level 3</td>
<td>Compile and present basic statistics</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

### ORAL COMMUNICATION SKILLS

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 7</td>
<td>Level 1</td>
<td>Communicate in the workplace</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 8</td>
<td>Level 2</td>
<td>Use technical and non-technical language</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 9</td>
<td>Level 3</td>
<td>Facilitate team communication</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 7</td>
<td>Level 1</td>
<td>Speak effectively in the workplace</td>
<td>10 hrs</td>
</tr>
<tr>
<td>Module 8</td>
<td>Level 2</td>
<td>Demonstrate effective communication skills</td>
<td>10 hrs</td>
</tr>
<tr>
<td>Module 9</td>
<td>Level 3</td>
<td>Demonstrate effective interview and counselling skills</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

### WRITTEN COMMUNICATION SKILLS

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 10</td>
<td>Level 1</td>
<td>Interpret and follow instructions</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 11</td>
<td>Level 2</td>
<td>Interpret and give technical instructions</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 12</td>
<td>Level 3</td>
<td>Assist in on-the-job training</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 10</td>
<td>Level 1</td>
<td>Demonstrate telephone skills</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 11</td>
<td>Level 2</td>
<td>Provide customer service</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Module 12</td>
<td>Level 3</td>
<td>Facilitate customer service improvement</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Level</th>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 13</td>
<td>Level 1</td>
<td>Participate in group/team discussions</td>
<td>30 hrs</td>
</tr>
<tr>
<td>Module 14</td>
<td>Level 2</td>
<td>Present information to groups</td>
<td>30 hrs</td>
</tr>
<tr>
<td>Module 15</td>
<td>Level 3</td>
<td>Participate at meetings and apply meeting procedure</td>
<td>30 hrs</td>
</tr>
</tbody>
</table>

### Module 13 Reading for the Workplace

<table>
<thead>
<tr>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpret written communication</td>
<td>10 hrs</td>
</tr>
<tr>
<td>Use a range of text and data</td>
<td>10 hrs</td>
</tr>
<tr>
<td>Apply advanced reading skills</td>
<td>10 hrs</td>
</tr>
</tbody>
</table>

### Module 14 Summarising and Research

<table>
<thead>
<tr>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take notes and record information</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Summarise text and data</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Apply research skills</td>
<td>10 hrs</td>
</tr>
</tbody>
</table>

### Module 15 Writing for the Workplace

<table>
<thead>
<tr>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate in writing</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Write reports, memos and letters</td>
<td>30 hrs</td>
</tr>
<tr>
<td>Write formal reports/submissions</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

### Module 16 Forms, Documents and Records

<table>
<thead>
<tr>
<th>Skill</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete common forms</td>
<td>10 hrs</td>
</tr>
<tr>
<td>Complete forms, documents and records</td>
<td>10 hrs</td>
</tr>
<tr>
<td>Evaluate manual and computerised records management systems</td>
<td>10 hrs</td>
</tr>
</tbody>
</table>

The hours shown are an indicative average of time before competency can normally be demonstrated.

The certificates in Workplace Education comprise three levels, each with a nominal 350 hours on-the-job training component.

Six... modules are included in the course, with each having three separate Units of Competency. The objective of each Unit of Competency is to demonstrate knowledge and skills gained from the corresponding Unit of Learning in a work situation.

© 1993 GOTECLtd
UNITS OF COMPETENCY

The identified units of competency are shown on the previous page. The objective of each unit is to demonstrate knowledge and skills gained from the corresponding unit of learning in a work situation.

As required generic competencies are identified, individuals and enterprises may wish to gain access to the relevant stand-alone units of learning. For example, the unit of competency Assist in On-the-job Training, is underpinned by the unit of learning Training and Development, which, being of 18 hours duration, also meets the requirements for a Train the Trainer program.

Each unit of competency includes elements of competency, performance criteria, a range of variables statement and an evidence guide. Competency Assessment Logs are also available to assist in workplace assessment.

To qualify for a Certificate at Level 1, 2 or 3, a nominal 350 hours of relevant workplace practice and/or experience would need to be demonstrated. Detailed on-the-job generic competencies are available for this purpose, as it is essential that for the award of a Statement of Attainment or a credentialled outcome, that both the off-the-job and on-the-job components are completed.

RECOGNITION OF PRIOR LEARNING

To provide maximum flexibility of entry, exit and duration, Recognition of Prior Learning (RPL) is strongly emphasised in each of the three levels. In order to accelerate learning and to provide maximum recognition for past experiential and work life learning, recommended entry criteria, learning outcomes, performance criteria and assessment methodologies are included for each unit of learning.

Elements of competency and their related performance criteria, together with assessment guidelines, are included for each unit of competency. Participants may produce documented prior learning evidence for RPL consideration, or be formally assessed, in order to gain credit for the entire unit of learning or for specific learning outcomes within the unit. Similarly, RPL may be sought for an on-the-job unit of competency or for specific elements within the unit.

The on-the-job prior learning evidence includes: correspondence including letters of reference; job profiles and position descriptions; statements and reports; other documentary evidence including business forms and technical drawings (charts, maps, sketches and plans); computer-generated text and data.
ASSESSMENT METHODS AND RESULTS

To enable competency to be demonstrated, guidelines have been provided as to the required performance, conditions and standards. To enable flexibility, the assessments include a range of methodologies. Further, all assessments have been designed to accommodate learners with special needs.

Each unit of learning assessment has been trialled over the two-year pilot program at the Port of Geelong Authority, and, where necessary, modifications made to ensure that the learning outcomes are met.

Throughout the course, a wide variety of assessment methodologies have been incorporated; these include testing, demonstrations, presentations, assignments, research, analysis, problem-solving and written, oral and recorded responses.

Where a correlation exists between the TAFE National Communication Modules and units within the Certificates in Workplace Education, assessment requirements within the Certificate units have been written to ensure conformity.

The unit of competency assessments have been prepared on the advice of the Manager, Education and Training, Australian Chamber of Manufactures. Each on-the-job assessment includes both performance and supplementary evidence through a range of methodologies.

Performance evidence includes: direct observation; completion of set tasks/jobs; examples of workplace application; simulation; skills/competency tests; projects and assignments. Supplementary evidence includes: oral questioning; written questioning; oral or recorded information; written documentation and computer-generated text and data.

A main focus of the course is articulation. Within the course itself, participants may readily articulate from Level 1 to Level 2, and from Level 2 to Level 3. Within each of the sixteen modules, the learning outcomes for the Level 1 unit become the entry criteria for the following Level 2 unit. Similarly, the learning outcomes for the Level 2 unit become the entry criteria for the following Level 3 unit.

As the two-year pilot program at the Port of Geelong Authority has positively shown, graduating Level 1 participants are able to confidently undertake Level 2 of the course; whilst graduating Level 2 participants can confidently undertake Level 3 of the course.
EVALUATION PROCESS AND RESULTS

Since the beginning of the pilot course in July 1991, there has been on-going evaluation of each of the three levels within the Certificate. The evaluation has included the course participants, managers involved in the workplace, union representatives, and all those developing curriculum and teaching the course.

In 1991, the State Training Board and the Office of the Adult, Community and Further Education Board allocated $15,000 to the Transport and Storage Industry Training Board (Victoria) to examine 'integrated' and 'separate' basic education in the workplace. The focus of the evaluation was on the Certificates in Workplace Education, offered by the Port of Geelong Authority and an industrial relations program developed at the Port of Melbourne Authority.

Within the initial allocation of funding received from the Victorian Education Foundation of $110,710.00, funding for the purpose of evaluating the pilot program at the Port of Geelong Authority, which commenced in July 1991, was included. Thus, to meet this requirement, an extensive evaluation was carried out.

In November 1992, a formal evaluation report on the piloting of the Certificates in Workplace Education at the Port of Geelong authority was written. The following extract has been documented from the Conclusion:

The new course, based on andragogical theory, has been extremely well received by participants, members of management and union representatives at the Port of Geelong Authority.

When participants were asked in what ways they had personally changed, many cited higher levels of confidence, which positively impacted on their attitudes to the workplace and to further education. ...

Many participants contrasted the enjoyment of the new learning situation with negative feelings which they had experienced in relation to past schooling. When asked if they would recommend the Certificates in Workplace Education to others, the participants overwhelmingly said that they would. This is substantiated by the fact that all those who completed Level 1 in mid-1992 commenced Level 2, whilst all but two who completed Level 2 commenced Level 3.

The evaluation revealed the achievement of course aims and objectives. Such achievement is also supported by David McGregor, Project Officer, Transport and Storage Industry Training Board (Victoria) who also formally evaluated the course.

Further information on the Certificates in Workplace Education may be obtained from:

Lyn Wakefield
Training & Instructional Design Consultant
GOTEC Ltd
Gordon Technical College
Private Bag No 1
Mail Centre
GEELONG VIC 3221

Telephone: 250 676 or 250 680
Facsimile: 250 505
CERTIFICATES IN
WORKPLACE EDUCATION

A Nationally accredited course
providing generic skills for every workplace

GOTEC Ltd
(The Commercial Arm of the Gordon Technical College, TAFE)
Fenwick Street, Geelong, Victoria 3220
Tel: (052) 250 680 Fax: (052) 250 508

NATIONALLY RECOGNISED
TRAINING
Gaining the competitive edge

Australia needs a highly skilled and productive workforce. This workforce needs to be able to respond flexibly to changes generated culturally, technologically and structurally.

Australia is responding to the key components of workforce and training reform. Competency standards and competency-based education and training are at the forefront of change.

Emphasis is placed on the importance of skill formation, the rewards of teamwork, the benefits of open communication, the value of customer service and the convergence of general and vocational skills.

Generic skills for every workplace

General or generic skills are the skills which underpin on-the-job competencies. These are portable skills such as working with people, solving problems, making decisions and communicating with others. Valuable workplace skills can readily be acquired through the range of units offered across the three levels of the Certificates in Workplace Education.

The Certificates in Workplace Education, which have been piloted across a range of industries since mid-1991, have the capacity to provide broad-based generic skills for every Australian workplace.

Aims:

The aims of the Certificates in Workplace Education are:

✔ To assist in the achievement of generic workplace competencies.
✔ To improve opportunity of access across the workplace.
✔ To help remove the barriers to further education and training.
✔ To recognise work and life experiences (Recognition of Prior Learning - RPL).
✔ To enable participants to have the skills, knowledge, competence and confidence to better perform workplace duties.
✔ To provide formal recognition for competencies achieved in relation to broad-based generic skills.
✔ To articulate into other courses.
✔ To help provide career opportunities through Award Restructuring and Enterprise Agreements.
Units of learning

Each of the three levels within the course takes a notional 240 hours to complete. Within each level there are 16 stand-alone units of learning. Units may be undertaken in optional order and/or specifically grouped or customised to meet individual or enterprise need.

Each unit of learning (detailed in the four-volume Training Syllabus) comprises:
- a unit description
- unit aims
- duration
- recommended entry criteria
- learning outcomes
- performance criteria
- work requirements
- assessment
- recommended resources
- learning strategies.

The training syllabus also contains off- and on-the-job human resource statements for those involved in the facilitation of training and assessment.

Units of competency

The objective of each unit of competency is to demonstrate the knowledge and skills gained from the corresponding unit of learning.

As enterprises identify their generic competencies, they may wish to gain access to the relevant stand-alone units of learning. For example, the unit of competency Assist in On-the-job Training is underpinned by the unit of learning Training and Development Skills. This unit is recommended by the Competency Standards Body - Assessors and Workplace Trainers, as enabling the achievement of the National Standards for Workplace Trainer Category 1.

Each unit of competency includes elements of competency, performance criteria, a range of variables statement and an evidence guide. Competency Assessment Logs are also available to assist in workplace assessment.

To qualify for a Certificate at Level 1, 2 or 3, a nominal 350 hours of relevant workplace practice and/or experience is necessary. Detailed on-the-job generic competencies are available for this purpose, as it is essential that both the off-the-job and on-the-job components are completed for the award of a Statement of Attainment or a credentialled outcome.

<table>
<thead>
<tr>
<th>Units of Competency (On-the-job)</th>
<th>Underpinned by</th>
<th>Units of Learning (Off-the-job)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrated Workplace Performance</td>
<td>Written Communication</td>
<td>Achieved Learning Outcomes</td>
</tr>
<tr>
<td></td>
<td>Oral Communication</td>
<td>Provide the necessary skills and knowledge to enable competency to be demonstrated in the workplace</td>
</tr>
<tr>
<td></td>
<td>Mathematical Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal and Interpersonal Skills</td>
<td></td>
</tr>
</tbody>
</table>
Learning resources and costings

For each unit of learning both trainer-based and flexible delivery (open learning) resources are available. The flexible delivery resources have been developed in conjunction with five Queensland-based TAFE Colleges - Queensland Distance Education College (QDEC), Bayside Community College, Gateway College, Ithaca College and South Bank Institute.

Learning resources are costed at $2.00 per notional off-the-job learning hour [see course matrix on back page, with the exception of Module 5, Level 1, Relating Mathematics to the Workplace. Due to its comprehensive content, this unit is priced at $12 for each of the eight parts - Addition, Subtraction, Multiplication, Division, Vulgar Fractions, Metric Measure and General Problem-Solving. Each part may be purchased separately.

Assessment

Assessment is competency-based and requires the participant to:

✓ Achieve the off-the-job learning outcomes described in the unit of learning.
✓ Demonstrate the on-the-job competencies outlined in the unit of competency.

Competency Assessment Logs are included in the resource materials to assist in workplace assessment.

Recognition of prior learning

Recommended entry and exit criteria are provided for each level. Assessment kits and computerised assessments are under development to assist in the placement of participants into appropriate levels and to help determine their future learning needs.

Articulation

Credit transfers are available for a range of TAFE courses. For example, the TAFE National Communication Modules, the Vehicle Industry Certificate and the Engineering Production Certificate are approved credits to and from the Certificates in Workplace Education.

Where participants complete the Certificates in Workplace Education Level 3 and have a minimum of three years work experience, they are eligible to enter the Graduate Certificate of Education (Adult and Workplace) offered by Deakin University, Geelong. Therefore, one articulation pathway which may be followed is:

<table>
<thead>
<tr>
<th>Certificates in Workplace Education</th>
<th>Deakin University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 → Level 2 → Level 3</td>
<td>Graduate Certificate → Graduate Diploma → Master’s Degree</td>
</tr>
</tbody>
</table>
## ORDER FORM

To: GOTECH Ltd

The Gordon Technical College, TAFE

Private Bag No 1

GEELONG VIC 3221

| Name:          |                  |
|               |                  |
| Title:        |                  |
| Organisation: |                  |
| Address:      |                  |
| City:         | State:           |
|              | State:           |
|              | Postcode:        |

Please send me:

<table>
<thead>
<tr>
<th>Item</th>
<th>Price (excluding postage and handling)</th>
<th>Number required</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificates in Workplace Education Course Outline</td>
<td>$ 20.00</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Four-volume Training Syllabus</td>
<td>$200.00</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>On-the-job Competencies for 50 Units</td>
<td>$ 80.00</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Please accept my cheque or charge my account:

Cheque enclosed [ ] Account to be charged [ ]

If paying by credit card, please provide the following information:

Bankcard [ ] Visa [ ] Mastercard [ ] Other [ ]

Credit Card No [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] Expiry Date / /19

Signature __________________________________________ Date __________________________

For urgent delivery, fax your order to (052) 250 508.
Australian Standards Framework

Due to the variation in generic skills across different industries, an indication of the alignment between levels within the Certificates in Workplace Education and the Australian Standards Framework is:

In some industries, the alignment would be to a higher ASF level, for example Level 3 of the Certificates in Workplace Education, which is designed for team leaders and supervisors, may equate to ASF 4 or ASF 5. The alignment will be reviewed in late 1995, when the Certificates are reaccredited under the Australian Qualifications Framework.

Want further information?

A telephone conversation may provide you with the information you require. For direct attention, telephone (052) 250 680, or send a fax to (052) 250 508.

If you would like to receive documentation on the course, complete the form provided and forward to:

GOTEC Ltd
The Gordon Technical College, TAFE
Private Bag No 1
GEELONG Mail Centre
VIC 3220

Learning resources for the Certificates in Workplace Education are available through an increasing number of outlets across Australia. A list of distribution centres will be forwarded on request.

Lyn Wakefield
Project Manager
## Generic Skills Framework - Off-the-job Units of Learning

### Level 1

**Personal and Interpersonal Skills**
- **Module 1: Time Management**
  - Establishing a routine: 6 hrs
- **Module 2: Goals and Motivation**
  - Setting goals and learning to achieve them: 6 hrs
- **Module 3: Working with People**
  - Working in groups and teams: 6 hrs
- **Module 4: Decision-making**
  - Assessing situations and predicting outcomes: 6 hrs

**Mathematical Skills**
- **Module 5: Calculations**
  - Relating mathematics to the workplace: 30 hrs
- **Module 6: Graphics and Statistics**
  - Applying calculations to charts and graphics (line, pie charts, tables, plans): 30 hrs

**Oral Communication Skills**
- **Module 7: Comprehension**
  - Communicating in the workplace: 15 hrs
- **Module 8: Speech and Expression**
  - Developing speech and expression: 15 hrs
- **Module 9: Listening and Questioning**
  - Listening and remembering: 15 hrs
- **Module 10: Instruction and Training**
  - Interpreting and following instructions: 15 hrs

**Written Communication Skills**
- **Module 11: Customer Service**
  - Developing telephone skills: 6 hrs
- **Module 12: Presentations and Meetings**
  - Participating in group discussions (HHS, FOD and industrial relations): 15 hrs

### Level 2

**Personal and Interpersonal Skills**
- **Module 1: Time Management**
  - Managing time effectively: 6 hrs
- **Module 2: Goals and Motivation**
  - Identifying priorities and meeting demands: 6 hrs
- **Module 3: Working with People**
  - Participating as an effective team member: 6 hrs
- **Module 4: Decision-making**
  - Developing an objective approach to problem-solving: 6 hrs

**Mathematical Skills**
- **Module 5: Calculations**
  - Developing mathematical skills: 30 hrs
- **Module 6: Graphics and Statistics**
  - Interpreting and preparing charts and graphs: 30 hrs

**Oral Communication Skills**
- **Module 7: Comprehension**
  - Expanding vocabulary: 12 hrs
- **Module 8: Speech and Expression**
  - Becoming a more confident speaker: 15 hrs
- **Module 9: Listening and Questioning**
  - Listening, questioning and memory skills: 15 hrs
- **Module 10: Instruction and Training**
  - Interpreting and giving technical instructions: 15 hrs

**Written Communication Skills**
- **Module 11: Customer Service**
  - Providing customer service: 15 hrs
- **Module 12: Presentations and Meetings**
  - Presenting information to groups: 15 hrs

### Level 3

**Personal and Interpersonal Skills**
- **Module 1: Time Management**
  - Planning and control: 6 hrs
- **Module 2: Goals and Motivation**
  - Developing motivational skills and influencing others: 6 hrs
- **Module 3: Working with People**
  - Building teams and providing leadership: 6 hrs
- **Module 4: Decision-making**
  - Solving problems and making decisions: 6 hrs

**Mathematical Skills**
- **Module 5: Calculations**
  - Applying mathematics in problem-solving (business or technical): 30 hrs
- **Module 6: Graphics and Statistics**
  - Summarising and presenting basic statistics: 30 hrs

**Oral Communication Skills**
- **Module 7: Comprehension**
  - Evaluating strengths and weaknesses in language for media applications: 15 hrs
- **Module 8: Speech and Expression**
  - Influencing others through effective communications: 15 hrs
- **Module 9: Listening and Questioning**
  - Interviewing and counselling skills: 15 hrs
- **Module 10: Instruction and Training**
  - Training and development skills: 15 hrs

**Written Communication Skills**
- **Module 11: Customer Service**
  - Improving customer service: 6 hrs
- **Module 12: Presentations and Meetings**
  - Participating at meetings and meetings procedure: 15 hrs

---

The hours shown are an indicative average of time before the desired learning outcomes can normally be achieved.

The Certificates in Workplace Education comprise three levels, each of which takes an average of 240 hours to complete and includes a recommended minimum of 120 hours of workplace release for instruction.

Sixteen modules are included in the course, with each having three stand-alone Units of Learning. Units may be undertaken in any order and/or specifically grouped to meet individual or enterprise need. Alternatively, units may be selected independently from a range of modules.

To qualify for a Certificate at Level 1, 2 or 3, all 16 modules within the level would need to be completed or Recognition of Prior Learning received, in addition to the nominal 350 hours of relevant workplace practice and/or experience being demonstrated. Where specific units are selected, both the learning outcomes and their related on-the-job competencies must be achieved. When the full requirements for a Certificate are not met, a Statement of Attainment should be provided.

© 1993 GOTEC Ltd
THE GORDON INSTITUTE OF TAFE

Certificates in Workplace Education

A Nationally Accredited Course

Fenwick Street, Geelong, Victoria, Australia

3220

電話 (61-52) 250920
傳真 (61-52) 250502

NATIONALLY RECOGNISED TRAINING

國家認可培訓
WORKPLACE EDUCATION: PLANNING FOR THE FUTURE

The Gordon Institute of TAFE, an international Institute, is providing opportunities for persons outside Australia to gain highly recognised qualifications through the Nationally accredited Certificates in Workplace Education. The course may be delivered in China.

The Certificates in Workplace Education are designed to increase both general workplace knowledge and generic workplace skills. The three Certificates, Level 1, Level 2, and Level 3, may be undertaken by any person and they apply to every workplace. Appropriate English training will be available for the course requirements.

GENERAL SKILLS FOR EVERY WORKPLACE

General skills are portable skills such as communicating with others, solving problems, making decisions, processing oral and written information and working in teams. They are key skills, which have been identified as being necessary for the Western workplace.

ARTICULATION

In addition to enabling credit transfer into other National TAFE courses, the Certificates in Workplace Education provide an articulated pathway to higher education:

<table>
<thead>
<tr>
<th>WORKPLACE EDUCATION</th>
<th>UNIVERSITY STUDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Graduate Certificate</td>
</tr>
<tr>
<td>Level 2</td>
<td>Graduate Diploma</td>
</tr>
<tr>
<td>Level 3</td>
<td>Master's Degree</td>
</tr>
</tbody>
</table>

Through the Certificates in Workplace Education, general skills are gained and demonstrated, in both a formal learning environment and as an important part of workplace training and experience.

COURSE AIMS

The aims of the Certificates in Workplace Education are:

- To assist in the achievement of general workplace competencies.
- To help remove barriers to further education and training.
- To recognise the value of work and life experiences.
- To enable more people to have the knowledge, skills, competence and confidence to better perform their workplace duties.
- To provide formal qualifications for general workplace skills.
- To articulate into other courses.
- To help provide career opportunities.
工作場所所需的培訓：為將來進行的設計

高登技術學院是一所國際學院。她通過國家認可的工作場所培訓證書課程為澳大利亞本土之外的人士提供機會以獲取廣泛認可的職業證書。部分課程可能會在中國授課。

工作場所培訓證書課程在設計上是用來掌握工作場所需的一般性的知識及技能的。任何人都可以修讀三種不同級別的證書——一級，二級及三級證書（設有課程所需的英語培訓）。它們適用於所有的工作場所。

任何工作場所需的一般性技能

一般性技能指的是那些例如如何解決問題，如何與他人進行交流溝通，如何決策，如何對口頭及書面信息進行處理及如何在集體中工作等。這些技能是很重要的，被認為是在西方國家工作場所里所必需的。

在正規的學習環境中，您可以通過工作場培訓證書課程及我們的展示獲取這些技能。這同時也是工作場所技能培訓及實踐的一個重要部分。

課程目的 — 工作場所培訓證書課程的目的是:

- 輔助獲得在工作場所一般應具有的能力。
- 為繼續深造及培訓鋪平道路。
- 認識工作及生活經驗的價值。
- 使那些具有知識，技能及信心的人能更好地進行工作。
- 為掌握基本的工作場所所需技能授予正式的證書。
- 提供與其它課程相結合的渠道。
- 幫助增加就業機會。

科目的單元

三個級別的證書中每一級都包含16個獨立的單元。可以按任何一種順序進行學習。亦可按個人或企業所需進行特殊的課程組合。

通往高等教育的階梯

有關工作場的培訓課程除了可以給您學分以外還修國家技術學院的其它課程之外，還能為您進行高等教育的學習鋪平道路。

工作場所培訓證書

大學中的選擇

一級 → 二級 → 三級 → 研究生證書 → 研究生文憑 → 碩士
## CERTIFICATES IN WORKPLACE EDUCATION

### Generic Skills Framework - Off-the-job Units of Learning

### LEVEL 1

<table>
<thead>
<tr>
<th><strong>PERSONAL AND INTERPERSONAL SKILLS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module 1</strong> Time Management</td>
</tr>
<tr>
<td><strong>Module 2</strong> Goals and Motivation</td>
</tr>
<tr>
<td><strong>Module 3</strong> Working with People</td>
</tr>
<tr>
<td><strong>Module 4</strong> Decision-making</td>
</tr>
</tbody>
</table>

### LEVEL 2

### MATHMATICAL SKILLS

| **Module 5** Calculations | Relating mathematics to the workplace | 30 hrs | Developing mathematical skills (business or technical) | 36 hrs | Applying mathematics to problem-solving (business or technical) | 30 hrs |
| **Module 6** Graphics and Statistics | Applying calculations to charts and graphs (inc maps, sketches and plans) | 30 hrs | Interpreting and preparing charts and graphs | 24 hrs | Compiling and presenting basic statistics | 30 hrs |

### ORAL COMMUNICATION SKILLS

| **Module 7** Comprehension | Communicating in the workplace | 18 hrs | Expanding vocabulary (technical and non-technical) | 12 hrs | Evaluating strengths and weaknesses in language (inc media applications) | 12 hrs |
| **Module 8** Speech and Expression | Developing speech and expression | 16 hrs | Becoming a more confident speaker | 16 hrs | Influencing others through effective communication | 16 hrs |
| **Module 9** Listening and Questioning | Listening and remembering | 12 hrs | Listening, questioning and memory skills | 12 hrs | Interviewing and counselling skills | 12 hrs |
| **Module 10** Instruction and Training | Interpreting and following instructions | 12 hrs | Interpreting and giving technical instructions | 12 hrs | Training and development skills | 12 hrs |
| **Module 11** Customer Service | Developing telephone skills | 6 hrs | Providing customer service | 12 hrs | Improving customer service | 6 hrs |
| **Module 12** Presentations and Meetings | Participating in group discussions (CHSE&O and Industrial Relations) | 18 hrs | Presenting information to groups (CHSE&O and Industrial Relations) | 18 hrs | Participating at meetings and meeting procedure | 18 hrs |

### WRITTEN COMMUNICATION SKILLS

| **Module 13** Reading for the Workplace | Interpreting written communication | 18 hrs | Reading and Interpreting text and data | 18 hrs | Applying advanced reading skills | 12 hrs |
| **Module 14** Summarising and Research | Taking notes and recording information | 6 hrs | Summarising text and data | 6 hrs | Developing research skills | 6 hrs |
| **Module 15** Writing for the Workplace | Developing writing skills (inc messages, instructions and short reports) | 42 hrs | Extending writing skills (inc reports, memos and letters) | 42 hrs | Applying advanced writing skills (inc formal reports and submissions) | 36 hrs |
| **Module 16** Forms, Documents and Records | Completing common forms | 6 hrs | Completing forms, documents and records | 6 hrs | Evaluating records management systems (manual and computerised) | 18 hrs |

The hours shown are indicative average time of three levels before the desired learning outcomes can normally be achieved.

The Certificates in Workplace Education comprise three levels, each of which takes an average of 240 hours to complete and includes a recommended minimum of 120 hours of work release for instruction.

Sixteen modules are included in the course, with each having three stand-alone Units of Learning. Units may be undertaken in any order and/or specifically grouped to meet individual or employer needs. Alternatively, units may be selected independently from a range of modules.

To qualify for a Certificate at Level 1, 2 or 3, all 16 modules within the level would need to be completed or Recognition of Prior Learning received, in addition to the nominal 350 hours of role workplace practice and/or experience being demonstrated. Where specific units are selected, both the learning outcomes and their related on-the-job competencies must be achieved. Where full requirements for a Certificate are not met, a Statement of Attainment should be provided.

© 1993 GOTECH
工作場所教育證書
常見技能結構 - 脫產學習單元

一級

有關係到個人與人們之間關系的技能

<table>
<thead>
<tr>
<th>單元</th>
<th>類型</th>
<th>時間</th>
<th>內容</th>
</tr>
</thead>
<tbody>
<tr>
<td>一單元</td>
<td>時間管理</td>
<td>6小時</td>
<td>建立常規</td>
</tr>
<tr>
<td>二單元</td>
<td>目標與影響</td>
<td>6小時</td>
<td>建立目標並學習如何實現</td>
</tr>
<tr>
<td>三單元</td>
<td>和他人一起工作</td>
<td>6小時</td>
<td>在集體中工作</td>
</tr>
<tr>
<td>四單元</td>
<td>決策</td>
<td>6小時</td>
<td>評估處理方法並預測結果</td>
</tr>
</tbody>
</table>

數學技能

<table>
<thead>
<tr>
<th>單元</th>
<th>類型</th>
<th>時間</th>
<th>內容</th>
</tr>
</thead>
<tbody>
<tr>
<td>五單元</td>
<td>計算</td>
<td>30小時</td>
<td>工作場所與數學</td>
</tr>
<tr>
<td>六單元</td>
<td>圖表及統計</td>
<td>30小時</td>
<td>圖表的計算</td>
</tr>
</tbody>
</table>

口頭溝通技能

<table>
<thead>
<tr>
<th>單元</th>
<th>類型</th>
<th>時間</th>
<th>內容</th>
</tr>
</thead>
<tbody>
<tr>
<td>七單元</td>
<td>理解</td>
<td>18小時</td>
<td>工作場所的交流溝通</td>
</tr>
<tr>
<td>八單元</td>
<td>講述及表達</td>
<td>18小時</td>
<td>提高說及表達能力</td>
</tr>
<tr>
<td>九單元</td>
<td>聽與記</td>
<td>12小時</td>
<td>聽與記及記憶</td>
</tr>
<tr>
<td>十單元</td>
<td>指導及培訓</td>
<td>12小時</td>
<td>對指示的理解及執行</td>
</tr>
<tr>
<td>十一單元</td>
<td>客戶服務</td>
<td>6小時</td>
<td>通信技術</td>
</tr>
<tr>
<td>十二單元</td>
<td>呈遞及會議</td>
<td>18小時</td>
<td>公眾演講</td>
</tr>
</tbody>
</table>

書面交流技術

<table>
<thead>
<tr>
<th>單元</th>
<th>類型</th>
<th>時間</th>
<th>內容</th>
</tr>
</thead>
<tbody>
<tr>
<td>十三單元</td>
<td>書面溝通</td>
<td>18小時</td>
<td>書面溝通文件的理解</td>
</tr>
<tr>
<td>十四單元</td>
<td>調研</td>
<td>6小時</td>
<td>執行研究技術及應用</td>
</tr>
<tr>
<td>十五單元</td>
<td>工作寫作</td>
<td>42小時</td>
<td>執行概述，報告，報告，報告，報告及報告，報告</td>
</tr>
<tr>
<td>十六單元</td>
<td>表格，文件，記錄</td>
<td>6小時</td>
<td>書寫表格，文件及記錄</td>
</tr>
</tbody>
</table>

工作場所培訓證書有三個級別。每一級平均需要240小時的學習並且包括最少120小時的用以替代課堂教學的工作場所實習。