2+25/4.37

MONASH UNIVERSITY

THESIS ACCEPTED IN SATISFACTION OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

ON..... 27 January 2004 .....

.....[redacted].....

Sec. Research Graduate School Committee

Under the Copyright Act 1968, this thesis must be used only under the normal conditions of scholarly fair dealing for the purposes of research, criticism or review. In particular no results or conclusions should be extracted from it, nor should it be copied or closely paraphrased in whole or in part without the written consent of the author. Proper written acknowledgement should be made for any assistance obtained from this thesis.

Addendum

The examiners requested the following changes:

p16	(Campion and Kelly, 1988) amended to (Campion & Kelly, 1988)
p63	Peters & Waterman (1982) amended to Peters and Waterman (1982)

In addition, the candidate would like to request the following amendment:

Title page	May, 2003 amended to December, 2003

The Open Learning Initiative:

a critical analysis of change in Australian higher education, 1990–1997

A thesis submitted to Monash University
for the degree of Doctor of Philosophy

School of Political and Social Inquiry
Monash University

William Renner
May 2003

Contents

Abstract iv

Declaration vi

Acknowledgements vii

List of figures viii

List of acronyms and abbreviations x

1 An introduction to the study 1
- Overview 1
- The Open Learning Initiative (OLI) 3
- The organisational components of the OLI 4
- Structure and methodology of the study 7
  - Data collection 9
  - Limitations, delimitations and assumptions 10
- Outcomes of the study 10
- Summary and thesis outline 11

2 The origins of the Open Learning Initiative 12
- Introduction 12
- Distance education: the Australian context 12
- Early policy development in distance education 16
- The Dawkins reforms: 1987–91 21
- The reformation of distance education 24
- Baldwin – new directions 30
- Open Learning policy emerges 32
- Defining Open Learning 36
- Policy objectives 40
  - Access and unmet demand 40
  - Cost 41
  - Credit transfer 41
  - Diversity 42
  - Competition 43
  - New technologies 44
  - Building on best practice 44
- Summary 46

3 A conceptual framework for the analysis of the development of the OLI 47
Introduction 47
The emerging context for the OLI 48
A systems approach to organisational change 51
Educational Fordism 55
Distance education: the most industrialised form 58
Crisis of Fordism 61
New organisational models 63
Toyota-ism 65
Lean Production 68
Flexible Specialisation 71
The Learning Organisation 72
The OLI: A synthesis of traditions 75
Technology and innovation 77
Summary and conclusions 80

4 The TVOLP: the seed of the OLI 84
Introduction 84
Bidding for the TVOLP 84
The expanded consortium 91
Establishment 94
Organisational structure and management 94
Curriculum and production 96
Marketing and public relations 98
The launch 102
Delivery 107
Evaluation 109
Concluding comments 111

5 OLA: establishment of a brokerage 114
Introduction 114
Building on the pilot 114
Bidding for Phase Two 118
OLA is established 127
Unit provision 128
The central office 134
Openness 140
Rationalisation 145
Innovation and technology 151
Concluding comments 157

6 The OLESS Pilot 161
Introduction 161
The OLESS Pilot launch 162
The birth of the OLESS 164
Tendering for the OLESS 169
Setting up the OLESS pilot 172
NEXUS services 173
The OLESS First Pilot 175
The OLESS Second Pilot 178
Discussion 183
Concluding comments 185

7 The rise and fall of Open Net 187
Introduction 187
Mission and expectations 188
Setting up services 196
The launch 199
Competing interests on the Board 203
Subscriber backlash 209
Exit from carriage 214
The slide into chaos 219
Open Net closes 224
Discussion 225
Concluding comments 228

8 Conclusion 230
Introduction 230
The mission revisited 230
The influence of government policy 235
The brokerage system 238
Market access and equity 243
Technological innovation 247
Concluding comment 252

Appendix A: Archival sources 259

Appendix B: Relevant Commonwealth Ministries 261

References 263

Abstract

This thesis investigates the development of the Australian Federal Government's Open Learning Initiative (OLI) from its inception in August 1990 until its major reformation in January 1997. The Federal Government envisaged the initiative as a grand scheme to change the profile of higher education in Australia. Minister Baldwin's stated objectives in 1992 were to extend access to higher education, increase participation in higher education, examine the potential of communication technologies for education and increase public awareness of higher education. That is to say, the OLI became a government-led attempt to enhance higher education through the coordinated provision of distance education and by harnessing new technologies to improve educational quality and accessibility. The thesis examines each main component of the OLI: the Television Open Learning Pilot, Open Learning Australia, the Open Learning Electronic Student Support pilot project and Open Net.

Through the OLI the Australian public were offered open access to higher education, namely open entry to university courses regardless of age, geographic location, or academic background of students. Course materials and tuition were provided from a consortium of Australian universities and steps were taken to establish progressive credit transfer arrangements and flexible degree pathways.

In this thesis, the OLI is examined as a dynamic organisation, an emerging force for change within Australian higher education. A theoretical model of the OLI is presented, inter-relating environment and technology with the above OLI components. Pre-Fordist, Fordist and post-Fordist organisational constructs are examined for their relevance to higher education in Australia and to the OLI in particular.

The research is essentially qualitative, drawing on documentary evidence from relevant archives, from interviews and informal discussion with the OLI staff and from personal on-site observations. Thus, the research aims

to locate the OLI within recent developments in Australian higher education, to profile the organisational components of the Initiative and to link organisational changes in the OLI to government policy and departmental directives. In substance, the research documents, interprets and models the forces of change, external and internal, that characterise the OLI from 1990 to 1997.

Clearly, the OLI was more than simply a new system of distance delivery. Through the OLI, collaborative arrangements were negotiated among participating universities, the marketplace for higher education was expanded and new educational technologies were trialled. The study shows how the OLI evolved by negotiating and resolving competing interests of decision makers, of stakeholders and of students. Yet, despite these achievements, the stated objectives of the OLI were not fully realised. By focussing on structural reform, the OLI passed by opportunities for educational and technological innovation, on occasion supporting a return to established educational practice. Commercial priorities and educational goals were in conflict. Interpretations of access and equity were less than open. Course delivery was emphasised more than interactivity and flexibility. The opportunity for decision makers to reform higher education in Austalia was explored but not fully exploited. In short, restrictive and instrumentalist government policies together with internal structural difficulties identified in this study hindered the capacity for the OLI to be a genuine catalyst of educational change.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other institution. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text.

William Renner

Acknowledgements

Discussions which led to this study began while Professor Peter Spearritt was Director of the National Centre of Australian Studies. It was his initial supervision and support that enabled me to focus on a research theme and gain invaluable access to archival materials. I was subsequently able to establish contact with senior executives and staff involved in the Open Learning Initiative, conduct interviews and informally discuss emerging ideas and themes. For this and related matters I acknowledge the support of Monash University, Open Learning Australia and Open Net for granting access to their archives and to the assistance and kindness I received during my many prolonged visits.

Earlier work at Murdoch University suggested the possibility of exploring an organisational perspective for the research and applying the tenets of Fordism and post-Fordism to the emergence of the Open Learning Initiative. Daryl Nation lent to this a strong research focus on distance education, and gave me the opportunity to work closely with him on a number of related research projects, involving Terry Evans and Karen Tregenza. These experiences did much to help shape my understanding of distance education as a field. Daryl played a leading role as co-supervisor of the project and was a great source of support throughout the preparation of the thesis.

I gratefully acknowledge financial assistance from The Australian Postgraduate (Industry) Awards Scheme to which Open Learning Australia contributed funds as an equal partner, and to Monash University for granting HECS exemption status. My thanks to John Arnold and Chris Baker for their advice in preparing the final draft, to Mick Campion, who gave me a start in distance education research, and to Dianne Martin and Mary Flood for their life support. Finally, my thanks to the staff and students associated with the Open Learning Initiative who willingly assisted in the research, and most of all to my family for their support and encouragement.

List of figures

Figure 1.1 Organisational sequence of the OLI 4

Figure 1.2 Organisational relationships and components within the OLI 6

Figure 2.1 Distance education student enrolments in higher education: total numbers 14

Figure 2.2 Distance education student enrolments in higher education: percentage of total enrolments 14

Figure 2.3 Total student enrolments in higher education 15

Figure 2.4 External student enrolments at the eight DECs in 1991 25

Figure 2.5 Sources of higher education funding shown as percentages 41

Figure 3.1 Pressures for change in higher education 52

Figure 3.2 Organisational models of higher education 63

Figure 3.3 The difference between Fordism and Toyota-ism 67

Figure 3.4 The OLI: A synthesis of traditions 75

Figure 3.5 Conceptual map: organisational attributes of the OLI 81

Figure 5.1 OLA units offered by discipline area: 1992–5 129

Figure 5.2 Total OL unit registrations by year and study period 131

Figure 5.3 Organisational chart: OLA decision making bodies 135

Figure 5.4 Student entry and access provisions for OLA 141

Figure 5.5 Flexibility provisions for OLA 142

Figure 5.6 Rationalisation provisions for OLA 146

Figure 5.7 OLA funding available for innovation and technology 153

Figure 6.1 Numbers of students in the OLESS First Pilot 175

Figure 6.2 Numbers of students in the OLESS Second Pilot 179

Figure 6.3 Comparison between the First and Second OLESS Pilots 180

Figure 6.4 Student perceptions of the value of the OLESS/Open Net, responses from 19 students 181

Figure 7.1 Open Net register of Directors as of 1 February, 1997 189

Figure 7.2 Open Net market segment analysis 197

Figure 7.3 Telecom monthly trending by call duration 210

Figure 7.4 Summary of calls by answering point during August 1995 211

Figure 7.5 Letters of complaint addressed to Open Net: May 1995 – December 1996 213

Figure 8.1 Summary of government policy initiatives: a reassessment 233

Figure 8.2 The OLI: a balance sheet 254

List of acronyms and abbreviations

AARNET	Australian Academic and Research Network
ABC	Australian Broadcasting Corporation
ABC TV	Australian Broadcasting Corporation (Television)
ACTA	Australian Credit Transfer Agency
AEC	Australian Education Council
AGPS	Australian Government Publishing Service
ANU	Australian National University
ARC	Australian Research Council
ASPESA	Australian and South Pacific External Studies Association
AVCC	Australian Vice-Chancellors' Committee
BSEG	Broadband Services Experts Group
CAE	College of Advanced Education
CAUT	Committee for the Advancement of University Teaching
CD-ROM	Compact Disk–Read Only Memory
CEO	Chief Executive Officer
CMC	Computer Mediated Communication
CMCs	Cooperative Multimedia Centres
CQU	Central Queensland University
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSU	Charles Sturt University
CTEC	Commonwealth Tertiary Education Commission
DE	Distance Education
DEC	Distance Education Centre
DEET	Department of Employment, Education and Training
DEETYA	Department of Employment, Education and Training and Youth Affairs
DETYA	Department of Employment Training and Youth Affairs
DMU	Dual Mode University
DTU	Distance Teaching University
ECU	Edith Cowan University

EDNA	Education Network Australia
EFTSU	Effective Full-Time Student Unit
EMA	Educational Media Australia
HEC	Higher Education Council
HECS	Higher Education Contribution Scheme
HED	Higher Education Division
ICDE	International Council for Distance Education
ICT	Information and Communications Technology
IDP	International Development Program
ISP	Internet Service Provider
IT	Information Technology
JIT	Just-In-Time
LAP	Local Access Point
MCEETYA	Ministerial Council on Employment, Education, Training and Youth Affairs
MOSA	Monash Orientation Scheme for Aborigines
NBEET	National Board of Employment Education and Training
NCODE	National Committee on Open and Distance Education
NDEC	National Distance Education Conference
NODES NET	National Open and Distance Education Student Network
NOLPU	National Open Learning Policy Unit
NSW	New South Wales
ODE	Open and Distance Education
OL	Open Learning
OLA	Open Learning Australia
OLA APB	Open Learning Australia, Academic Programs Board
OLA IAPB	Open Learning Australia, Interim Academic Programs Board
OLAA	Open Learning Agency of Australia
OLABC	Open Learning Agency, British Columbia
OLDPS	Open Learning Deferred Payment Scheme
OLESS	Open Learning Electronic Support Service
OLI	Open Learning Initiative
OLLIS	Open Learning Library Information Service

OLTC	Open Learning Technology Corporation
ON	Open Net
PAGE	Professional and Graduate Education
QOLN	Queensland Open Learning Network
RFIP	Request For Initial Proposals
RIPVET	Research Institute for Professional and Vocational Education and Training
RMIT	Royal Melbourne Institute of Technology
SA	South Australia
SBS	Special Broadcasting Service
SCEET	Standing Committee on Employment, Education and Training
SCES	Standing Committee on External Studies
SCU	Southern Cross University
SEETRC	Senate Employment Education and Training Reference Committee
STD	Subscriber Trunk Dialing
TAFE	Technical and Further Education
TCP/IP	Transmission Control Protocol / Internet Protocol
TVOLP	Television Open Learning Pilot
UKOU	United Kingdom, Open University
UNE	University of New England
UNE-NR	University of New England–Northern Rivers
UNISA	University of South Australia
UNS	Unified National System
UP	University Partnerships
UQ	University of Queensland
USA	United States of America
USQ	University of Southern Queensland
VC	Vice-Chancellor
VCR	Video Cassette Recorder
VET	Vocational Education and Training
WADEC	Western Australian Distance Education Consortium

1 | An introduction to the study

OVERVIEW

THIS thesis investigates the establishment and growth of the Open Learning Initiative (OLI) from its inception in August 1990 until its major reformation in January 1997. It seeks to understand the OLI as a unique set of organisations, initiated by government, supported by a consortium of Australian universities, and offering units from more than 40 universities and colleges from all states and territories in Australia. The focus of the study is organisational rather than pedagogical, sequential rather than cross-sectional, a response to the need for a documented study of a distinctive government initiative, one that has influenced many higher education institutions in Australia, and has offered an impressive array of educational opportunities to many Australians. In its early years, it was an entrepreneurial challenge to both its decision makers and its appointed staff. The thesis documents organisational change in the OLI and interprets the forces of change, external and internal, that characterised the OLI from 1990 to 1997.

Open Learning Australia (OLA) and the Open Learning Initiative (OLI) from which it emerged have become a major innovative force in Australian higher education. Many existing organisational practices, particularly those of educational delivery and administration, were changed as the emerging organisation was shaped to improve student access and enhance distance education provision in Australia. To this end, government policy, new technologies, and a substantial sum of public funding were directed towards the OLI. The Initiative began with the Television Open Learning Pilot (TVOLP) in 1991, followed by the formation of the Open Learning Agency of Australia (OLA)[1] in 1993, the Open Learning Electronic Support Service

[1] The company was registered as Open Learning Agency of Australia Pty Ltd (OLAA), but traded as Open Learning Australia (OLA).

(OLESS) pilot in 1994, and Open Net in 1995. From 1997, the components of the Initiative were amalgamated into what is more commonly referred to as Open Learning Australia.

By the end of this period of growth and change the OLA emerged as:

> ...a national broker of post-secondary distance education. All Australian and overseas students are eligible to study university units and TAFE and training modules which can lead towards certificates, diplomas, degrees and other qualifications
>
> (Open Learning Australia, 1996c, p2).

This announcement taken from the *OLA Handbook* sets the scene for the study of OLA, and the wider government Initiative from which it was formed, an innovative program originally designed to:

> ...open the door to tertiary education for many people currently without access through traditional arrangements. The program will have major advantages for people in rural and remote areas as well as for people with work or family commitments or disabilities which make access to on-campus courses difficult.
>
> (Baldwin, 1992a, p2625)

The OLI is unique in that its innovative origins were firmly embedded in Federal Government policy and government scrutiny. That is to say, the OLI was government initiated, government funded and government monitored. Substantial change was engineered by government to an education sector that hitherto had jealously guarded its independence. But concurrently, Australian universities were positioning themselves for similar moves of their own making, noting for example changes in program delivery emanating from the United Kingdom, USA and Canada. These new organisational forms in higher education were answering calls for greater flexibility in undergraduate course offerings, improved access and equity for all Australians. In parallel, innovative teaching staff in universities were exploring the emerging potential of convergent communication technologies and the educational possibilities of electronic delivery. The OLI was both part of these changes in higher education and a pace setter that challenged established university practice. For government policy makers, change had not been rapid enough. Educational leadership in government wanted to

establish and promote an organisation committed to offering 'everyone the opportunity to study, regardless of age, location, or previous educational qualifications' (Open Learning Australia, 1996c, p2).

In common with all Australian universities in 1991–2, the OLI had to deal with a changing educational environment. Unlike many others however, its national mission was to lead the universities to confront these challenges head-on. The changing environment included: the perception of knowledge as a commodity, the trial and introduction of new pedagogies, pressures for a more flexible curriculum and degree structures and the absorbing of new technologies into academic and organisational sub-cultures. All were linked to the mission and the development of the OLI. All were destined to spread with varying degrees of rapidity throughout the institutions of the higher education sector.

THE OPEN LEARNING INITIATIVE (OLI)

The term *Open Learning Initiative* (henceforth, the 'OLI', or 'the Initiative') was first used by the Commonwealth Government in 1992, in a proposal to establish a national educational brokerage. This proposal was put to tender and given form with the establishment of OLA, which later overtook the Open Learning Initiative. They remained discrete terms, however. The OLA was the name of the company which was given the right to administer the government's OLI.

In later usage, particulary in government documents, the OLI gained a more general meaning. It referred to the set of Open Learning policies formed by the Commonwealth Government, which spawned a number of related companies and projects. Retrospectively it included the TVOLP, and embodied additional companies and projects as new Open Learning policies emerged. In this thesis, the term OLI is used in the context of the set of related organisations comprising the TVOLP, OLA, the OLESS and Open Net.

From this perspective, the OLI was a broadly based Federal Labor Government undertaking to introduce open learning across Australia. The Initiative began with the announcement of the TVOLP in August 1990, received considerable public funding, and quickly expanded over the subsequent two

terms of Labor government office. In January 1997, the incoming Liberal government reformed the Initiative. Eventually the name OLI was disused, although its core component, the OLA, remains an active and thriving organisation at the time of writing. This study is concerned with the formative period of the OLI, from August 1990, until its reformation in January 1997.

Proclaimed as a new model for educational provision, the OLI comprised several innovations: a) open entry to its programs without any prerequisites; b) an organisational structure based on a brokerage model involving the collaboration of over half of the Australian universities; c) the ability to establish articulated pathways to and through established higher education providers; d) the national use of television and other educational technologies, and; e) a commercial orientation to educational delivery. Its innovative profile together with television broadcasts and media exposure had a substantial impact on public perceptions of open learning in Australia. Yet, the term 'open learning' continued to generate confusion. Was open learning a generally accepted educational concept, or was it synonymous with the activities of the OLI? It became common practice therefore to use capitalisation to distinguish between two different uses of the term. 'Open Learning' (capitalised) refers specifically to the activities of the OLI, whereas, 'open learning' (lower case) is the broader educational concept.

THE ORGANISATIONAL COMPONENTS OF THE OLI

The OLI was fashioned from a set of evolving government policies, which spawned and funded four main enterprises: the TVOLP, OLA, the OLESS and Open Net (*Figure 1.1* and *Figure 1.2*).

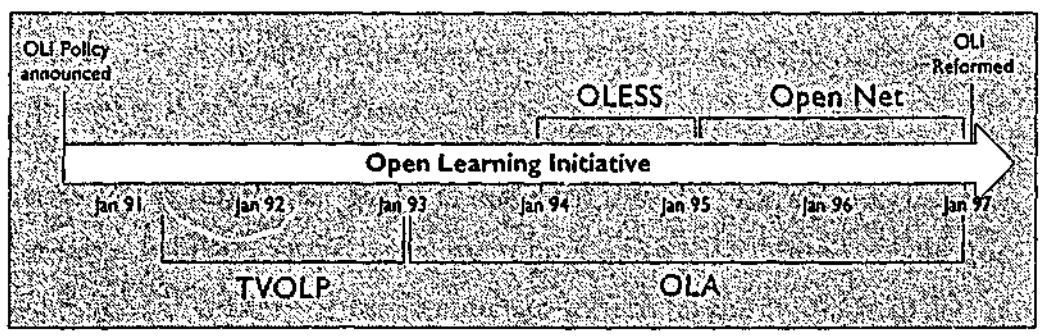


Figure 1.1 Organisational sequence of the OLI

Each of the core organisational components of the OLI were established with specific relationships and government objectives as follows:

Television Open Learning Pilot (TVOLP). A pilot project (May 1991–January 1993), to test the possibility of creating an educational television channel, to diversify the delivery of higher education and to increase public awareness of tertiary education. The TVOLP was hosted by Monash University, based in Melbourne, but supported by a consortium of Australian Universities and the Australian Broadcasting Corporation. Considered successful, the pilot was later expanded into OLA.

Open Learning Australia (OLA). A publicly funded company (January 1993–present), originally owned and controlled by Monash University, with administrative offices located in the Melbourne Central Business District. OLA grew out of the consortium established by the TVOLP, with an expanded membership. It was formed with the objective of opening access to higher education for all Australians with 'no educational prerequisites, no limits on numbers and no requirements to attend lectures' (Open Learning Australia, 1996a, p2). Its key feature was the establishment of a brokerage agency, a mechanism for the consolidation of distance education and the promotion credit transfer among Australian universities and TAFE institutions. It was the cornerstone of the OLI. Restructured early in 1997, it remains a significant player in Australian higher education.

Open Learning Technology Corporation Pty. Ltd. (OLTC). A small publicly funded company (January 1993–February 1998), based in Adelaide, with a brief to achieve national coherence in the use of educational telecommunications technology. The company was supported by an advisory committee, which was broadly composed of education and government representatives from all post-secondary education sectors, and all states. The OLTC is not explored in detail in this thesis.

Open Learning Electronic Support Service (OLESS). A pilot project (December 1993–February 1995) to trial the rollout of a national infrastructure for the electronic delivery of educational services; to fill the communication gap experienced by distance education students by providing additional student

support; and to avoid unnecessary duplication of services by utilising existing resources. The project was jointly managed by the OLTC and OLA, and was an Adelaide-based service. Considered successful, the pilot was later expanded into Open Net.

Open Net Pty. Ltd. A publicly funded company (February 1995–January 1997), jointly owned by the OLTC and the OLA, with offices in Sydney. Open Net was established with a brief to expand the OLESS into a national service; to support Open Learning by providing learning opportunities and electronic support services by making them equally accessible to all students at a fixed price; and to pilot a much more ambitious government initiative, the Education Network Australia (EDNA). The company was considered unsuccessful and was divested in January 1997.

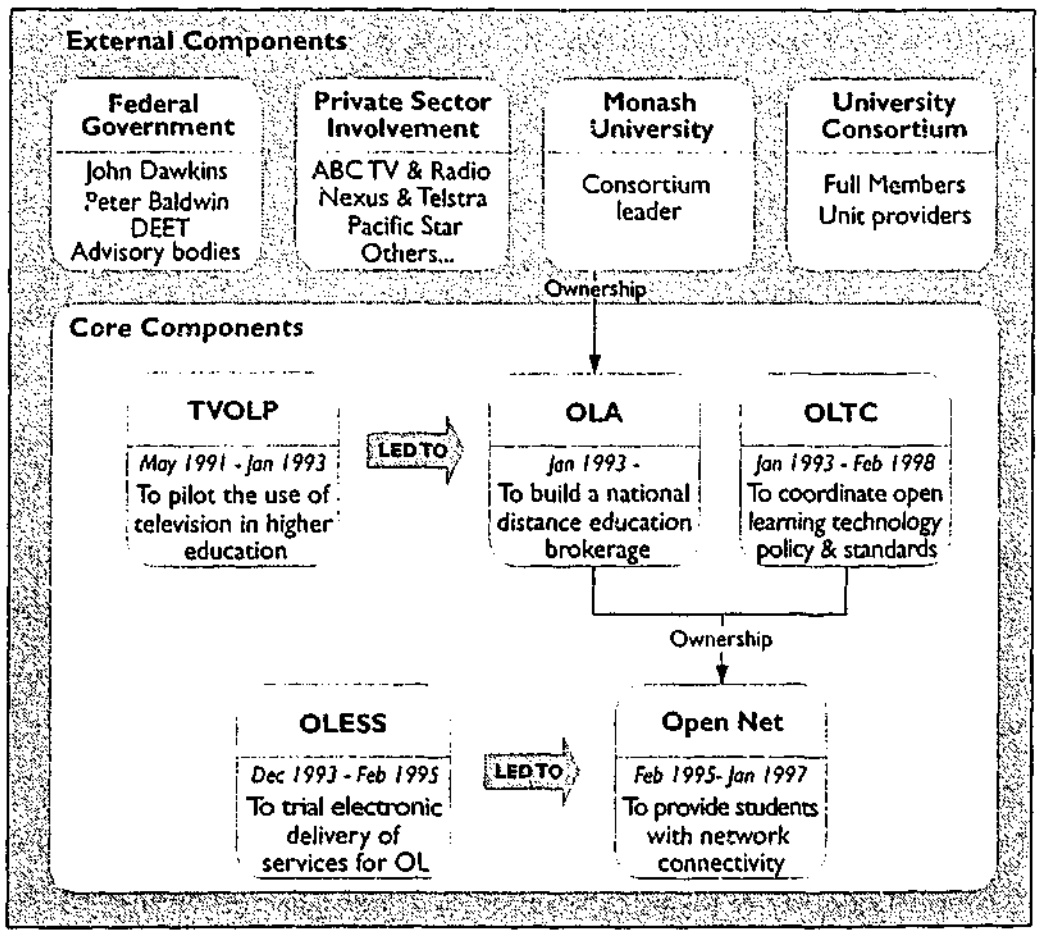


Figure 1.2 Organisational relationships and components within the OLI

The use of new technology by the OLI received considerable media attention and was central to its stated mission. It was the first time universities had

used a television broadcaster (the Australian Broadcasting Corporation) to deliver educational material nationally, and this is still perceived as the defining technology of the Initiative. The OLI did however experiment with various other technologies, including the use of computer-based learning in delivering education services. Each component of the OLI was underpinned by a core technology designed to improve the delivery of open learning – the TVOLP (television), OLA (computer-based learning), the OLESS (networked learning), the OLTC (carriage) and Open Net (internet service provision). In practice, however, most student guides and other educational materials were still paper-based and sent to the students by post.

The OLI attracted $51 million of Federal Government funding. Of this, $28 million was allocated to the OLA. The remaining funds were allocated to technology initiatives, student benefits and Commonwealth administration costs (Senate Hansard, 1994, p120). Funding for technology represented about half of the overall budget for the OLI, with much of this amount allocated to television programming, and the rollout of Open Net's networking infrastructure. The government provided generous seed funds for developing innovative projects, but recurrent costs were expected to be recovered on a user-pays basis. Widespread use of existing technologies were at the core of the OLI's approach, with innovative options explored at the margins.

STRUCTURE AND METHODOLOGY OF THE STUDY

This thesis is a study of the OLI, a complex of organisations with very broad educational objectives encompassing primary, secondary, higher education, Vocational Education and Training (VET) and corporate educational services. Its emergence occurred at a time of discussion and considerable controversy over the status and role of distance education and open learning challenged established educational practice and philosophy. Thus in Chapter 3, considerable emphasis is given to the search of an appropriate organisational model for the OLI. Inevitably, fragments of several organisational models are evidenced in the OLI, inviting the presentation of a hybrid or composite model. In subsequent chapters the OLI and its key sub-organisations are described, documented and evaluated from an organisational perspective, recognising earlier studies on the OLI in Australia.

The most significant study to date has been a PHD dissertation by Helen Williams (1995). Her research used the OLI as a vehicle for exploring theories of curriculum perceptions, curriculum-student relationships, curriculum controls and curriculum codes through a sample of 44 OLA student interviews. Williams aimed to clarify the meaning of the open learning concept. In so doing, she claimed to have developed a new theory of open learning based on the 'manefestation of educational democratisation' (Williams, 1995, p263). Her study was neither organisational nor developmental in focus. Rather, it aimed to clarify the broader meaning of open learning–an exploration of issues reaching beyond the Australian scene. Julie Hayford (1995) also made an important contribution with her MEd thesis. In this work she studied the impact of the OLI on staff at the University of South Australia, and in a subsequent journal article (Hayford, 1996) she provided further comment on various political and social aspects of the OLI.

By contrast, in this study, the OLI is conceptualised as an evolving complex of organisations, each a producer of educational services, dynamically responding to a variety of environmental pressures. The thesis explores these important issues historically, covering the first six years of OLI's rapid development from government concept to institutional reality. The OLI was a high profile government endeavour, yet surprisingly few independent studies have explored its evolution and achievements.

Since the organisational context of the OLI is the focus of the research, a qualitative rather than quantitative approach is appropriate (Bryman, 1989). Furthermore, the research traces the development and growth of the OLI both as an institutional history and as an examination of organisational change. The theoretical model detailed in Chapter 3, was generated by reviewing literature on educational organisations, organisation theory and case studies of open learning and distance learning. The study necessitated archival research, formal and informal interviews and participant observations by the author. During the data collection, there was considerable opportunity for informal contact with members of OLA and participating staff from provider universities. The framework for the study was summarised diagrammatically (the 'conceptual model'), which appears in Chapter 3.

This model (*Figure 3.5*) is examined and tested in each of the chapters (4 to 8). An organisational map of the OLI and its sub-organisations (*Figure 1.2*) became the organisational guide for the thesis. In subsequent chapters the key component-organisations which make up the OLI receive individual treatment.

DATA COLLECTION

Three chief sources of data were examined: a) archival material; b) interview data and transcripts, and c) diary records of informal interviews, participant observation notes and the notes of site visits.

Archival material was extensively used in each of the chapters of this thesis. Special permission was obtained to access three secure archival collections, with repeated visits made during 1996–8. First, the Open Learning Agency of Australia Pty Ltd archives. Second, Open Net Pty Ltd archives. Third, Monash University archives. In each instance, the archival material was examined in detail. Each relevant document was entered into a database, in some cases with accompanying notes and/or photocopy of the source. Several thousands of documents were treated in this way. Types of archival records included personal communications, file notes, internal reports, legal documents, minutes of board meetings and draft documents[2]. Archival research formed the core of the documentary investigation (*Appendix A*).

Site visits were made primarily to OLA offices (Melbourne) during 1996–7, but visits were also made to the OLTC (Adelaide) in 1994, and to Open Net (Sydney) in January, 1996. Various provider universities were also informally visited. These include Deakin University, University of New England and Murdoch University. In total twenty site visits were conducted.

Formal and informal interviews were held 'in person' and via the telephone. In instances where the interviewee agreed to be named, these are listed as references. In some cases, confidentiality agreements prevent the naming of these informants. Additionally, from time to time, the author came into contact with various staff involved in the OLI at conferences and in the workplace. These informal meetings were recorded in a research diary. In

[2] Cited references obtained from archival sources are indexed according to the author-year format, but with their source indicated by dash notation, showing their location, file reference number, and folio number, if the latter is available (*Appendix A*).

addition, the author participated in the First and Second Trials of OLESS (September 1994 to February 1995) as an assistant courseware developer for an Australian Studies unit, offered by the National Centre for Australian Studies, Monash University.

LIMITATIONS, DELIMITATIONS AND ASSUMPTIONS

The research was limited and constrained in a number of ways. Resources were not available to investigate all component bodies making up the OLI. Notably, the OLTC component of the OLI was not researched in any depth. The sheer size and complexity of the OLI became a constraint. The research was therefore focussed and delimited by a number of factors: a) *provision*—the study was restricted to higher education; b) *geographic scope*—it was not financially feasible to make multiple interstate visits; c) *central sources of data*—the research focussed on sources available; d) *time*—the project was restricted to the initial six years of operation of the OLI (December 1990–January 1997); and e) *approach*—the research focussed on policy development and organisational change. The project did not seek permission to access Federal Government archives. The cut-off date of the research coincides with the reformation of the OLI following a change in government.

It was assumed that the researcher was able to maintain a detached, objective view of the OLI during the period of data gathering and interpretation. It was also assumed that the committee records, reports, communications and other official documents were a reliable representation of events.

OUTCOMES OF THE STUDY

The study locates the OLI within the historical development of distance education in Australia. It presents a theoretical model of the OLI as a set of functioning organisations within the Australian higher education environment and offers a systems perspective of the OLI, including its response to the environment, implementation of government policy, utilisation of technology, approach to the student market, and stakeholder collaboration. The study offers in turn a description and analysis of the development of each of the core components of the OLI: The Television Open Learning Pilot

(TVOLP); Open Learning Australia (OLA); The Open Learning Electronic Student Support (OLESS) pilot project and; Open Net Pty Ltd. Finally, an intended outcome for the study is to contribute to a scholarly understanding of environmental and technological change in higher education with particular reference to the OLI. In summary, the thesis aims to use an organisational perspective to further the understanding and appraisal of the Australian Open Learning Initiative.

SUMMARY AND THESIS OUTLINE

In this introductory chapter, the complexities of the OLI were described, key terms defined and the orientation and methodology of the study outlined. The need for a documented account of the development of the OLI was established. The OLI was described as a unique organisation, complex and in its formative years, 1990 to 1997, characterised by substantial change. The thesis begins in Chapter 2 by exploring the historical background of Australian distance education policies and emerging government motives for establishing the Open Learning Initiative. Chapter 3 is a modelling exercise. It builds on published papers by the author (Campion & Renner, 1992; Renner, 1995) that consider the implications of Fordist and post-Fordist constructs in education, with particular reference to open and distance educational models. Chapters 4 to 8 consider the succession of changes in the OLI, the good times and the bad, the sequence of innovations adopted and implemented with varying levels of success by a set of organisations searching for their future. In the final chapter, the evolution of the OLI is reviewed by synthesising the findings of the previous chapters, by returning in summary to the mission, policies and practices of governments, and by reconsidering the historical and organisational outcomes of policies and decisions involving technology, student markets, and organisational structures.

2 The origins of the Open Learning Initiative

INTRODUCTION

THIS chapter explores the contextual and policy background of the OLI. It investigates the historical development of distance education provision, the emergence of relevant Government distance education policy, and the culmination of these policies in two major reforms of distance education, the Distance Education Centres, and the Open Learning Initiative. The chapter defines Open Learning in an Australian context, and concludes by revealing the conditions of the late 1980s and early 1990s that made Open Learning attractive to policy makers in the Federal Government. Open Learning will be shown to be a policy tool, harnessed to achieve national goals, to infuse higher levels of innovation, to achieve mass-provision and more generally to act as a catalyst in the reform of the higher education sector.

DISTANCE EDUCATION: THE AUSTRALIAN CONTEXT

Australia has a long and distinguished history of distance education provision in higher education. In the first half of this century, distance education options were offered by universities because of the need to overcome the tyranny of distance that separated students from institutions.[3] The first Australian distance education program was offered by The University of Queensland in 1911 (Holmberg, 1986), followed by The University of Western Australia in 1921 (White, 1982). In the immediate post-World War Two period, external education was provided by all of Australia's six universities in a government funded effort to retrain ex-service personnel, known as the Commonwealth Reconstruction Training Scheme. By 1948 there were 1,152 external students enrolled at the University of Queensland (White, 1982).

[3] Australia has a large landmass of over 7.6 million square kilometres, with a relatively small population of just over 19 million persons (Australian Bureau of Statistics, 2001).

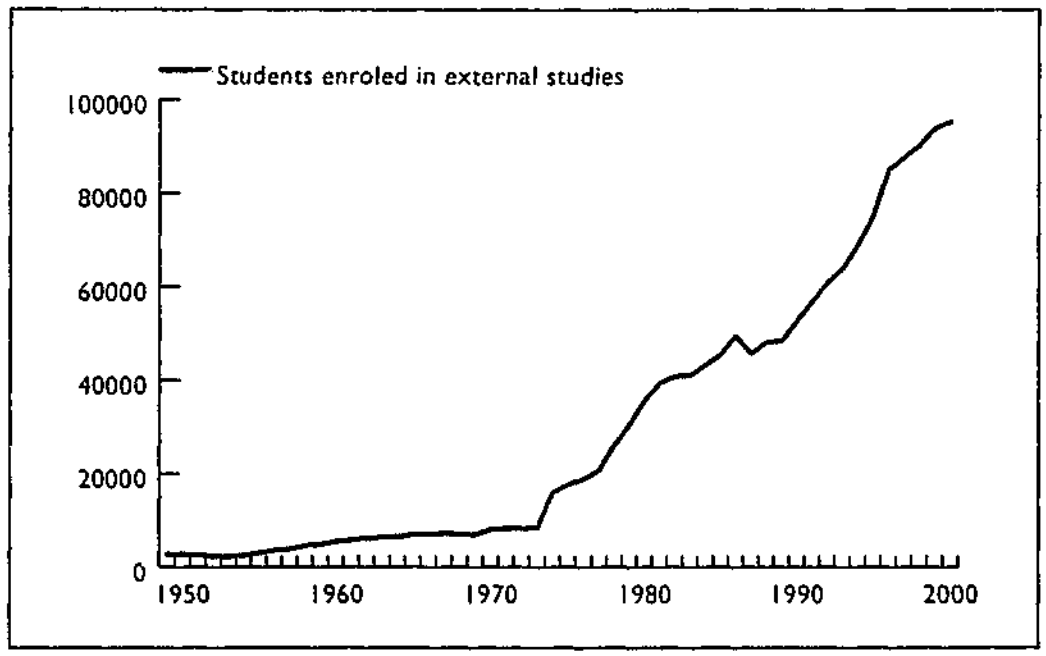
In 1954, the University College (Armadale) separated from the University of Sydney to form the University of New England in the following year. During this period, both the Universities of Melbourne and Sydney shed their external teaching responsibilities, although external course offerings were maintained by the new University of New England (McKay & Clarke, 1998).

In 1955, the University of New England commenced external teaching on a much larger scale, using residential colleges for periodic face-to-face contact with external students (University of New England, 2002). In the following years various other Australian universities began expanding their external studies programs, which matured into a distinctive Australian model, sometimes referred to as integrated or dual mode teaching (Department of Employment Education and Training, 1993b). According to this practice, academic staff within the faculty would concurrently teach both on-campus and off-campus students. Internal and external students would study exactly the same courses, would be taught by the same staff and would take the same examinations (Sheath cited by Evans & Nation, 1999). Separate departments, comprising academics who taught only at a distance, were therefore relatively rare in Australian universities. Only the University of Queensland employed this alternative structure, with separate external studies departments appointing their own teaching staff (Sewart, 1986). Dual mode arrangements achieved recognition with the establishment of Deakin and Murdoch Universities, both dedicated dual mode institutions. Professor Fred Jevons, the founding Vice-Chancellor of Deakin University, summarised the advantages of dual mode tuition as follows:

- Credibility. Parity of esteem between the two modes of study
- Spillover of DE practices to regular teaching, leading to better designed course materials, economies of scale and a convergence between the two modes (Jevons, 1984, 1987).

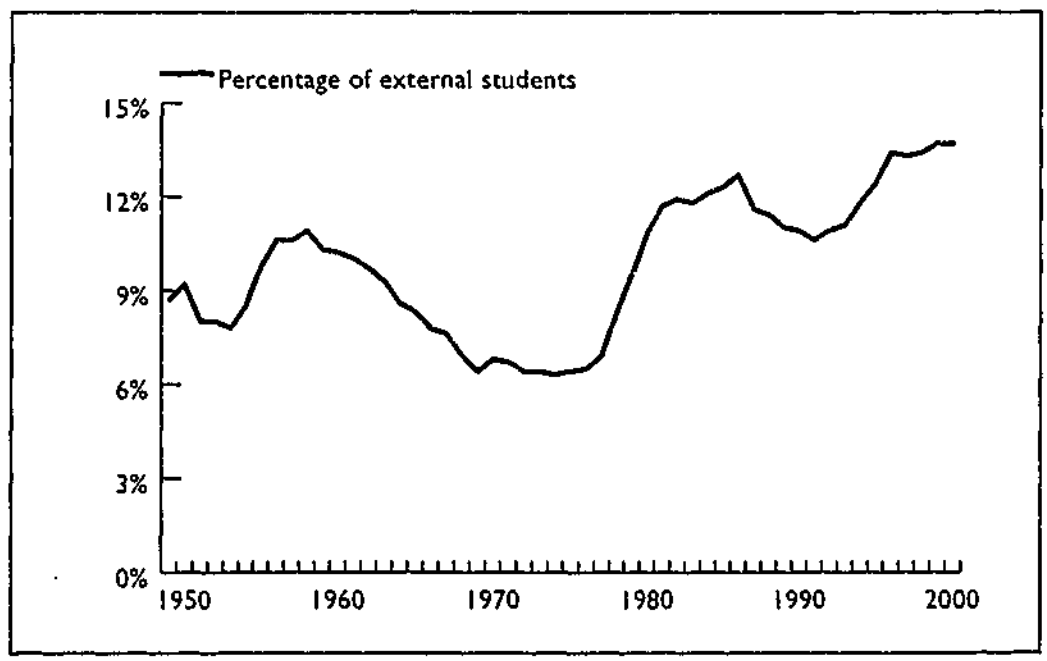
Nevertheless, distance education remained a marginal activity within higher education until the mid 1970s. As Anwyl, Powles & Patrick (1987) point out, until this time only six Australian higher education institutions offered external programs. By 1985, however, there were 37 institutions involved in

distance education, many of which were in the CAE sector. The following figures (*Figures 2.1* and *2.2*) show the growth in distance education enrolments, both as total enrolments and as a percentage of higher education enrolments.



Adapted from Department of Employment Training and Youth Affairs (2001a)

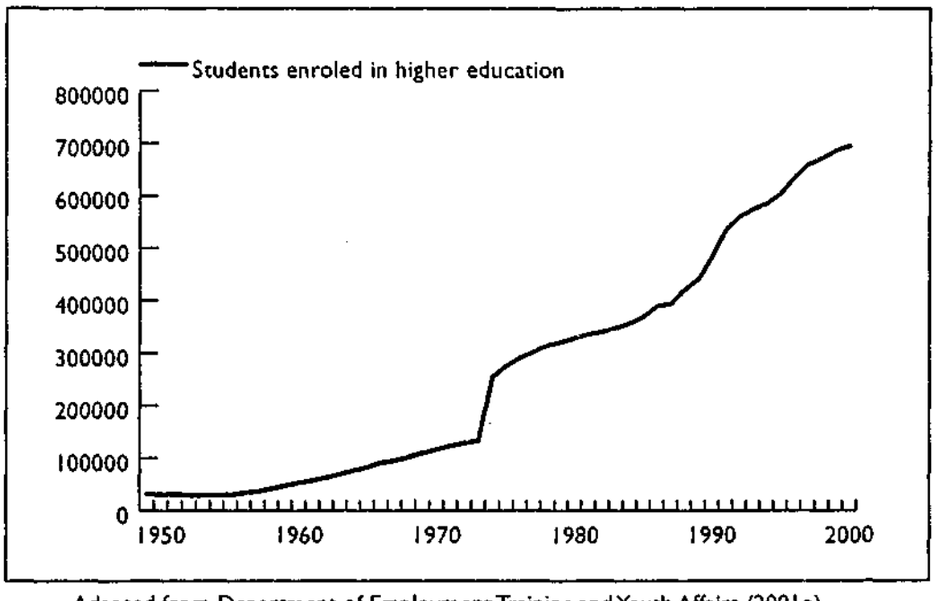
Figure 2.1 Distance education student enrolments in higher education: total numbers



Adapted from Department of Employment Training and Youth Affairs (2001a)

Figure 2.2 Distance education student enrolments in higher education: percentage of total enrolments

As evidenced in *Figure 2.2*, although distance education enrolments had rapidly increased since the mid-1970s, this trend was not reflected in the percentage of students electing to study in this mode. This was because the system as a whole had also been expanding rapidly (*Figure 2.3*), masking the growing number of distance education students. According to Karmel (1998), the overall growth in student numbers had a major impact on the ability of the Federal Government to finance the higher education sector. Growth in the number of university students was gradual throughout the 1950s and 1960s, with a period of substantial growth in the 1970s in the advanced education sector. From the late 1980s, student numbers grew rapidly once again (*Figure 2.3*).



Adapted from Department of Employment Training and Youth Affairs (2001a)

Figure 2.3 Total student enrolments in higher education

Today, Australia's higher education system integrates distance education in many courses. The convergence of modes predicted in the literature of the 1980s (Millar, 1985) appears to be accelerating at a rapid pace. Distance educators are no longer a 'breed apart' and their ranks are being swelled by a new generation of innovators involved in open learning, flexible delivery, e-learning and distributed learning. The growth in Open and Distance Education (ODE) is driven by an increase in demand. Significant numbers of city-based students are choosing distance education for convenience. Many

of these students are mature age, in full time or part time employment. They fit the profile of the 'life-long learner', for which flexibility and access are of fundamental importance. Innovation and non-traditional modes of delivery, such as those of ODE, are part of this shift. But, they are also perceived as a response to new student markets which place a high value on flexibility and access (Evans & Nation, 1999).

Australia's public universities are substantially reliant on discretional funding from the Commonwealth Government,[4] an effective policy lever. Moreover, with student participation rates rapidly increasing, the Federal Government has been advocating a shift to mass-provision, built on the principles of cost effectiveness and quality. Shown historically, changes in government policy reveal the emergence of ODE from a marginal activity to that of a strategic policy tool.

EARLY POLICY DEVELOPMENT IN DISTANCE EDUCATION

Following World War Two, the Commonwealth Government started to have direct and substantial involvement in formulating higher education policy. This was because the States had lost their powers to collect income tax, and could no longer provide funding on their own (Karmel, 1998). A system emerged in which the Commonwealth and State governments provided matching triennial funding of capital as well as recurrent costs for higher education (Gallagher, 1993a). At this time, an important review of higher education was commissioned to Sir Keith Murray in 1957, the *Committee of Enquiry into the Future of Australian Universities*. The so called Murray Report (Murray, 1957) urged the Menzies Government to inject additional funds into higher education. Demand for university education had been increasing throughout the mid-1950s, and the government was under pressure to expand the system. The establishment of Monash University in the following year (1958) was a direct outcome of this concern. The Murray Report adopted a very traditional view of the university, but nevertheless acknowledged external studies as a necessary but marginal activity in response to Australia's demographics (Campion and Kelly, 1988). Distance education

[4] The Commonwealth's key role results from the States ceding full responsibility for funding higher education in 1974. However, as universities become more entrepreneurial, public funding has been steadily declining as a proportion of operating expenditure.

was seen as 'a most distinctive and essential feature of the Australian scene' (Murray, 1957, p121). The report touched on the University of Queensland, which had 36% of its students studying externally and the University of New England, with 64% external enrolments, substantial enrolments, yet distance education was not prominent in the report's considerations (Zeegers & Macauley, 2000).

The *Martin Committee Report* (Martin, 1964) was responsible for establishing the Colleges of Advanced Education. The Committee proposed a tripartite system of universities, which was modified by Gorton (then Senator in charge of education) into a Binary System of higher education (Gallagher, 1993a). Universities were expected to engage in research and offer higher degrees, while Technical Colleges and Teachers Colleges were to become *Colleges of Advanced Education* (CAEs), with a focus on teaching. The idea was that the CAEs were more cost-effective for teaching than universities in that they were not funded for research. Furthermore, the Committee observed that 'part-time attendance is, in general, an unsatisfactory and expensive form of education... the Committee believes that steps should be taken to provide conditions which will make part time university studies on any considerable scale less necessary' (Martin, 1964, p76). The Report recommended '...to the extent that further expansion in external studies may be necessary, it should be undertaken by constituent members of Institutes or Colleges. The Committee does not consider the provision of external studies to be a University function' (Martin, 1964, p46). The major consequence of this report was the rapid expansion of the Colleges of Advanced Education within which most developments in alternative modes of delivery, teaching innovation and external studies subsequently occurred.

In 1974, the Whitlam Labor Government undertook a major reform of higher education by abolishing tuition fees, increasing university funding and by assuming financial responsibility for the sector via the newly established Commonwealth Tertiary Education Commission (CTEC) (Pennington, 1997). As part of these reforms, the Whitlam Government commissioned a Committee of 14 members Chaired by Peter Karmel to conduct a major review of tertiary education and consider the establishment of an Open University in Australia, modelled after the United Kingdom Open

University (UKOU) (Dhanarajan, 2001). The Committee considered various public submissions and released both a draft report (Karmel, 1974) and a final report (Karmel, 1975). The question of whether external studies should be administered by 'a separately created national teaching body, or mainly by existing institutions' was given careful consideration (Karmel, 1975, para 6.24). Public responses received by the Committee adopted one of two main stances. The first stance was that a large Australian Open University be established as a separate and autonomous body, offering its own courses, conferring its own degrees, and absorbing the external studies programs of existing providers. The second stance was that existing institutions were better prepared to cope with any growth in demand for external studies given their accumulation of skill and experience and Australia's relatively small and sparse population (Ashenden & Costello, 1984). In other words, the Committee was required to arbitrate the conflicting merits of centralisation and diversity.

In the final report, the establishment of a single national provider of distance education was ruled out on the understanding that it '...might actually reduce the likelihood of existing institutions adopting innovative policies' (Karmel, 1974, p80). Instead, an integration of on and off-campus provision was felt to better 'infuse the tertiary education system as a whole with a greater measure of openness than currently exists' (Karmel, 1974, p80). Additionally, the Committee proposed that the decentralised model be supported by a central coordinating structure formed by establishing an open tertiary education agency to encourage and facilitate the lowering of barriers and improving access to tertiary education. Thus, the Karmel Committee argued against the establishment of a dedicated distance teaching university, preferring the decentralised approach of mixed-mode provision utilising existing universities and colleges[5] (Rumble, 1992). The establishment of the open tertiary education agency was not realised at that time. It was swept away by the political crisis leading to the dismissal of the Whitlam Government in November 1975, leaving open learning as an unresolved issue over the next decade (Johnson, 1996).

[5] Similar conclusions were reached by the Swedish Committee for Television and Radio in Education in 1975, which also rejected the establishment of a DTU (Rumble, 1992).

The latter part of the 1970s following the Karmel Review, saw a great expansion of distance education enrolments. According to Moodie (1993b), this was driven by a lowering of student demand for higher education which prompted regional colleges to shift towards external studies as a means of securing much needed student enrolments. Conservative governments had established many regional teachers' colleges, technical colleges and business schools in loyal electorates with the 'rhetoric of extending access to education but with a hard eye on electorial advantage' (Johnson, 1996, p92). Thus, regional colleges were often located in small population centres with limited numbers of potential students. Following the economic downturn of the mid-1970s trained teachers were in over-supply, fewer rural students were electing to progress to higher education, and rural populations were shrinking in a general demographic trend towards larger urban centres (Johnson, 1996). Many regional institutions therefore began targeting metropolitan students who sought the convenience of off-campus study (Pascoe et al., 1997). In addition, the Whitlam Government's decision to abolish student fees introduced many more mature women into the higher education system, many of whom were attracted to the flexibility offered by distance education due to family commitments or their geographic location (Johnson, 1996). Hence, the rapid proliferation of distance education during the 1970s owed less to a coordinated policy of stimulating access and openness in the system, and more to attempts by regional institutions to fashion an alternative and viable market (McKay & Clarke, 1998; Moodie, 1993b).

Until the time of the Johnson Report (Johnson, 1983) external studies remained largely off the government agenda. In this report entitled *The provision of external studies in Australian higher education,* Richard Johnson (1983) voiced an emerging government concern over the unsystematic expansion in distance education provision. External studies was considered ripe for national coordination. It was argued that excessive course duplication across institutions had prevented the realisation of economies of scale (Johnson, 1983, p25). In this vein, Johnson proposed that improved efficiencies and higher quality course materials would result from less course duplication and greater concentration in course production. The Johnson Report argued for fewer, better courses delivered in the external mode, although the

providers themselves were to engage in self-regulation in that CTEC (at that time) opposed a Federally-sponsored mechanism for coordination (Johnson, 1996).

Drawing on the Johnson Report, the Hudson Report (Commonwealth Tertiary Education Commission, 1986) proposed what were subsequently called Distance Education Centres (DECs). The report attempted to ascertain the relative merits and faults of distance education provision current at that time. The advantages of an integrated and decentralised model were acknowledged. First, an integrated system was felt to promote consistency in the quality of credentials, staff and courses across both modes. Second, it encouraged competition and diversity. Third, it aided the integration and transfer of innovative methods across modes. Finally, dual mode provision was felt to be instrumental in the viability of some regional institutions which relied on a large proportion of external enrolments. However, the report concluded that more centralisation was necessary due to 'a fragmentation of resources and unnecessary duplication of effort' (Commonwealth Tertiary Education Commission, 1986, p222).

The Hudson Report drew heavily on the work of the Standing Committee on External Studies (SCES), which was chaired by Richard Johnson and had been formed to provide advice to CTEC. The Committee aimed to create a coordinated network of distance education providers. In its advice to CTEC, the SCES suggested that institutions with fewer than 3000 total external mode enrolments were uneconomic and that the large number of distance education providers required considerable rationalisation, eventually with 'no more than about half a dozen higher education institutions designated as principle providers, involved in distance education on any large scale' (Commonwealth Tertiary Education Commission cited by Johnson, 1996, p97). The recommendation of the Hudson Report was for regional institutions which relied heavily on their external enrolments to become principal providers of distance education. Others were to become specialist providers or withdraw their external programs altogether. The principal providers (later known as DECs) would receive full EFTSU-based funding for their courses, and would be expected to outsource some of their courses to institutions with specialist expertise at lower rates. This system of proportional

funding finds a parallel in the Open Learning brokerage model, discussed later in this chapter. The report had three overall goals: 1) to fund growth in higher education and expand overall participation 2) to encourage equity by increased participation by disadvantaged groups, and 3) to make higher education institutions more responsive to the needs of industry (Gallagher, 1993a). Ultimately, the Hudson Report's principal recommendations were implemented, but not before the higher education system as a whole received a major shake-up in what has become known as 'the Dawkins reforms'.

THE DAWKINS REFORMS: 1987–91

Following the general election of July 1987, John Dawkins was appointed minister of the new 'super-portfolio' of Employment, Education and Training[6] In a climate of recession and economic rationalism, he initiated a major reform of higher education aimed at improving the efficiency and effectiveness of the sector (Pusey, 1991). Minister Dawkins had developed a reputation for reform through market deregulation during his term as Minister for Trade (1984–7), but he also had a 'deep and detailed knowledge' of education, extolling the virtues of 'openness', 'universality' and 'government intervention' to achieve change (Marginson, 2000, p54).

To expedite the education reform agenda, Dawkins surrounded himself with a coterie of academic advisors and intellectuals (dubbed the *purple circle*) that met occasionally during 1987. This key group contributed policy options and mapped 'the boundaries of possibility' for the subsequent Dawkins reforms (Marginson, 2000, p56). Mal Logan, Vice-Chancellor of Monash University was a key member of the purple circle, perhaps even a founding member. The group gave papers to the minister, but according to Logan (cited by Marginson, 2000, p56), much of the discussion was conducted informally over the telephone.

Ideas for reform were then redrafted by Dawkins's senior advisors, Paul Hickey, and Gregor Ramsey among others (Marginson, 2000), culimating in the Green Paper (*Higher education: a policy discussion paper*, Dawkins, 1987) and the White Paper (*Higher education: a policy statement*, Dawkins,

[6] The Department of Education was amalgamated with Employment and Training to form the new Department of Employment, Education and Training (DEET) (*Appendix A*).

1988). The costs and benefits of higher education had been previously addressed in government policy documents, but with the publication of these two papers they became subsumed in a broader push to make higher education more relevant to national social, and, particularly, economic goals (Meek & Wood, 1997). According to Sharon Kemp (2002), the rationale of reform was a response to a report overseen by Laurie Carmichael, *Australia reconstructed* (Australian Council of Trade Unions, 1987), which attributed part responsibility to the higher education sector for Australia's poor economic performance. What ensued was a series of sweeping reforms, heralded by the abolition of the national university governing body, the Commonwealth Tertiary Education Commission (CTEC), and the transfer of its functions to the Federal Government. The so called 'Dawkins reforms' dramatically transformed Australian higher education. The major reforms were:

- Controlled expansion in the number of student places, targetting 'designated areas of national priority'.
- The requirement that students contribute financially to their education via the Higher Education Contribution Scheme (HECS).
- Establishment of the Unified National System (UNS) in which the former Colleges of Advanced Education (CAEs) joined the established universities on an equal footing (abolition of the 'binary divide'), allowing all public higher education institutions to receive equivalent funding for student places (EFTSU-based funding arrangements).
- The amalgamation of institutions to form a fewer number of larger universities.
- Encouragement of institutional entrepreneurship.
- Establishment of the advisory body, the National Board of Employment, Education and Training (NBEET) and its subordinate councils, the Higher Education Council (HEC) and the Australian Research Council (ARC).
- Government control of university research by investing the ARC with the authority to competitively allocate research funds.
- The creation of the Distance Education Centres.

Adapted from: Meek and Goedegebuure (1989), Johnson (1996) and Department of Education Science and Training (2002b)

The creation of the Unified National System (UNS) and the abolition of the binary divide between universities and Colleges of Advanced Education (CAEs) fundamentally changed Australia's higher education system. The Dawkins reforms allowed expansion of the higher education system, growth in participation, and improvements in access and equity. Universities were compelled to achieve this with gains in efficiency, through the rationalisation and reallocation of resources and by adopting a more entrepreneurial and market-driven approach. The Dawkins reforms heralded greater degrees of accountability and more diverse avenues of resource generation than had been previously been known by universities. New funding mechanisms encouraged more efficient use of resources, long term planning and improved institutional management (Gallagher, 1993a).

The initiatives of the Dawkins era were built on four key policy objectives: rationalisation, growth, equity and access. The first of these, rationalisation, was premised on the potential administrative cost savings of operating fewer, larger institutions. To maintain levels of funding, institutions were forced into amalgamations, which culminated in the now familiar multi-campus universities. According to the White Paper, this arrangement promised less duplication of effort in areas such as capital investment, student administration, student support, and materials development. The cost savings were to be reinvested into the system to fund greater student participation. Growth was therefore a key objective of the reforms to meet rapidly increasing demand. Education was also seen by the government as the provision of a public good in the sense that an increase in participation should better accommodate students from more diverse sectors of the population. Thus, equity can be considered the third important objective of the Dawkins Reform period. Groups targeted by the government included those disadvantaged by gender, race, Aboriginality, linguistic background, physical disability and socio-economic conditions. Special funding arrangements were set up to support equity initiatives for these groups of students, such as the Higher Education Equity Program and the Aboriginal and Torres Strait Islander Support Fund. However, there was also mounting pressure to broaden the concept of disadvantage to include school leavers. High school graduates were not well represented in employment statistics, and had become the

focus of media and public scrutiny in terms of rising unmet demand for higher education. Equity was therefore addressed in various ways. The dissolution of the binary divide, for example, gave recognition and credit to the disproportionate number of low socio-economic groups enrolled in the former CAEs. The Higher Education Contribution Scheme included an equity dimension by allowing students to pay back their loan when their income could support it. Universities were required to produce an equity plan and to establish targets as part of their organisational profile. These measures were employed to ensure '...that Australians from all groups in society have the opportunity to participate successfully in higher education' (Department of Employment Education and Training, 1990, p2). To facilitate growth and improve equity, the White Paper encouraged institutions to improve student access to educational services. Various initiatives sought to provide articulation between the TAFE and university sectors, and facilitate the transfer of credit among universities. This commitment was shored up in subsequent policy statements such as *A fair chance for all: higher education that's within everyone's reach* (Department of Employment Education and Training, 1990), so that *access, equity, growth* and *rationalisation* became the key intellectual and policy underpinnings of the Dawkins era (Marginson, 1993a).

THE REFORMATION OF DISTANCE EDUCATION

Distance education did not escape the scrutiny of government reformers during the Dawkins Period. However, many of the subsequent reforms were in fact 'ideas which had been around for some years but had not been drawn into a single statement' (Johnson, 1996). As a minister, Dawkins was exceptional in that he had the political will to act decisively and draw on earlier recommendations (Johnson, 1991). For example, the White Paper endorsed the recommendations of the Hudson Report (Hudson, 1986) which carried forward many of Professor Johnson's earlier suggestions for the rationalisation of distance education. Similarly, new life was given to the *Report for the 1988–90 Triennium* (Commonwealth Tertiary Education Commission, 1987) which established a theme of 'concentration of effort' (Johnson, 1991; Neumann & Guthrie, 2001). Both reports were important points of departure for the reformation of Australian distance education.

During the 1980s, there had been a substantial growth in the number of institutions offering external studies. Of the 48 dual mode institutions, that taught external students in 1986, five commanded almost half of all enrolments, while government figures showed that the last 22 institutions had less than 300 enrolments in 1988, suggesting 'shoestring distance education services' and unacceptable costs to the taxpayer (Keegan, 1994, p3). Commonwealth policy drew on such evidence to justify a concentration of distance education activities by limiting the number of distance education providers (Department of Employment Education and Training, 1993b). The White Paper took this up, suggesting the creation of specialised Distance Education Centres (DECs). Submissions from 14 institutions were received and examined by an assessment team headed by Professor Johnson (Moodie & Nation, 1993). Ultimately, eight DECs were established, as shown in *Figure 2.4*. Five of the DECs were formed by amalgamated institutions, and one was a consortium of three Western Australian universities (Jakupec, 1996).

University host	External Students (EFTSU)
University of New England	9,690
Charles Sturt University	8,556
Deakin University	7,426
University of Southern Queensland	6,717
Monash University	4,232
WADEC (Curtin, Edith Cowan and Murdoch)	4,000
University of Central Queensland	3,460
University of South Australia	2,698

Source: European Association of Distance Teaching Universities (1995)

Figure 2.4 External student enrolments at the eight DECs in 1991

The DECs were funded on a full EFTSU basis to develop, produce and deliver external studies. Institutions not designated as DECs were not qualified to receive full government funding for their enrolments, and were effectively barred from directly offering distance education programs. Instead, they were required to offer their external programs on a revenue-sharing basis

with an authorised DEC. The non-DEC partner would receive 85% of the normal student rate, and the DEC would receive 15% (Johnson, 1996). The main mechanism for rationalisation of the DECs was the National Distance Education Conference (NDEC), with a membership composed of a representative from each of the DECs, one from a non-DEC university, one from TAFE and chaired by a senior Commonwealth officer. NDEC was charged with the tasks of promoting efficiency and effectiveness among the DECs, encouraging the application of new technologies in the management and delivery of higher education, and providing advice to the minister (Jakupec, 1996).

Government intervention in the provision of distance education can be considered in the context of the prevailing climate for change both in Australia and internationally. The White Paper (*Higher education: a policy statement*, Dawkins, 1988), recognised the integral role distance education could play in supporting life-long learning and adult education, and was an important shift in attitude. Minister Dawkins (1988, p30) acknowledged the 'wide range of people who find on-campus [study] unsuited to personal circumstances', and advocated a key role for distance education 'in achieving the government's objectives of growth and greater equity in education'. Distance education was no longer viewed as a peripheral activity mainly in the service of remotely located students, but also as a response to metropolitan community needs (Zeegers & Macauley, 2000). For the first time since the Karmel Review (Karmel, 1974, 1975), off-campus study assumed an integral role within the higher education system (Herrmann, 2000).

Distance education was expected to satisfy key government goals, which applied to the higher education sector more generally. First, the distance education sector was of strategic importance in achieving access and equity goals. It already serviced disadvantaged groups in the community (isolated, physically handicapped, mature-aged and part-time), and aided the government's objectives of the universality of education and the basic right to be educated. Second, distance education was required to be more flexible, meet the demands of lifelong learning and act as a catalyst in supplying credit transfer opportunities, both inter-university and inter-sector. Third, the White Paper called for additional funding for the distance education

sector to trial new technologies to improve the quality and effectiveness of educational delivery and administration, initially by establishing a network of video-conferencing facilities (Cunningham et al., 1997).

The argument for concentrating distance education activities in the newly established DECs, was based on the claim that existing distance education provision in Australia was uneconomically structured (Dawkins, 1988). Dual-mode institutions were duplicating the efforts of each other, offering similar subjects to students. Duplication of effort was argued to occur in curriculum development, course content and instructional design, as well as administration, delivery, assessment and tuition costs. Conceivably, replacing the myriad of university offerings with nationally offered units, would ensure a monopoly of enrolments, and would be much cheaper to develop and run. Economies of scale could reduce service costs (administration, assessment and student support) through rational principles, such as bulk processing of assignments and more efficient staffing. The fixed costs of development could be amortised across all the enrolments. Furthermore, there would be considerable savings in that curriculum and staffing costs would not need to be duplicated across a swathe of institutions. These savings could be reinvested in higher quality course materials and delivery media. The concentration of off-campus teaching in the eight DECs was a part of this wider trend (Evans & Smith, 1999). Like the higher education sector as a whole, the distance education sector was expected to achieve growth through more efficient organisation of resources, 'reduced duplication' and centralisation of its operations (Dawkins, 1988). The Green Paper clearly outlined the rationalist position of the Commonwealth at that time:

> Over the past decade external studies has become increasingly important to Australians as a means to obtain higher education. For the future it presents a cost-effective means of extending access to a broad spectrum of the Australian community, including business and industry, and to overseas students who wish to gain an Australian qualification while studying in their own country. The government's basic objectives for provision of external studies are to reduce unnecessary duplication and to enhance the quality of provision for the greater number of students who could take advantage of this mode of study

> (Dawkins, 1987, p36)

Rather than just 'ideology or some consistent rationality', the new policies reflected pragmatic concerns regarding costs and outputs (Johnson, 1991, p52). Nevertheless, economic rationalism was a prevalent ideological force during the 1980s, and its influence on policy should not be discounted. The Reagan and Thatcher administrations, in particular, had implemented an austere regime of budgetary cuts and economic liberalism associated with opening public sector institutions to market forces. In a climate of expanding demand for higher education, and a weak national economy, Australian bureaucrats[7] and policy makers (from the Labor Right faction) turned towards economic rationalisation to improve public service efficiency (Pusey, 1991). Similarly, the Dawkins reforms represented a watershed in distance education policy, partly guided by the logic of economic rationalism (Campion & Guiton, 1991), and partly designed to reduce funding dependency on the Federal Government (Jakupec, 1996).

King (1993) notes however, that rationalisation through improved economies of scale was only part of the policy equation. If distance education could be shown to be cheaper than its on-campus counterpart, then it could 'afford a mechanism for the government to increase university places by encouraging a change of mode rather than injecting additional funds into the higher education system' (King, 1993, p17). Malcolm Tight (1991) reminds us that these concerns find echoes in other countries such as Britain, raising a question of critical importance: Are large institutions necessarily a better way of organising educational delivery?

This draws attention to a wider debate regarding the costs of distance education and the relative advantages both of DTUs (Distance Teaching Universities) and DMUs (Dual Mode Universities). In 1992, Rumble (1992) sparked a debate (Keegan, 1994; Mugridge, 1992; Rumble, 1994; White, 1992) in the British distance education community with his article, *The competitive vulnerability of distance teaching universities*. He argued that the monopoly position of DTUs was under increasing threat from the more flexible and competitive DMUs, which were able to produce courses quickly and cheaply, could target them to a wider range of part time students, and could develop

[7] According to Pusey (1991), executive level bureaucrats of the Australian Federal Government were leading exponents of neo liberalism and drove policies of economic rationalism.

a greater variety of subjects at a greater number of levels (economies of scope), including many more specialist programs (Guiton, 1997). Furthermore, in many cases, DMUs provide higher quality academic support and tuition to external students in that on and off-campus students at DMUs are taught by the same academic staff (Rumble cited by Hart & Knoors, 1998), thus achieving a parity of standards between modes. The greater economies of scale in DTUs must therefore be tempered by Rumble's (1992) observation that their supposed cost advantages are achieved by limiting 'both the range of subjects taught and their level of student support services' (Rumble cited by Guiton, 1993). Rumble (1994) also described a British trend in which many campus-based universities (CBUs) were developing resource-based learning materials for on-campus students, but using them to teach off-campus students (market expansion), thereby securing an economic advantage while transforming themselves into dual-mode institutions. Overall, Rumble's position found considerable support among Australian distance educators, who had long argued the advantages of integrated provision and who questioned the rationale behind centralisation.

In response to Rumble (1994), Keegan (1994) defended the viability of DTUs, arguing that large, centralised distance education providers have a number of advantages over DMUs, namely: the ability to develop a strength in distance delivery through dedicated administrative structures, and associated economies of scale resulting from spreading the high fixed cost of developing courses over a large number of students.

Clearly, in the Australian context, the establishment of the DECs was an endorsement of such a position, namely the rationalisation and attempted separation of distance education activities from on-campus teaching (Johnson, 1996). The DECs were created on the expectation that centralisation, rationalisation, along with a shift in mode (from on-campus to off-campus) would realise considerable cost savings for the government. Significantly, however, by adopting this position the government was operating under a double standard. On one hand, the Commonwealth had removed distinctions between institutions with the dismantling of the binary divide, and had acknowledged the integral role of distance education. However, on the other hand, the introduction of the DECs represented a policy of division by

mandating a formal distinction between modes of delivery, where no such distinction had existed in the past (Campion & Kelly, 1988; Jakupec, 1996). Simply put, in devising the DEC policy, the government did not acknowledge the advantages of an integrated approach, and in this sense, the DEC system never attained broad support from the Australian distance education community.

BALDWIN – NEW DIRECTIONS

Higher education policy took a new turn on 7 May 1990 with the appointment of Peter Baldwin as the Minister for Higher Education and Employment Services. Minister Baldwin was responsible for continuing the higher education reform agenda. The position was junior to the Minister for Employment, Education and Training occupied by Minister Dawkins. However, on 27 December 1991 this senior portfolio was transferred from John Dawkins to Kim Beazley, in effect consolidating Minister Baldwin's position and the new reform agenda he espoused (*Appendix B*). Under Minister Baldwin, distance education assumed the strategic role of infusing open, flexible and innovative practices into the whole higher education system.

The first statement of the new direction in government policy appeared in *Higher education: quality and diversity in the 1990s* (Baldwin, 1991d), sometimes referred to as the 'Baldwin Statement'. Building on the White Paper, the statement renewed the call for efficiency and effectiveness in higher education, greater diversity across the universities that made up the UNS, and proposed the introduction of university audits by the new 'Committee for Quality Assurance in Higher Education'. In addition, the statement included a careful reorientation of the reform agenda begun by Dawkins. It called for new efficiencies through the widespread use of technology and 'alternative modes of delivery' to support innovative practices in teaching and learning (Baldwin, 1991d). According to McKay and Clarke (1998), technology was promoted as a panacea for reducing the costs of higher education. For King (1992b) however, the shift in policy indicated the minister and his advisors had 'given up on distance education' and were 'looking around for some other way of achieving open education' (King, 1992b, p90).

A perception had formed in the government that the DEC system was doing little to encourage the development and spread of innovative practices within higher education (McKay & Clarke, 1998), and a new direction was proposed (Campion, 1996a). Official acknowledgement of this appeared in the Baldwin Statement (Baldwin, 1991d), in the consultants' report, *Changing patterns of teaching and learning* (National Board of Employment Education and Training, 1992b), and more pointedly in *Distance education in Australia* (National Board of Employment Education and Training, 1992c). The latter report recommended that the special funding arrangements for distance education through the DECs be abolished so that all institutions could have the flexibility to choose their preferred mode of delivery and deliver in external mode under equal EFTSU-based funding arrangements. In 1994, after recognising the unsuitability of the DEC system it was eventually disbanded (Forster et al., 1997; Johnson, 1996; Taylor et al., 1996).

The reasons for the abandonment of the DEC system are several. First, according to Johnson, NDEC was an ineffective coordinating body. It was premised on self-management, requiring the DECs to rationalise, 'with no way for sanctions or pressure to be applied' (Johnson, 1996, p99). Second, the system of revenue sharing between DECs and non-DECs caused 'intense irritation' to the non-DECs and was sometimes evaded by collusion between the two institutions (Johnson, 1996, p99). However, Evans & Smith (1999, p4) suggest that '...such partnerships were rare. Institutions which had fought competitively for students for several years and which had now been plunged into a tussle over DEC status were not predisposed to enter into a cosy relationship between victor and vanquished'. Many of these institutions realised they were missing opportunities in part-time professional education (Deakin University, 2002) and although some non-DECs discontinued their distance education programs, others surreptitiously maintained their programs under different names: 'distance education... was dropped from their lexicon and in its place came a variety of other terms such as extended campus, open campus and flexible delivery' (Evans, 1999, p93). Third, under the competitive structure of the UNS, all universities were pressured to find non-government income. Fourth, many universities were exploring the potential of new communications technologies. Such educational technologies drew on interactive learning methodologies and

were viable adjuncts both to distance education and flexible delivery (Evans & Smith, 1999). Thus, government efforts to centralise and concentrate distance education activity through the DEC system was largely unsuccessful.

More importantly however, the rationale underlying the DEC system had been rapidly overtaken by events within Canberra. The perceived value of distance education was redefined 'as a catalyst for the reform of teaching in universities' (Evans & Nation, 1999, p23). Furthermore, it was thought better to encourage 'all universities to invest in technologies catering for both on-campus and off-campus provision' (Beazley cited by Evans & Nation, 1999, p24). These new objectives required broad-based institutional uptake of distance education practices and were therefore incompatible with a strategy of isolating such practices to the eight DECs (Gamage, 2002). The opening up of distance education however, did not suggest a diminished role for the government. Rather, the aim was for coordinated development using targeted funding and competitive tendering. Overall, the government called for universities to develop discipline specialisation (diversity) to achieve selective excellence (quality). From August 1990, these DEC objectives became part of the government's policies for Open Learning.

OPEN LEARNING POLICY EMERGES

Open Learning emerged in the early 1990s, to considerable fanfare. Government ministers heralded its innovative and transformative potential. It was promoted as a bold attempt to modernise higher education and to bring learning opportunities to more Australians. Its approach however, grew out of the DEC system, preserving continuity in policy. The earlier objectives of rationalisation and coordination were not abandoned, but were newly expressed through Open Learning. The goals of credit transfer, improved efficiency and the advocacy of new technologies were further links between the DEC system and the OLI. Both shared similar intellectual underpinnings. Both were conceived and developed during the 1980s by many of the same government reformers. The OLI was an extension of the DEC system, perhaps as a rising phoenix in response to government disaffection with NDEC and the DECs. These issues along with the creation of OLI policy will be addressed in the following discussion.

In 1984, Dean Ashenden and Ray Costello reopened the open learning debate with their Commonwealth discussion paper, *Can further investigation of open education be justified?* (Ashenden & Costello, 1984). The authors revisited the recommendations of the Karmel Review, and found that during the intervening years open provision (based on the level of flexibility in admissions, timetabling, course structure and mode of study) had become only 'weakly established' in Australian higher education (Ashenden & Costello, 1984, p14). In contrast, they argued that the nationally-structured open universities in other countries provided tertiary students many more open learning opportunities, with 'little reason to suppose that *open* arrangements [in Australia] will move in these directions unless the Commonwealth intervenes' (Ashenden & Costello, 1984, p15). The paper was not prescriptive about government intervention, although it endorsed greater levels of government coordination and centralisation, the establishment of an open learning working party, and further investigation of open learning options.

This advice closely followed a recommendation of the *Karmel Report* which called for better coordination of distance education activities through the establishment of an agency designed to 'encourage and facilitate the lowering of the barriers of access to tertiary education' (Karmel, 1975). However, unlike Karmel, Ashenden & Costello did not rule out the possibility of establishing an Australian Open University which they thought might be effective in combating the uncoordinated proliferation of external studies programs.

The idea of consolidating distance education within a single institutional entity was very appealing to the government. Early in his term, the proposition was put to Minister Dawkins:

> In distance education [Minister Dawkins's] first inclination was to establish an Open University on the British model, an institution for which he had a high regard. This was also the first inclination of Karmel's review of open tertiary education in 1974. Both changed their minds to the dispersed model when some of the realities in Australian conditions became clear to them. Instead, Dawkins opted for rationalisation and concentration in a few distance education centres.
>
> (Johnson, 1991, p53)

Transferral of distance education to a single provider was thought to be financially and politically expensive. The UKOU model which employed teams of local tutors would be difficult to implement given Australia's large geographic size. High quality broadcasts of learning materials would not be as viable given Australia's smaller population. Furthermore, many of the regional institutions were reliant on off-campus enrolments. Their exclusion from distance education might adversely affect their operations and incur political repercussions (Hayford, 1996):

> If you establish an OU, you destroy or gravely damage the higher education institutions of Rockhampton, Toowoomba, Lismore, Armadale, Bathhurst, Wagga, Gippsland, Warnambool, Geelong and Launceston; that is a lot of electorates.
>
> (Richard Johnson cited by Hayford, 1996)

Nevertheless, the DECs had earlier been conceived as a state-based consolidation of university distance education activities, incorporating an element of national coordination through NDEC. The DEC system had been the growing subject of 'ministerial dissatisfaction' (King, 1992b, p89) in that its coordinating body, NDEC, was considered to be ineffectual in championing government policy and in leading the drive towards student centredness, the embracing of new technologies, improved credit transfer arrangements and greater efficiencies (Johnson, 1996). Furthermore, 'the DEC system had not led to fewer providers in distance education nor to substantial savings' (Senate Employment Education and Training Reference Committee, 1994, p14), nor indeed any 'significant movement towards rationalisation' (National Board of Employment Education and Training, 1992b, p7). There remained considerable pressure to establish a more robust national system of distance education, which hitherto had only partially been realised through NDEC and to match the perceived efficiencies of the UKOU model.

Professor Richard Johnson (1991; 1996) had been arguing for national coordination of Australian distance education since the early 1980s. He had developed a reputation as an influential government advisor in the area of distance education policy. His reports of the era included, *The provision of external studies in Australian higher education* (Johnson, 1983), *Report on the joint Department of Employment, Education and Training / Higher Education*

Council assessment team on the designation of Distance Education Centres for Australia (Johnson, 1989) and *Open learning: commissioned report number 4* (Johnson, 1990).

In *The provision of external studies in Australian higher education,* also known as the Johnson Report (Johnson, 1983), he put forward a strong case for the rationalisation of distance education (Inglis, 1999b). Over the next several years, the recommendations of Johnson were reiterated in various reports such as *Review of efficiency and effectiveness in higher education* (Commonwealth Tertiary Education Commission, 1986). Between September 1986 and September 1987, Livingston (cited by Herrmann, 1995) identified nine major Commonwealth reports or evaluations similarly dealing with distance education issues. In addition his role as Chair of the Standing Committee on External Studies (SCES) immediately prior to the Dawkins era (Commonwealth Tertiary Education Commission, 1987) provided a strong intellectual argument for the formation of the DECs (Johnson, 1996). His later work (Johnson, 1990) established the rationale for the development of Open Learning policy.

Johnson's discussion paper, *Open learning: commissioned report number 4* (Johnson, 1990), provided a new direction for government policy. The paper showed how open learning practices could be harnessed to encourage new levels of student-centredness, better use of new technologies, improved efficiencies and perhaps cost-savings for the government. For Johnson, Open Learning involved a new approach both by teachers and by students. For the government, Johnson's model of open learning was also of appeal because it stressed the importance of availability of education and student access. According to Johnson (1990, p24), 'the democratic ethos ought not to tolerate inequity and perpetual disadvantage; the disadvantaged ought to have the opportunity to overcome their situation'. Moreover, the model proffered 'the possibility of a model to utilise a shared bank of high quality curricula and materials which would minimise costs in large popular programs, and maximise student choice in small enrolment courses' (Cunningham et al., 1997). The brand of Open Learning espoused by Johnson (1990) was educationally and socially justifiable, and promised a level of consolidation, efficiency and cost-effectiveness which could only be achieved with national coordination.

The Open Learning Initiative took its initial form in 1990 with the announcement of the TVOLP (August 1990), although it should be noted, at this stage it was not referred to as the OLI. The announcement had been preceded by the appointment of Minister Baldwin (May 1990), and Johnson's Open Learning discussion paper (June 1990). These events, suggest that the OLI was given form by two key proponents: Richard Johnson, the advisor, who saw in Open Learning a chance to realise his earlier efforts to consolidate and rationalise distance education provision, and Minister Baldwin, the politician, who saw in the OLI a means for projecting higher education into the age of new technology. By recasting these earlier objectives within the framework of Open Learning, the government signalled a return to the recommendations both of Karmel (1975) and Johnson (1983) (Pritchard, 1992j).

It remains a matter of conjecture, however, as to what specific circumstances provided impetus for government action. Herrmann (1995, p4), for example, suggests it may have been 'conceived in a taxi travelling between the Lakeside Hotel and the airport in Canberra'. Irregardless of the particular sequence of events, by 1991 the Commonwealth had established as a division of DEET, the National Open Learning Policy Unit (NOLPU), signalling a major new policy effort. In addition, NOLPU encouraged academic debate through a number of commissioned reports on aspects of open learning (European Association of Distance Teaching Universities, 1995). Within the space of a year, Open Learning had been transformed into a national strategy, in the form of the OLI, incorporating all post-secondary sectors of education.

DEFINING OPEN LEARNING

Open learning is a term clouded by many interpretations since reaching prominence when the Open University in the United Kingdom admitted its first students in 1971 (Open University, 2002a). Since then, open universities and open learning entities within universities have been established in many countries (Department of Employment Training and Youth Affairs, 2001b). The trend has also extended into vocational education and training, if not in name then in nature, where increasing use of flexible delivery and

opportunities for self directed learning are available for trades and white collar employees. Despite, or perhaps because of the newness of the term 'open learning' and its rapid growth, there have been many attempts in the literature to clarify its meaning. *The Commonwealth of Learning* (2000) notes that there is no one definition of open learning, but many approaches to defining the term and acknowledges that open learning practices can occur in on-campus, off-campus, single, dual and mixed modes of delivery.

Kember (cited in Moore & Kearsley, 1996), in his open learning model identified seven criteria of open learning, while admitting that few, if any, learning institutions would exhibit them all: *entry* (where no prerequisite qualifications would be needed), *time* (where students are able to access course materials and study at a time that suits them), *place* (there are no locational constraints on student learning), *pace* (students study at their own pace), *curriculum* (course content is negotiable), *assessment* (students negotiate assessment), and *cost* (students are freed from the costs of enrolment, materials etc). Kember (1995) also foreshadowed the possibility of additional 'aspects of openness' emerging in the future.

In Australia a definition of open learning proposed by Richard Johnson (1990) was accepted by the Australian Education Council (1991), the Senate (Australian Federal Government) and the OLTC in 1993/4 and is now widely accepted in Australia (Open Learning Technology Corporation, 1997).

> Open learning is an approach rather than a system or technique; it is based on the needs of individual learners, not the interests of the teacher or the institution; it gives students as much control as possible over what and when and where and how they learn; it commonly uses the delivery methods of distance education and the facilities of educational technology; it changes the role of teacher from a source of knowledge to a manager of learning and a facilitator. It justifies these measures by arguments of efficiency, cost-effectiveness and equity.
>
> (Johnson, 1990, p4)

This definition highlights the complexities of open learning. It stops short of claiming open learning as a philosophy, though in its substance, it suggests components of a possible 'practical theory', including student centredness, student responsibility, interactivity through technology, and the teacher as

manager and facilitator. As such, Johnson's view finds an accord with Lewis and Spencer (1986), who saw the 'heart of open learning' as the individual learner, and Miles (1994, p20) who found open learning as more demanding and more innovative than established practices of distance learning in that it promotes qualities of autonomy, independence and flexibility.

The Federal Government's expression of open learning through the OLI was strongly, although selectively influenced by Johnson's paper. Not all aspects of his conception of open learning were equally treated. Williams's (1995, p244) research on the OLI suggests 'a technocratic orientation' and a fairly narrow government view of open learning that focussed on extending access, encouraging participation and the promotion of distance delivery and teaching methods. Thus, Open Learning may also be succinctly summarised in two words—*access* and *equity*, the former referring to a lowering of entry restrictions and the latter to improved opportunities for under-represented groups, such as students in remote locations, and indigenous students who have had limited study opportunities. This interpretation of openness offers a degree of flexibility to the learner to make choices regarding the medium or media, the place of study; the pace of study; support mechanisms (eg tutors available on demand, and various forms of audio and computer support), as well as entry and exit points. Jakupec and Nicoll (1994, p219) suggest however, these measures did not automatically guarantee an open approach to learning, because 'learning experiences... cannot be opened beyond the concept of what learning is'. They argue along with Campion (1996b) that openness is more a product of the learning methodology (eg behavioural, interpretive and critical) employed by teachers, than the outcome of a student-centred approach to curriculum and entry prerequisites.

Flexible learning, distance learning and open learning are a trio of closely related terms, which are frequently confused and applied in an interchangeable fashion. Taylor et al (1996) make some useful distinctions between these terms:

> We use the term 'open learning' to refer to an educational philosophy expressed through a move away from traditional face-to-face practices, while 'distance education' is used to refer to a relatively traditional educational delivery system designed to meet the needs of geographically remote students. That is, 'open

> learning' alludes to an approach which places student learning, needs and choice at the centre of educational decision-making. 'Distance education' refers to practices which allow off-campus participation in educational programs, largely through the provision of print-based resources... The term 'flexible' is used to refer to practices which utilise the capacities for learner-learner and teacher-learner interactions made possible through recent developments in communication and information technology to provide increased 'openness' in both on and off-campus delivery of educational programs.
>
> (Taylor et al., 1996, p6)

In addition, *flexible learning* should be distinguished from *flexible delivery*. The former term refers to the core activity of education, the learning process in the individual student, and student choice regarding the methods employed in that process. By contrast, flexible delivery is an administrative term which implies a focus on the modes in which content can be distributed so as to relieve students of the time/place/space determinism of on-campus education, and on administrative systems which respond to consumer needs.

Distance education commonly refers to programs that have primarily been instituted to service isolated or external students. Typically, Australian distance education programs correspond with Keegan's (1990) categorisation of a Level One distance education model, employing no contiguous teaching, resource-based and pitched at an individual learner. This contrasts with Level Two (the UK Open University model) which is resource-based but with a local facilitator. According to Nipper (1989) however, forms of open and distance education are not static, but are evolving through successive generations of technology which facilitate the production and distribution of learning materials and learning opportunities. These technologies have progressed from correspondence (print), to non-interactive forms of multimedia (broadcast), and more recently, to interactive distance learning (flexible communications technologies). This progression has been facilitated by a growing acceptance of distance learning, the use of communication and information technologies in all forms of education, and the increasing use of new technologies and ODE practices in teaching on-campus students (Evans & Nation, 1999). As such, the progression has also led to a blurring of distinctions between modes of study.

POLICY OBJECTIVES

The OLI combined a range of government objectives, including the pragmatic matters of rationalisation, cost-effectiveness, efficiency and competition, and the social policy concerns of access, equity, credit transfer and diversity. These policy objectives were informed by Australian and overseas developments, and included the additional government aspiration of investigating alternative technologies, particularly computer-based learning. Each of these objectives will be briefly considered in the present section, to situate policy within the context of the late 1980s and early 1990s, and reveal the conditions from which the Open Learning Initiative emerged.

ACCESS AND UNMET DEMAND

As shown in *Figure 2.3*, higher education enrolments had been rising rapidly throughout the 1980s and the absorption of rising 'unmet demand' was a critical objective of the UNS (Department of Employment Education and Training, 1995b). Foremost in the minds of political leaders was the shortfall in the number of places allocated to school leavers. A large proportion of places in first year university programs were awarded to mature age students who often out-competed school leavers for places. In 1981 for example, the proportion of mature age students to school leavers was 60%, which later fell to 47% in 1991 (Department of Employment Education and Training, 1993b). Furthermore, according to the Australian Vice-Chancellors' Committee (1996), in each year from 1989–96, between 6 and 9 per cent of people that were eligible missed out on obtaining a university place.

The focus on school leavers, itself a political issue, was reflected in a newfound distinction between the terms 'access' and 'participation'. *Participation* referred to the total number of students enrolled in higher education institutions, *access* was defined as the percentage of first-time students enrolling in universities (Department of Employment Education and Training, 1994). In the early 1990s, low access rates were of particular concern. In 1993, for example, 49.2% of 18 year olds obtained first year, first degree places. By 1996 however, this had increased to 60.5% of Australian 18 year olds, indicating that access rates improved as the UNS expanded. (Olsen & Aeuckens, 1997). These figures also show that unmet demand was of particular

importance at the time of the founding of the OLI. As Williams (1995, p244) has suggested, the OLI was a 'pragmatic response to unmet demand', driven by a policy of substituting mature age students into Open learning, yielding more fully-funded places for school leavers in conventional on-campus programs.

COST

Until the Dawkins reforms, the public provision of higher education was almost completely dependent on government funding. In subsequent years, this situation steadily reversed with the introduction of various fees. Full fees for overseas students began in 1986, and Australian resident undergraduate fees (HECS) commenced in 1989. By 1994, non-government sources of revenue made a significant contribution to the revenue mix of universities (*Figure 2.5*), and fuelled the expansion of the system (Dobson et al., 1998).

Funding source	1981 %	1987 %	1994 %
Government	90	84	62
Fees	0	2	24
(HECS)	(0)	(0)	(13)
Other	10	14	14
Totals	100	100	100

Source: Dobson et al (1998, p51)

Figure 2.5 Sources of higher education funding shown as percentages

The Open Learning Initiative was to extend this rationale by requiring full fees from students, roughly equivalent to HECS. Financially, the OLI was a particularly attractive proposition for the government as government support would not cover recurrent costs, staff costs, nor any capital component. Aside from Commonwealth seed funds, Minister Baldwin represented it as a consolidation of existing distance education provision, fully self-funded after 1996 (Baldwin, 1991c; Gallagher, 1992a).

CREDIT TRANSFER

A further advantage of an Open Learning brokerage was its potential to establish conditions for credit transfer, across universities, and particularly

between the university and TAFE sectors. A mainstay of Open Learning was the requirement of participants to recognise the academic standards of other participating universities, and jointly develop degree pathways (Department of Employment Education and Training, 1991). The DEC system had itself failed to realise significant improvements in inter-institutional credit transfer arrangements (Patterson, 1992), and in 1989, the government's concern was declared in *Credit transfer: a discussion paper* (National Board of Employment Education and Training, 1989), which recommended a range of targeted projects to address this issue. Pressure was put on the AVCC (Australian Vice-Chancellors' Committee, 1993) to loosen-up inter-institutional credit arrangements, and an agency, the Credit Transfer Authority of Australia, was established to issue certificates across the UNS (Patterson, 1992). The Open Learning Initiative was expected to promote credit transfer where earlier attempts had met resistance.

DIVERSITY

Notwithstanding the numerous types of diversity which can be identified in relation to higher education (Meek & Wood, 1998), government expectations for the OLI were explicit regarding *student diversity*: 'Open learning... is a way of taking a wider spectrum of the population into the learning process' (Johnson, 1990) by 'valuing flexibility, or the maximisation of student options' (King, 1993, p18). As the Higher Education Council (1990) forecast, continued growth within the UNS would be attributable to an expanding lifelong learning market, and the extension of open learning to students from more diverse backgrounds, particularly greater numbers of mature students. Hence, the objectives behind Open Learning worked in consort with government desires to leverage the higher education system as a cheap and effective educational response to the demands of lifelong learning and to be more responsive to the diversity of student needs (Moodie & Nation, 1991). The OLI was presented as a means of redressing the perceived failure of the universities and the DECs in particular, by providing new study options to students who would otherwise not normally gain places in conventional universities (King, 1993).

Another type of diversity implicit in the OLI structure was *systemic diversity*, or 'specialisation through selective excellence' in which universities were

encouraged to build on their individual strengths (Department of Education Science and Training, 2002b, p7). Institutions were expected to provide units to the emerging Open Learning Australia (OLA) in academic fields of demonstrable expertise. Thus, the government hoped to realise its compound aspiration of concentrating resources in a rational manner and advancing institutional diversity within the UNS (Baldwin, 1991d; Dawkins, 1988).

COMPETITION

An important government strategy for improving efficiency was the introduction of inter-institutional competition through structural reform and competitive funding arrangements. The OLI encapsulated both ideas. In particular, each of the companies which comprised the OLI were established as mechanisms to administer a system of competitive tendering for educational services, first by selecting services, and then by putting these out to tender. Organisations would compete for the right to supply services.

Competitive tendering had been widely used within the public service since the early 1980s, and later in the higher education sector, when research funding was competitively allocated following the Dawkins reforms (Industry Commission, 1997). The success of research tendering lead to calls for wider deployment of the concept, in EFTSU funding and administration, the development of 'clearing houses' for shared knowledge and resources, and in IT contracts. According to the Industry Commission (1996), the approach was an instrument of reform designed to harness market-based incentives and to expose public services to competition or to the threat of competition. The main benefits of competitive tendering have been summarised as: better clarification of objectives; improved transparency and accountability; a greater focus on outputs and outcomes, and the encouragement of suppliers to provide innovative solutions and cost savings in providing services (Industry Commission, 1996). At the time of the formulation of the OLI, plans were being made for the competitive tendering of student enrolments (National Board of Employment Education and Training, 1992a). The OLI's role as a brokerage agency for courses was very much a progeny of this movement.

NEW TECHNOLOGIES

In the early 1990s, the impact of information technology was promising new possibilities for higher education:

> The explosive development of the information technologies enables higher education to be, to a large extent, freed from location and time constraints. More mature participants as well as any disabled or disadvantaged by location or work conditions, will likely place the convenience of learning at a time and place of their choosing above the cost of acquiring the technology. It is certain that information technology will alter the delivery mechanisms of higher education, and learning in the workplace will become more common as the methods develop.
>
> (Higher Education Council, 1990, p35)

Harnessing the potential of educational technologies was a core expectation of the Initiative. Early OLI policy focussed on educational television, voice mail and improvements in the technical quality of educational resources (King, 1992a). Later policies concentrated on educational multimedia (CD-ROM) and networked learning via the emerging information and communications technology (ICT).

BUILDING ON BEST PRACTICE

The decision to embark on the Open Learning Initiative was also a creature of national and international conceptions of best practice. Australian policy makers had a keen eye on overseas initiatives in open learning, thought to be well advanced of developments in Australia. Two such initiatives were the Open Learning Institute of Hong Kong and the Open Learning Agency of British Columbia (OLABC). The success of these new organisations helped persuade the Federal Government to establish a similar educational brokerage in Australia (Inglis, 1999b). Formed in 1988 as a consortium of the Open College, the Open University (Canada), Simon Fraser University, the University of British Columbia and Victoria University, the OLABC sported an open admissions policy, and utilised non-traditional delivery media, including audio cassettes, home experiment kits, software, on-line learning and television programs (Institute for Information Technologies in Education, 2000). It also played a coordinating and support role within the British Colombian system (Bates, 1995).

According to John Mitchell (2002), a consultant to OLA, the Australian Initiative was primarily an attempt to reproduce the Canadian experience in Australia:

> Technology-wise, the TVOLP followed five years behind the Canadians, who in turn followed the UK. The Open Learning Agency [Canada] was set up by a few key people from the UKOU who brought with them their views on educational technology. The UKOU and the OLA [Canada] were very much involved with television during the 1980s, and were the real pioneers.
>
> (Interview with John Mitchell, 2002)

The OLI was also an opportunity for the Commonwealth Government to build on existing Australian projects and initiatives. In particular, open learning had become popularised in the TAFE sector, with a number of high profile initiatives. There had been a push to establish both State and national networks of open learning access centres. For example, the School of Aboriginal Education and the South East College of TAFE had established a number of 'walk-in' access centres, over 1985–90 (Kirk, 1990). Open learning access networks were being established in many States as a delivery support mechanism, providing a variety of video-conferencing, audio and data facilities. Early experiments included the establishment of compressed digital television to connect designated TAFE institutions, schools and public libraries with distance education centres (Jones, 1990a; 1990b). Although the government may have capitalised on these earlier trials, the idea of setting up extensive networks of open learning centres, was later dropped in favour of delivering learning materials directly to the home via television and later via internet technologies. This has lead Herrmann (1995) to suggest that Australian open learning was 'hijacked' by the OLI.

In the area of television, there was considerable latent interest in broadcasting open learning programs. The Australian Broadcasting Corporation (ABC), for example, had a long tradition of providing primary and secondary educational radio and television programs in Australia. However, there was 'little attempt to address the issue of educational broadcasting [television] for an adult audience' (Kenworthy, 1989, p47). Since the late 1970s, the establishment of an additional ABC television channel dedicated to educational broadcasting had been raised (Australian Broadcasting

Corporation, 1979), but in the shrinking budgetary environment of the 1980s, the idea had been shelved (Ramsay, 1988). Nevertheless, the 1980s did see several small-scale educational television projects aimed at mature audiences which foreshadowed the TVOLP. Over 1987–8, both the ABC and SBS broadcast educational programs developed by the US-based company *The Learning Network*. In the State of Victoria, *TV ED Australia* delivered one hour per day of free broadcast time to universities on regional stations . In Western Australia, on the *Golden West Network*, 14 hours per week of free air time were provided to 10 participating institutions (Kenworthy, 1989). Furthermore, there had been a significant proliferation of compressed digital television equipment, used primarily to connect the regional campuses both of TAFE colleges and universities (Mitchell, 2002). These developments had combined to create a growing awareness of the potential of educational television.

SUMMARY

By the end of the 1980s distance education had emerged as a central component of government higher education policy. The new term, Open Learning and its national organisational counterpart, the Open Learning Initiative, proclaimed the strategic importance of distance education as a means of social transformation. The policies which emerged from the OLI brought new government expectations, including: rationalisation, efficiency, absorption of unmet demand, improved student access and credit transfer as well as the introduction of new educational technologies. The OLI drew on overseas developments in open learning, to formulate an essentially Australian response and an Australian agenda for reform.

In Chapter Three, the organisational characteristics of the OLI will be explored from a theoretical perspective. The aim will be to develop an organisational model suitable for subsequent analysis of the OLI, expanding on the organisational structure introduced in Chapter One, and drawing on the concepts, issues and definitions which have been illustrated in the preceding discussion.

3 | A conceptual framework for the analysis of the development of the OLI

INTRODUCTION

THIS thesis is about organisational change in the Open Learning Initiative (1990–7), a complex of organisations, generated substantially from a sequence of Federal Government initiatives. In this chapter, the focus is on organisational theory and conceptual modelling of relevant theory, designed to analyse the OLI. Four questions are addressed in the chapter:

- What recent environmental changes have impacted on universities in Australia?
- How have these changes influenced the OLI?
- What organisational models are relevant when describing and interpreting the early years of the OLI?
- What uses of technology became important in the development of the OLI?

The chapter begins with an examination of recent changes in Australian universities recognising that the Open Learning Initiative is both part of and derived from Australian university traditions. In an organisational context, universities can be regarded as producers, and subject to organisational analysis from an industrial perspective. That is to say, in this chapter, pre-Fordist, Fordist, and post-Fordist organisational constructs are examined for their relevance to Australian universities and to the Open Learning Initiative. Attention is also given to educational technology for its role as a delivery and interactivity tool in higher education. The Federal Government expected the OLI to provide leadership to higher education institutions by establishing networking infrastructure (delivery) and in experimentation with 'innovative technologies' (content). Given the importance of technology policy in the development of the OLI, the

chapter explores organisational issues pertaining to the conceptualisation, innovation and implementation of key technologies adopted by the OLI.

Finally, from the selection of organisational models described in the chapter and from the analysis of Australian universities in change, a composite conceptual model of the Open Learning Initiative is presented. The aim is to develop a working model as a guide towards framing the discussion in the chapters which follow.

THE EMERGING CONTEXT FOR THE OLI

To say that contemporary higher education is undergoing considerable and ongoing structural change is almost a cliché. The idea that universities are in transition is giving way to the realisation that 'continuous improvement' may more properly describe the condition of the university. Colin Latchem and Donald Hanna (2001), for example, show that strong external forces are challenging the survival of the traditional university. Foremost among these forces are globalisation and the adaptation of new computer-based technologies. Universities are exploring new approaches to teaching and learning, but also new organisational structures, flexible systems of labour organisation, and the integration of computer technologies into these approaches. In addition, markets are changing. Students and governments expect education providers to be more customer focused, more relevant to and supportive of individual needs. Access and openness are more than just catch phrases; they are genuine expectations, which are being pursued in various ways and to varying degrees by institutions.

Universities have long prided themselves on their traditions and on their resistance to external interference. The so-called ivory tower gave academics the freedom to nurture and protect knowledge and to endure political and economic upheavals. Universities remained one of the longest surviving and perhaps most unchanged institutions in the society. Nevertheless, many of the ideals and structures, which protected universities are now seen as impediments to their development (Gallagher, 2001; Skilbeck, 2001). Universities are beginning to shed their traditional forms (Peters, 2000b).

In Australia, change is occurring at all levels, including the core aspects of research, teaching and learning practices, organisational and administrative

systems, and in the fundamental goals and values of the university. Education providers must not only accommodate change, they must also reinvent themselves to lead change and stay ahead of their competition. According to Tony Bates (1997), organisational change requires strategic responses, which include developing a stronger vision for reform, building technology infrastructure, developing new teaching models, and experimenting with new organisational structures, including the sharing of risks and costs through inter-institutional collaboration and consortia. Peter Dirr (2001) identified eight emerging university structures that break with tradition:

- For profit university subsidiaries. Commercial ventures, which are incubated within universities can evade restrictive employment and service regulations.
- Single mode universities. These are dedicated ODE providers, sometimes termed mega-universities, usually modelled after the renowned UKOU, to provide open, mass-education.
- Dual mode universities. Long practised by Australian universities as 'external studies', on and off-campus teaching are integrated.
- For profit universities. Whilst mainly an American phenomenon, these universities are operated as a commercial enterprise, with shareholders, and a profit imperative. They focus on high demand courses, in fields with lucrative career prospects.
- Corporate universities. These are universities formed by large corporations, such as Apple, Intel, McDonalds and Motorola, typically to train their own staff.
- Consortia and strategic alliances. Consortia members benefit from collective marketing and protection from competition. Brokering is common where there is a dominant partner.
- University-business alliances. Universities provide educational expertise and a brand, while the industry partner provides technological skill, capital investment and marketing expertise.
- Government-education alliances. The government becomes a major educational player, typically for the purpose of training military recruits, or to gain direct involvement.

Organisational responses such as these indicate the emergence of a strong alternative education market based on elements of ODE provision. Educationally, ODE is seen by Cunningham et al (2000) as a principal institutional response to a) globalisation b) new technology, and c) demands by students and governments for access, equity and lifelong learning. In that perhaps some 10–20% of post-secondary students around the world now study in open or distance education programs (Dhanarajan, 1998), ODE is now a strategic organisational response to changing student demographics and the economic imperatives of cost-effective delivery.

Life long learning gives emphasis to the mature adult market, which universities are vigorously pursuing, not least because adult learners are willing to re-enter higher education as a career investment. As universities attempt to extend their markets globally, particularly in the lucrative professional training areas, markets tend to become larger, but also more fragmented. Farrell (2001) emphasises this trend, noting that ODE providers are not simply serving mass-markets, with generic and pre-packaged courseware, but are offering mass customisation to meet individual needs in a cost-effective way. Thus, over and above the models shown above, there is a strong tendency for the convergence of distance and face-to-face teaching methods (Moran & Myringer, 1999), represented by a strong customer focus. Some commentators suggest that universities are destined to evolve into 'clicks and mortar' institutions, structured more like 'virtual universities', and harnessing technology to expand their market reach (Cunningham et al., 1997). Others warn that the commodification of education will seriously compromise the essential values and educational principles, which have long guided the university (Apple & Jungck, 1990; Campion & Renner, 1995; Noble, 1998; Postman, 1992).

Various authors paint a picture of the university grappling with changes in the wider environment, particularly, the organisational and societal environments. Latchem and Hanna (2001) for example, enumerate key environmental factors impacting on the university. First, is the issue of shrinking public funds, which require universities to do 'more with less'. Second, is the effect of globalisation, carrying both positive and negative influences. On one hand, globalisation promises an expanded (borderless)

market. On the other hand, it suggests heightened competition as more universities enter the marketplace and compete head to head for students. Even established university hinterlands are no longer captive markets. In a global marketplace, geographic monopolies may be impossible to sustain. Third, as consumers, students are demanding more of higher education. There is the recognised demand for lifelong learning, particularly amongst working people who need to (and can afford to) constantly reskill themselves throughout life. With shrinking public funds, the fee paying student also has higher expectations. Education must be relevant, of high quality, convertible into career advancement (i.e. have prestige or professional value) and must be readily accessible. The focus on the student has seen a strategy shift from supply-driven to demand-driven production, from academic to professional qualifications, and from inflexible to flexible provision. Fourth, new technologies, particularly those based on Information and Communications Technology (ICT) are enabling much of this shift. They impact on administrative systems and academic research, as well as on teaching and learning.

A SYSTEMS APPROACH TO ORGANISATIONAL CHANGE

The modelling exercise in the present chapter draws on a variety of disciplines to build a systems view of the organisation and of organisational change. The aim is to inter-relate environmental, technological and organisational components, showing the organisation as a dynamic structure. In contrast to a structural-functionalist approach, the orientation herein, not only shows innovation and change as an organisational response to a changing environment, it acknowledges the fundamental importance of the political environment, of decisions made by human actors and the structural basis for organisational power-relations (Jefferson, 1973). Human actors influence policy and activities at various organisational levels, including the executive, the administration, and at the point of teaching and learning.

In *Figure 3.1*, the organisation is viewed as a captive of its environment. Various external and internal pressures exert themselves, and produce responses. The diagram shows these pressures as concentric 'spheres of

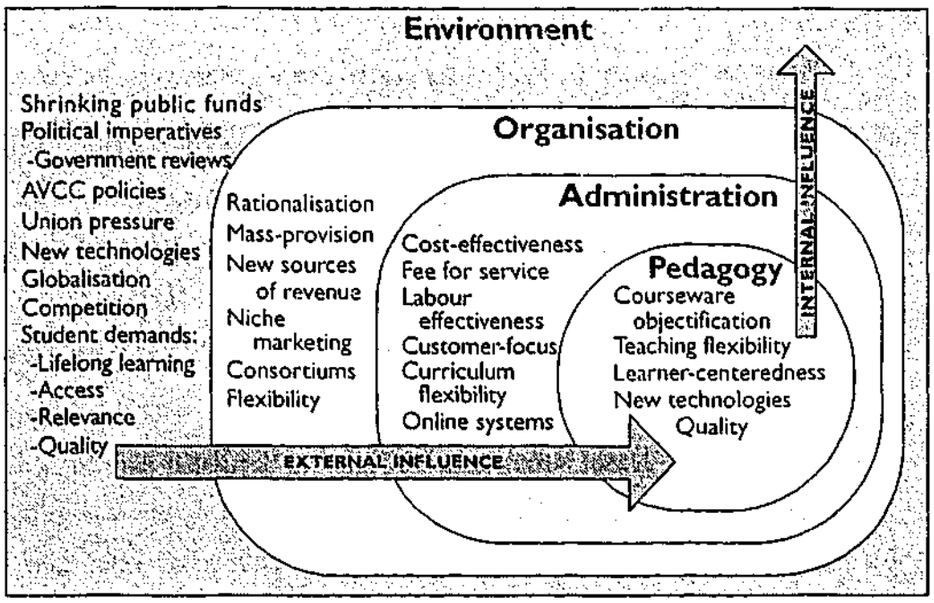


Figure 3.1 Pressures for change in higher education

influence'. Starting from the outside, the educational environment is considered to be the prime mover of change, which impacts directly on the organisation. The environment is considered in its broadest form, comprising social, political, economic, cultural and material components. Some of the important environmental issues affecting Australian higher education organisations are listed in the diagram. The organisation as a whole seeks to alter its structure and form in response to environmental change. Key organisational decisions are generally made through university committees and thence by university executives, but may also be handed down by interventionist governments.

Moving one step inside the model is the administrative sphere. This includes both academic and general administration. At this level, resources are allocated and policies implemented in response to new organisational goals. Typically the administrative sphere comprises department or faculty-level systems and decision makers. Moving to the centre, pedagogy is represented at the innermost sphere. This is the realm where teaching and learning actually occurs. The model suggests that pedagogy is directly influenced by the surrounding administrative sphere. This is because the teacher-innovator is protected from the wider environment. Innovative teaching, rather than a market-driven response, is instead more likely a response to internal stimuli

and teacher creativity, to administrative demands, to funding considerations, career advancement, or to changes in organisational structure.

The present study is concerned with the first three spheres: the environment, the organisation and the administration. Pedagogy is included in the diagram for completeness, and to show where organisational and administrative policies claim their greatest impact.

Of course, the model is an abstraction. It does not show processes of change, but simply the source of external pressures for change. The model suggests that internal pressures are weaker than external forces, because parent influences are more dominant. The organisation, for example, is an entity which tends to conform to environmental pressures. The reverse is less true. Organisations have less ability to influence their environment, although many organisations attempt to do so, either through public relations and marketing campaigns, or by attempting to influence external (government) policy. The model confirms that an education system is an artefact of its environment (Fullan, 1982) and that pressures for change tend to cascade down through the organisational structure, the administrative system and ultimately have a structuring effect on teaching and learning. Individual action is constrained in some sense by the effects of environment and structure, nevertheless, it is in times of organisational and environmental change and uncertainty that actors are best placed to exert their will. It is in this sense that the model most approximates Anthony Giddens's (1984) theory of structuration, which reconciles the free will of human agents with the determining structures of an institution. Agency and structure within an organisation can be considered as two sides of a weighted coin however, as 'the relative power of each party in a relationship is more, or less, if one party is also determining the surrounding structure of the relationship' (Strange, 1988, p25).

The model over-simplifies pressure for change, and does not show internal dynamics nor motivation for change. For example, innovative teachers may be motivated by moral, personal or pedagogic reasons, rather than simply by external pressure (Fullan, 2001). Nevertheless, the individual teacher still requires complicity from academic administrators for the change process to start, and may require financial and structural support for the change

to be implemented and take root (Fullan, 2001). The hierarchical model is therefore useful in showing pressure for change, but not the more complex issue of individual motivation and the political processes behind change.

At the environmental level, the model shows that public funding is shrinking, forcing Australian universities to become market-driven. Advertising campaigns, marketing strategies, branding, and public relations are indicators of the university attempting to gain competitive advantage by manipulating the market. Creating high demand is a precondition for profitability. Prestigious institutions, for example, are aware of their ability to create high demand by virtue of their brand, or by the supposed quality of their courses. The other precondition for profitability is limited supply (Marginson, 1993a, 1993b). This is the area where all institutions are able to compete more evenly.

The implication is not that universities are only engaged in a strategy of restricting enrolments (this is a traditional means of reducing supply), but they are also adopting a strategy of capturing niche markets for which supply is yet undeveloped. Examples of niche markets are those requiring specialised knowledge in a content-field, and quality of production and projection, in their relevance, or in their method of delivery. According to Marginson (1993b), niche markets (or knowledge markets) are composed of students seeking to develop personal mastery, to satisfy personal curiosity, or to bring about self-transformation. Traditional markets (positional markets) are essentially those which provide students with educational credentials to support career or professional goals. Commodification has therefore found its counterpart in the commercialisation of university courses through effective marketing strategies, but tends to be unsuited to the student-centredness required for self-transformation, or *savoir*. Moreover, commercialisation has had important structural consequences, notably the rise of administrative staffing numbers, and the increasing strategic importance of marketing and entrepreneurial management.

For academic staff, industrial strategies and organisational restructuring have reconceptualised teaching as a function of educational delivery (production) and there is a greater focus on the quality of 'deliverables', espe-

cially in the eyes of government. In some universities, research and teaching are increasingly dissociated. This is most apparent in the commercial arms of the university where course design (content mastery) and course delivery (teaching) are each conducted by specialist staff. Continuous improvement, and experimentation with new methods and technologies are features of the new ODE techniques.

Educationally, it is an exciting time. The university has evolved out of its cloistered roots, and is shedding inefficient (but academically justifiable) practices, in favour of innovative teaching practices and professional administration. In Australia, educational reform has been a highly charged political process, particularly during the Dawkins era, and in the decade which followed. Nevertheless, with two decades of rapid change behind us, the university is now emerging as a commercial institution with a customer focus and a flexible and innovative approach to teaching and learning. For Evans and Nation (2000, p162) 'the notion of the university as a critical community of scholars has changed into one of the university as an educational corporation'. Evidence of this is most compelling in the ODE and other 'non-traditional' sectors of higher education. The transformation of the university is being achieved through innovation, but also by relinquishing old values for new (Tierney, 2001). Further, the desire to modernise has also been evidenced by the adaptation of organisational structures borrowed from industry, as well as many of the associated management fads (Adenso-Diaz & Canteli, 2001; Birnbaum, 2000). Dare we suggest, then, that the university has become 'industrialised'?

EDUCATIONAL FORDISM

The label *Fordism* comes from Henry Ford's (1863–1947) archetypal system of mass production. At the time of its establishment early in the 20th century, Henry Ford's Highland Park factory was an exemplar of industrial production. For the politicians and industrialists who toured the factory premises, it was a showcase of modern management practices. Labour and other resources were rationalised to achieve mass-production at very low unit costs. For the American public, it was a window into the future. Even the most complicated of products, the automobile, could now

be mass-produced and sold to a mass-market. In 1913, the price of a Model-T was just US$290, representing three months wages of one of Ford's factory workers. By 1930, over 15 million Model-Ts had been sold in the US and other auto companies like General Motors were copying the system. One in four American families could afford to own their own car, as opposed to one in thirty Europeans. Earlier, cars had been handcrafted by skilled engineers, exclusively modelled, and made-to-order for affluent clients. Under Ford, the factory produced millions of identical cars. Efficiency was achieved by controlling all aspects of the production process. Workers were paid a wage of $5-a-day and were required to do small and clearly defined tasks, which were constantly repeated on each car that was made (Hodkinson, 1997). To assist the movement of the chassis from worker to worker, an assembly-line system was introduced based on a constantly moving conveyor belt. The factory reduced the production time to 93 minutes and by 1927 Ford was turning out a Model-T every 24 seconds.

During World War Two, Ford's concept of production was applied to uniforms, weapons, aeroplanes and ships, to name a few. In the post-war world, mass-production was extended to new sectors, both in goods and services. The food industry, for example was rapidly modernised. New restaurants chains such as McDonalds and Kentucky Fried Chicken emerged in the post-war period with their standardised menus, controlled recipes and efficient methods of preparation. Rather than employing chefs, these and other 'family restaurants' strove for efficiency through technology and scientific management practices (Ritzer, 1996). Meanwhile, the supermarket was transforming the grocery store into something resembling a factory with its trolleys and isles of inventory. Shoppers were now expected to do the work of selecting and carrying the goods, much as a factory worker would do during the assembly of an order. At home, family diets began to rely more and more on pre-prepared foods and less and less on handed down recipes. With the aid of technology, other cultural forms, such as art and music become standardised, packaged and mass distributed under the umbrella of 'pop' culture. The Fordist model became an exemplar of production and is credited with projecting the United States to a position of economic dominance.

Fordism, therefore, can be conceived as an industrial paradigm, based on a model of top-down bureaucratic and hierarchical control, designed to achieve technical efficiency in a stable market place. However, at the societal level, it is viewed as a counterpart to 'modernism' and as a stage of capitalist development, embodying a collective system of mass-production and mass-consumption both in goods and services (Roobeck, 1987). For Aglietta (1979), Fordism is characterised by seven key components: rigid division of labour; sequential tasking (the assembly line); top-down management (the bureaucratic separation of conception and execution); the pursuit of economies of scale; 'push production' (push as much as possible off the assembly line and into the market); rising wages and spending; and accords between capital and labour. The difficulty with Fordism arises because it offers little room for worker participation or innovation, and price competitiveness is achieved through uniformity and indifference to market demands (Basgen & Blunden, 2002). At the university level, Fordism is evidenced by grafting the arrangements of mass-production onto traditional conceptions of the university as a social institution, committed to remain independent of market and capitalist dictates.

Since the industrial revolution, education has confronted industrialisation. Hamilton (1990), for example, describes how twentieth-century schooling became subject to Fordist industrial techniques. The modern classroom emerged during the industrial revolution, and with it education become a formalised system of production which could be monitored, maintained and controlled in the same way as the factory of the 19th century. World War I introduced a full complement of Fordist techniques of continuous production into secondary education. The elements of which included: the worker (teacher); the raw material (students); tools for shaping the raw material (educational technology); inventory control (roll call); a blue print to guide design (curriculum); and quality control (assessment). The dominance of Fordism in compulsory education was testament to the rising demand for mass-education and to prepare children for the strictly regulated work of industry. On the other hand, the university evaded pressure to industrialise, especially since it was not in the business of mass-provision. Rationalised methods of production were seen as a barrier to free thought

and scholarship. The traditional university held fast to its heritage of pre-Fordism, based on craft-production techniques, high levels of intellectual autonomy and an irreverent attitude to managerial control (Renner, 1995).

DISTANCE EDUCATION: THE MOST INDUSTRIALISED FORM

The application of Fordist industrial production techniques to higher education began in earnest in the late 1960s. At that time, large-scale distance education institutions such as the United Kingdom Open University (UKOU) were established, promoting radically new concepts of teaching and learning. Dhanarajan (2001, p9), for example, argues that the high point of distance education was found in the UKOU, with its 'clever use of pedagogical principles, and academic product development to use mass media technologies along with brilliant marketing to catch the interest of the world'. However, its most significant innovation was perhaps mass-education. Many new 'open universities' quickly emerged around the world, many of which grew to become mega-universities, with very large enrolment figures (Latchem & Hanna, 2001). They proved that higher education was not just an elite pastime, but could be made available to anyone willing and able to study.

To achieve mass-education at low cost, the open universities (DTUs) drew heavily on industrial production techniques. In the thinking of the time, efficiency was assured by modelling the university after the factory (Hamilton cited by Evans & Nation, 1999). According to Otto Peters (1983; 1997), each of the components of the assembly line were implemented. First, production planning was instituted, enabling courses to be developed well before teaching commenced. Rather than a single lecturer being responsible for a course, teams (or sequences) of specialists worked to a tight production schedule. Second, the division of labour became the guiding principle of work organisation. Tasks such as research, planning, curriculum development, packaging, delivery of subject-matter, assessment, student counselling and feedback, which were once integrated responsibilities of a single lecturer, become divided among a range of specialists, performed at different times and at different locations. Third, teaching became objectified. The 'study guide' enabled lecture and tutorial notes to be formatted for clarity and packaged. Fourth, packaged courseware could be reproduced at will,

becoming an industrial commodity, which could be manufactured and sold. For Peters (1997), the emergent open universities were structurally different from conventional universities. They were, 'the most intensively industrialised form of teaching and learning' (Peters, 1997, p2).

Taking Peters's thesis as a starting point, various commentators have shown how the large distance education providers display attributes of Fordist production (see Campion, 1993; Campion & Renner, 1992; Raggart, 1993; Rassool, 1993). Peter Raggatt (1993) for example, has argued that the UKOU has been a shining example of Fordism in higher education. It offered a restricted number of standard products, used mass-production methods, automation, a highly evolved division of labour, and a bureaucratic structure with tight controls over production. Cost savings, for example, were maximised by establishing long print runs. This potential was reached by restricting the number of courses offered and by increasing the number of enrolments in each course. In addition, standardised courses were normally expected to have a shelf life of eight years, which maximised the return on investment. The potential of mass-production is therefore a product of the economies of scale formula. Similarly, Bates (1997) argues that the best examples of Fordist organisation in education are the large, national autonomous open universities in countries such as the United Kingdom, Netherlands, Thailand, Indonesia and India, many of which have over 100,000 students (Daniel, 1997).

Alongside the economic advantages of Fordism, Campion and Renner (1992) have pointed to important educational disadvantages. These include standardised expectations of students, system inflexibility and the loss of academic autonomy, as staff become replaceable components of a larger machine. In addition, student-teacher communications are substituted for 'industrialised teaching based on technical and prefabricated forms of communication' (Peters cited in Keegan, 1983, p64-65). One important critic of the Fordist approach has been Rumble (1995a; 1995b; 1995c). While agreeing that the UKOU evidenced elements of industrialisation (for example, a division of labour, the expansion of tutors as a peripheral workforce, and increased vertical integration), Rumble did not concur with a Fordist analysis of distance education: 'Not only are there non-industrialised forms of dis-

tance education, but there is plenty of evidence that 'traditional' classroom and group-based education is itself industrialised' (Rumble, 1995a, p19). His contention was that the UKOU's organisational structure owed more to a Webarian notion of bureaucracy, than it did to a Taylorist division of labour (Rumble, 1995b). This point was later challenged by Campion who suggested that both approaches share much in common – a shared conceptual framework and a shared process of organisational change – rationalisation (Campion, 1996a).

Harris (1987) situates the debate over the industrialisation of distance education within the discourses of Adorno, Marcuse and Habermas, arguing that in the UK at least, open learning has been underwritten by a behaviourist approach to curriculum, an attempt to build a manageable and quantifiable knowledge structure. He suggests that open access is achieved at the expense of academic debate, the transformation of teaching into a series of rational encounters between learners and a controlled body of knowledge, the subjugation of staff and students to system imperatives and ultimately a closure of discourse and counter-argument. Drawing on Habermas, Hodkinson (1997) has similarly warned that the discourse surrounding Fordism in higher education has an insidious undercurrent of 'technical rationalism'.

> Technical rationalism assumes that people can be managed as if they behaved like parts of a machine. Education and training are seen as systemic production processes, using the metaphor of the assembly line, with its inputs, processes and outputs. Quality and efficiency are dominant concepts. Above all, technical rationality is about the achievement of ever-greater control over social and human, as well as physical and inanimate, contexts and processes.
>
> (Hodkinson, 1997, pp73-74)

For Hodkinson, there are close parallels between technical rationality and Fordism. Both are essentially modern rather than post-modern in concept. They see the world as predictable and controllable rather than rapidly changing. Technical rationality would appeal to governments seeking increased levels of top-down control. It also sustains the conviction that educational quality and success can be determined by superficially measuring the inputs and outputs of an educational system.

CRISIS OF FORDISM

In the late 1970s, leading organisational theorists began suggesting that fundamental organisational change was occurring in the developed world. Significantly, commentators observed that organisations were dispensing with Fordist organisational structures. Instead, more flexible and progressive models of management and organisation were gaining in dominance (Badham & Mathews, 1989; Elam, 1990; Hirst & Zeitlin, 1991). These changes were attributed to a new and uncertain environment for the organisation. First, markets stopped following predictable patterns of growth, as populations in the developed world had stabilised and consumer spending had stalled. Second, a more sophisticated consumer and an increased level of business competition produced a highly segmented marketplace as organisations attempted to differentiate their products. Third, new technologies enabled unprecedented levels of production planning, automation and adaptability.

The 'post-Fordist era' has been welcomed by some as a progressive phase in capitalist development, although this remains contentious (Cruse, 1998). Sceptics argue that the shift is not paradigmatic. They perceive the new organisational models as 'neo-Fordist' in the sense that they form a continuum with Fordism, enabling management to achieve higher levels of exploitation through flexibility and flat management structures (Gambino, 1996).

The discussion thus far evokes a relatively fluid picture of higher education engaging and experimenting with new organisational structures. Three related trends have emerged. First, there is an established trend of rationalism as traditional universities move from pre-Fordist to similar post-Fordist models (Campion & Renner, 1992). Second, although Fordism may not be a strategic goal of many contemporary universities, for distance education providers it has been a structural basis and point of departure. Third, there is an emergent trend for innovative faculties and departments to experiment with more flexible structures termed 'post-Fordist' or 'neo-Fordist'. Traditional universities in which academic staff are concurrently involved in research, teaching and administration functions are genuinely pre-Fordist, in that academic staff are 'craft workers', content specialists, can be considered

multi-skilled in the sense there is no division of labour across the above mentioned activities. Few universities can be considered truly pre-Fordist, although many academics still aspire to this artisan ideal, which lingers most obviously in Oxford and Cambridge (Campion & Renner, 1995).

Fordist institutions are those in which efficiencies are achieved by increasing the division of labour across university functions. In this model, teaching, research, administration, production, curriculum design etc are separate functions of specialist staff. A consequence of this model is the decline in faculty independence as centralist (and corporatist) management practices gain influence. In contrast, post-Fordist and neo-Fordist organisational structures while new for higher education in Australia are at an emergent phase, principally as competitive strategies.

According to Bates (1997; 2000a), the traditional university is well-suited to the new post-Fordist environment. First of all, universities are decentralised organisations. They have a large core of highly creative and flexible staff, capable of adaptation and innovation. Academic staff who retain autonomous control of their administered courses are naturally able to rapidly adjust course curriculum and delivery to the changing needs of students (Rumble, 1995c). In addition, as Nipper (1989) reminds us, new technologies offer possibilities for interactive mediated communications, and may help transform distance education from an individual to a social process (Evans & Nation, 1999). This in turn may create the conditions for post-Fordist arrangements to be instituted within the teaching and learning process (Renner, 1995).

Figure 3.2 summaries the organisation models referred to above. The figure introduces four new post-Fordist / neo-Fordist models (Toyota-ism, Lean Production, Flexible Specialisation and The Learning Organisation) which comprise the 'New University'. Each of these models will be elaborated in the next section.

For the moment, it is important to recognise that the paradigms (Fordism, neo-Fordism and post-Fordism) are probably best seen as competing models, which are not mutually exclusive. Rather, these paradigms are 'juxtaposed

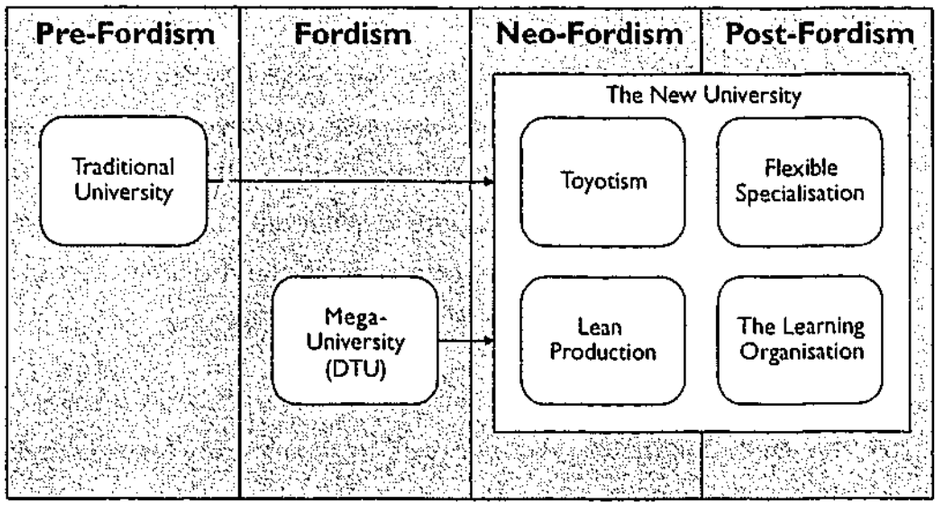


Figure 3.2 Organisational models of higher education

and parallel', are unevenly spread across different industrial sectors, and may be evidenced within a single organisation (Green & Le Queux, 2001; Grint, 1991, 2000). Transitions between the models are neither predetermined, nor sequential, and remain highly contested theoretical constructs (Campion, 1993). For, as Rumble suggests, 'most businesses are less coherently structured than the models seem to imply' (Rumble, 1995b, p26). A higher education institution, for example, may display elements of various models (Campion & Renner, 1992). Following this logic, a hypothetical university may gear its IT Faculty to target rapidly changing mass-markets (neo-Fordism), its Business Faculty for established mass-markets (Fordism), and its specialist Science Faculty for niche markets (post-Fordism). At best, the paradigms and models illustrate options or strategies for organisational change. They show trajectories, but are not prescriptive in any absolute sense (Badham & Mathews, 1989).

NEW ORGANISATIONAL MODELS

A multitude of theories and models have also been advanced to explain contemporary social and industrial change. Peters & Waterman (1982), for example called on organisations to 'search for excellence' which was subsequently revised by Peters (1987) to 'thrive on chaos'. Similarly, Drucker (interviewed by Lenzner & Johnson, 1997) has provocatively argued that large organisations (and universities) are relics of an era when physical space

mattered. These claims conform to a wider body of literature within the arts, humanities and social sciences which identifies a change from modern to post-modern society (Clegg, 1990) or from industrial to post-industrial society (Bell, 1973). Some sociologists even suggest that the transition constitutes a change in the 'mode of production' from Fordism to post-Fordism. The term 'post' is imprecise in nomenclature, indicating a successor to Fordism and the perceived economic limitations of mass production.

Generally speaking, there are three main schools of thought which categorise the post-Fordist literature. There is a European school, which is based on the societal theories of the French regulation theorists; there is a Japanese school, with its emphasis on production systems; and there is an American school, which tends to focus on organisational change and change management (Greenwood & Stuart, 2002; Jurgens, 2002). These approaches will be revealed in the four post-Fordist models which will be discussed: Toyota-ism and Lean Production (Japanese), Flexible Specialisation (European) and the Learning Organisation (American).

There are, however a number of other expressions of post-Fordism which will not be addressed. These include, Volvoism, Ohnoism, Kalmarism, enriched production, the third Italy, post-capitalist society, post-regulationism, techno-economic systems, the knowledge economy and the British debate over the 'New Times' (Asheim, 2000; Wallace, 1998). What much of this burgeoning literature suggests is the possibility of a paradigmatic shift in the contemporary socio-economic environment and in the operating principles of the organisation. First, some reflections on the meaning of a 'paradigm-shift' should be considered.

Kuhn's (1996) use of the term 'paradigm' has had considerable impact on academic research and theory, since it was proposed in the mid-1960s. Kuhn (1996) regarded a paradigm as a conceptual framework or worldview which determines all key aspects of scientific enquiry, including what problems are to be investigated, how they should be explored, and what solutions are considered legitimate. A paradigm-shift occurs when the old worldview, becomes outdated and fails to explain the problems that scientists have been examining. As the number of anomalies increase, new solutions (which

may previously have been considered heretical) are taken more seriously. This crisis of theory, then produces a plethora of alternative models, which struggle for scientific acceptance, until a few, or ideally a single theory displaces the earlier paradigm (Kuhn, 1996). A paradigm shift is therefore as much a process of ideological conversion as it is of bridging a theoretical gap (Evans & Nation, 2000; Inglis, 1996). Caste in this light, the plethora of post-Fordist theories is indicative of a crisis in the explanatory power of Fordism. This 'crisis of Fordism' has not yet revealed a new and dominant paradigm, and no single theory yet dominates discourse on organisational or societal change. The contested debate over post-Fordism continues. Yet much of the debate still centres on changes in the manufacturing sector, and in particular, the automobile industry. The question remains: 'what is the application for the university?'

Until recently, educational theorists were disinclined to associate the university with other sectors of industry. Education has long been considered structurally different, or unique in purpose. While this may be so, it is the contention herein, that much can be learned from a barometric investigation of organisational theory in other sectors (International Labour Organization, 2000). This is especially true now, as the university adopts a more corporate approach to managing relationships and an entrepreneurial approach to its market and technology (Cunningham et al., 1997). Ironically, this is occurring just as innovative firms are experimenting with educational models, attempting to evolve into 'learning organisations' (Fullan, 2001; Senge, 1990). We therefore turn to several key post-Fordist models to help us determine organisational alternatives for the university. Each model will also be considered for its relevance to the OLI.

TOYOTA-ISM

Toyota is one of the largest and most successful companies in Japan. Impressive growth in the 1970s made the company both feared and respected in the West (Drucker, 1981). By the 1980s, North American and Western European governments were restricting Japanese automobile imports, and scholars were attempting to explain the success of Japanese firms such as Sony, NEC, Panasonic, Nissan and Honda. The term Toyota-ism is used

to identify innovations in production that originated in Japan,[8] which have since been transferred to companies all around the world (Green, 1991; Kahn & Friedman, 1993).

One of the defining features of the Toyota model is its effective use of labour in conjunction with technology. Instead of striving to simply replace workers with technology, automation has been used to achieve reskilling, and continuous improvements in the production system. Workers are responsible for the quality of their final product, and are also responsible for the methods and processes which they perform (Dohse et al., 1985). This is achieved by a new approach to teamwork, known as Group Technology, in which small work teams are responsible for a defined stage of the production process and then harness their collective experience and imagination to tackle the task in better ways. Quality circles and employee suggestion systems are used to solve problems which may arise both in the product and in the production system (Monden, 1983). Another feature is that job rotation and multi-skilling helps to 'up-skill' workers while increasing production synergy. This latter concept keeps the separate steps of production highly integrated because a multi-skilled worker has a better picture of the system as a whole (Kenney & Florida, 1988).

In this way, work is modularised (internally cohesive, but decoupled as much as possible from upstream steps) which has provided the basis for the modularisation of production and of the product architecture itself. The contrast with the old conveyor-belt of the Ford factory should be apparent. In this older model, work was routine and unskilled, and workflow was sequential and dependent. The task of designing processes and systems was carried out by high-ranking engineers who utilised 'scientific management' principles which were quite independent of the actual work of production.

However, by utilising the creative abilities of the people performing the actual production work, Toyota was able to a) address social and motivational needs b) empower workers to redesign and control their own work c) enable quality to be managed by workers rather than invigilated by inspectors d) enable fewer highly skilled workers to achieve high levels of

[8] Ohno Taiichi (1912-1990), Toyota's production-control expert, has been credited with pioneering many of the Japanese production techniques.

productivity and e) achieve continuous improvement production methods (*Figure 3.3*). The so called Total Quality Management (TQM) principles of Toyota have given Japanese companies a reputation for high quality and high productivity (Womack, 1987; Womack et al., 1990).

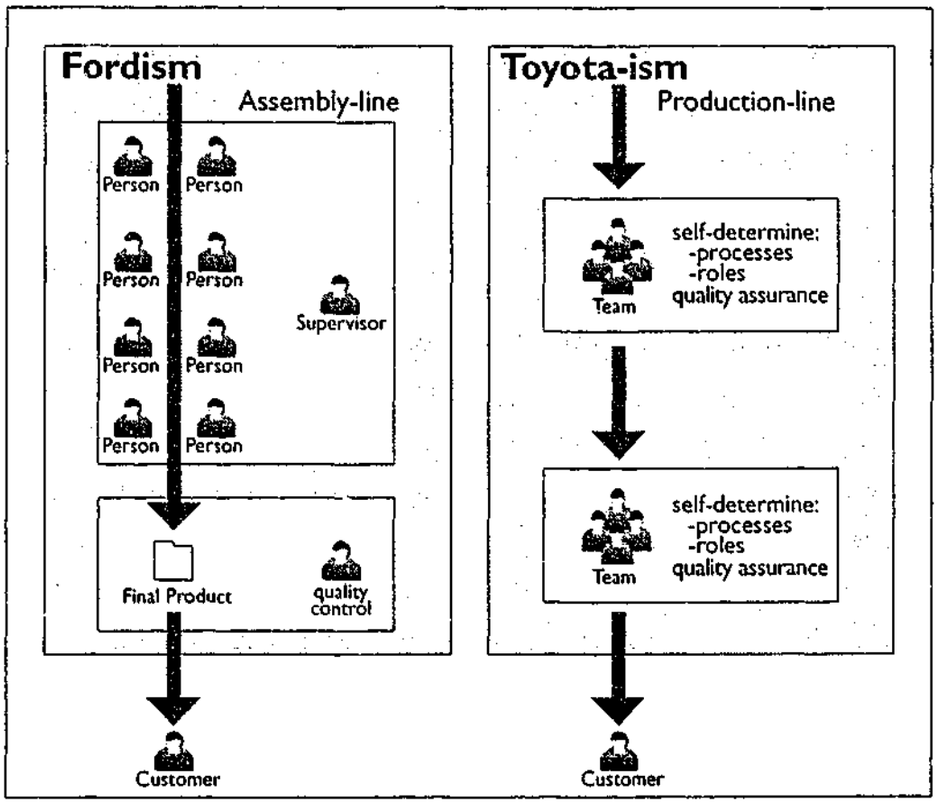


Figure 3.3 The difference between Fordism and Toyota-ism

According to Lincoln and Kalleberg (1985) the Toyota model is a re-think of labour relations and labour process, the benefits of which can be summarised under three headings:

- a workforce organised into self-managed teams taking collective responsibility for managing production, maintenance and quality control. Within the team, jobs are rotated and multi-skilling is encouraged
- integration and cross-linking of divisions and hierarchies to avoid 'them and us' situations, instituting mobility and career ladders to promote long-term attachment, motivation and loyalty
- recognition of the workforce as corporate citizens with legal rights and obligations within the company

In later chapters, it will argued that the OLI cannot be considered entirely Toyota-ist. Nevertheless, its effective use of self-managed work teams was an effective organisational response to the demands of labour flexibility and rapid development. As a result, many of the staff involved in courseware production, both within the OLI proper, and in the provider universities engaged in flexible labour practices based on loose job classifications and quickly assembled teams composed of multi-skilled members. Quality was intrinsic to the team approach. Staff took pride in their work and to a considerable extent shared a vision of contributing to a greater public good.

LEAN PRODUCTION

As the term suggests, *lean production* is concerned with the elimination of waste which was a necessity in the resource-scarce conditions of post-war Japan[9] (Kenney & Florida, 1993). Lean production employs a reciprocal approach to business-to-business collaboration. The main innovation is termed *just-in-time* production. Here, inventory stocks are minimised (or eliminated if possible), and replaced with strong relations between the supplier and the assembler-producer (Kato, 2001). This is achieved by using the *kanban* (literally 'signboard') which is a kind of purchase-order. As inventory stocks decline, the kanban is sent to the supplier of a particular part, and inventory is resupplied just-in-time for production to proceed. Not only does this reduce the capital and the amount of storage space devoted to intermediate inventories but it also quickly reveals any manufacturing defects so that these can be rectified before the next batch arrives (Dassbach, 1994).

Naturally, this system requires high levels of trust and integration between buyers and suppliers, but it means that parts are only ordered as needed. In contrast, the older Fordist philosophy required larger inventories of parts which were periodically resupplied. The disadvantage of this earlier model was two-fold. First, a large amount of capital and floor space was tied up in maintaining inventory. Second, when a sudden change in production occurred (eg a change to a new model), large quantities of stock became redundant and were often thrown away.

[9] Since the mid-1980s, many elements of lean production have spread rapidly to companies around the world, and it can no longer be considered simply a Japanese phenomenon.

Just-in-time production is also more flexible on another account. It supports the practice of *mixed-model* production. In mixed-model production, various models (products) are produced on the same production line. For example, in a Honda assembly plant, *Civics*, *Preludes* and other models are produced using the same equipment and labour. A complete retooling of the assembly line is not necessary for the production of each model, because the workers adjust their work and reprogram their equipment as the chassis approaches. In 1993, the author undertook factory tours of Daihatsu (Osaka Plant No.3) and Toyota (Toyotashi Main Assembly Plant). The levels of automation in these plants were considerably different, however, in both cases one could witness different models, colours and types of vehicles progressing down the same assembly line.

Above all, mixed-model production implies a closer customer relationship. Customised orders can be processed in smaller batches and delivered quickly (Kenney & Florida, 1988). In the Japanese food industry, for example, fast food chains such as Moss Burger compete with McDonalds using just-in-time production techniques. Rather than pre-preparing orders and anticipating demand, Moss Burger achieves 'flexible mass production' by rapidly preparing food on request. The result is a fresher, more customised menu and has inspired McDonalds to adopt similar practices.

In higher education, the philosophy is being implemented as 'flexible' or 'mixed-mode' delivery, in which a course is customised for various student-customers and then simultaneously marketed in various forms. For example, courses are customised to target various academic levels, learning styles, and are simultaneously taught in on and off-campus modes. Just-in-time production occurs in an educational context when the resources (staff, content, and technology) required to mount a course are rapidly pulled together by providers (suppliers) which feed into a central hub (final assembly).

According to Dassbach (1994), the central hub in a lean production environment has overall responsibility for maintaining customer relations, for sales, marketing, for defining and scheduling production requirements, and for organising its own cooperating network (*keiretsu)* of companies and independent subcontractors and suppliers. Appealing to the customer's needs

(ie flexibility) is a marketing and production objective of the central hub, but is a requirement imposed on the provider-producer. Once suppliers are operating flexibly however, opportunities emerge to rebrand and sell their products to niche markets (International Labour Organization, 2000). Witness here, the rebranding of 'educational product' and targeted marketing, eg the use of modular courseware which can be simultaneously taught in different programs at various academic levels.

Lean production is a collection of production techniques which can be summarised as follows:

- Just-in-Time Production (JIT). Suppliers produce components in small batches and deliver these to the main company as needed.
- Stakeholder collaboration between end-producers, suppliers and subcontractors.
- Integrated supply chain management allowing parts flexibility in terms of volume, design and specifications.
- Overall, it is also a structural and organisational approach to flexible mass-production.

  (Cressey & Kelleher, 1999)

Embodying a system of brokerage, the OLI exhibited close parallels with lean production. First and foremost, the success of its operations was based on effective buyer-supplier relations. Just-in-time production was evidenced by short development cycles, short courses, a short semester (called a study period) and a demand-driven approach in which student admissions were rapidly converted into enrolments ahead of providers being notified of final numbers, even as the study period was underway. As such, the system required high levels of flexibility, in resource capacity, and in staffing. This was complicated further by short lead times and the contractual obligation for providers not to turn away students. Other aspects of the OLI drew on brokerage arrangements, notably, Open Net, and indeed, the OLTC. In each case, high levels of integrated supply required new approaches to inter-organisational management, with the observation that horizontal integration became a feature of structural arrangements.

FLEXIBLE SPECIALISATION

A third approach to post-Fordism is that of 'flexible specialisation' (Hirst & Zeitlin, 1991; Piore & Sable, 1984; Sabel, 1982; Sabel & Zeitlin, 1985). Piore and Sabel (1984) focus their attention on the rise of new types of firms in the successful industrial regions of Italy, Germany, Japan and Scandinavia. They make a conceptual distinction between two ideal types of industrial production: mass production and flexible specialisation (Phillips, 2002). Flexible specialisation is perceived as a return to craft production techniques, characterised by skilled labour and the use of general purpose machinery in support of flexible practices. The main points are as follows:

- Flexible and skilled labour
- Rising wages
- Flat management structures
- Smaller firms
- Low fixed capital costs
- Collaborative networks of firms

Central to their thesis is that flexible specialisation is being adopted because it is a superior model in a fragmented market (Piore & Sable, 1984). Smaller, flexible firms are better able to retool and reach niche markets, but only if their workforce is highly trained and adaptable. They argue that business-to-business collaboration adds to this flexibility by forging new relationships as needed, by reducing competition and by allowing joint marketing opportunities. In this way, they believe that *pull* production is overtaking the earlier *push* approach. In other words, instead of producing a product and then drumming up a market, the market is found first, and then a product is custom-produced to fill the niche. In contrast, large firms are better suited for mass production with their dedicated machinery unskilled or complacent labour, and oligopolistic strategies. According to this view, the era of mass-consumption is at an end, and with it, the demise of the large and inflexible company (Hirst & Zeitlin, 1991). Clearly the small-scale flexible specialisation approach of Piore and Sable (1984) contrasts sharply with the flexible mass-production we have seen in the Japanese models.

From a marketing perspective, the OLI pursued a flexible specialisation strategy. Student markets were potentially diverse and segmented, particularly as many tertiary institutions were competing in the open learning marketplace. In some cases, large markets were identified and captured by adapting off-the-shelf 'educational product', a term widely used within the circles of OLA and Open Net. In other cases, economies of 'scale' were replaced by economies of 'scope'. Providers were particularly active in pursuit of niche markets and of developing the capacity for 'mixed model' production. This was achieved by simultaneously offering units to distinct, but similar student markets. Evidence includes the re-branding of courses developed for Open Learning for on-campus students (dual mode delivery), the appeal to younger students (enhancement programs[10]), attempts to attract corporate customers, and the redesign and re-badging of materials to accomplish these ambitions. In cases where units could be re-branded as positional goods, providers pursued markets independently of the OLI, drawing on their established reputation and positional standing. Overall, the providers were keenly aware of the competitive advantage which could be attained through flexibility and by spanning niche markets.

THE LEARNING ORGANISATION

The final post-Fordist model discussed is that developed by Peter Senge (1990) for what he calls 'The Learning Organisation'. Like other variants of post-Fordism, the model hinges around an 'ideal type' of organisation, but is distinctive in that it 'invites disorganisation and constant assessment and analysis' rather than acceptance of fairly static and prescriptive organisational models (Jaffee, 2001, p176). It therefore can be seen as a post-bureaucratic variant of post-Fordism. In this regard, Senge's focus is on internal organisational dynamics – the tensions and conflicts within an organisation which lead to its reshaping through policy and response.

Senge (1990) suggests that a 'learning organisation' is built on five disciplines: personal mastery, mental models, team learning, shared vision and systems thinking, all inter-related and inter-dependent. The organisation

[10] Enhancement Programs are offered by several universities to enable high-achieving High School students to enrol in several university subjects. Student results count both toward their secondary school graduation results and as credit toward an eventual degree (Monash University, 2002a, 2002b; University of Melbourne, 2002).

becomes a learning organisation through self discipline, team discipline and system discipline. Individuals within the organisation are held together by shared vision, teamwork and participation in decision making. 'Team learning' enables an organisation to function positively as a unit through the respect of all other members, the willingness to suspend judgement and preparedness to consider new ideas. Such an organisation becomes creative, experimental, forward looking and capable of meeting the contemporary challenges which face the organisation. He suggests that the successful organisations which have been studied by post-Fordists in Japan, Europe, the USA and elsewhere, have demonstrated these traits (Cressey & Kelleher, 2002).

According to Senge (1990), team learning depends heavily on two other disciplines: personal mastery and mental models. The former is a life-long experience, the shaping of one's personal vision through on-going appraisal of one's current achievements. The discipline of mental models is achieved by applying personal mastery (vision) to the organisation, and therefore the organisation can be reconceptualised as a living, breathing entity. Speaking both of individuals and of firms, Senge (1990) in his often quoted passage argues, 'the ability to learn faster than your competitors may be the only sustainable competitive advantage'. Application of these three disciplines, personal mastery, mental models and team learning, to the organisation and its members constitutes the fourth discipline, 'shared vision'. Here, creative tension is addressed by the organisation as a positive productive stimulus for growth. Thus resolution of creative tension will generate creative change. Hence, vision is considered as a driving force of change which is most potent when it can swing organisational culture (Lakomski, 2001). Finally, 'system thinking' is a logical outcome of applying the other four disciplines into an integrated model. Together, the five disciplines, their inter-dependence and their creative potential, should generate a model of a non-bureaucratic, democratic and self-directive organisation; one in which authority is not imposed and responsibility is shared as the learning organisation grows.

Elements of the Senge (1990) model are not new. Rather it is in the articulation of earlier ideas that the *learning organisation* can be seen as an innovative achievement. For example, earlier work on organisational learning

(Argyris & Schon, 1978), systems thinking (Weinberg, 1975), mental models (Schon, 1983) and personal development within organisations (Fritz, 1989) are all advanced components of the Senge model. The learning organisation as a practical theory is reminiscent of a leadership model proposed by Manz and Sims (1995) in which they advocated 'superleadership'. Here, superleaders initially become self-leaders (personal mastery), then through modelling, share self leadership with colleagues (mental models). In turn, colleagues work constructively in teams to achieve shared leadership (team learning). Again, the process relies heavily on sharing of responsibilities, first achieved by the discipline of self leadership (knowing thyself). The ultimate for a person in a leadership position is to ensure that colleagues become self leaders – that they will adopt self leadership skills. In turn, these will be shared with others. The Manz and Sims (1995) model, like the learning organisation proposed by Senge, is sequential, formative and in practice, never fully perfected. Senge (1990) argues that successful organisations are those which are able to motivate staff towards a common goal in which participants find meaning and personal conviction.

To what extent were the organisational objectives of the OLI translated into a shared vision from which individuals found personal meaning and purpose? The research suggests that the OLI achieved some success in instilling a shared vision. In the first place, the OLI had the advantage of addressing socially justifiable educational objectives. The mission of opening up higher education to hitherto under-represented student populations attracted highly motivated individuals to its cause. Individual commitment to the organisation as a whole, however, was less apparent. Staff in departments providing OLA units did not completely identify with the OLI, despite their adherence to 'system discipline'. This is not surprising considering the complex inter-institutional arrangements in place. On the other hand, the staff employed in the central office established a degree of 'systems thinking' through their dedication and commitment to the OLI and to its growth. Leadership within the OLI was the shared responsibility of the CEOs of each of its core constituents (the OLTC, OLA and Open Net), in particular, Anthony Pritchard, the CEO of OLA. His was a complex role of juggling the expectations of stakeholders, of staff, of students, whilst

retaining a focus on organisational development. Leadership success was established by the overall coherence of the Initiative throughout its formative period, and in the effective handling of shifting government expectations. The ability of leadership to engender a shared vision was a remarkable feat when we consider the large number of participant organisations. However, the conversion of creative tension into creative change was less apparent. In this regard, the OLI fell short of Senge's (1990) ideal of an innovative learning organisation. Despite its unique collaborative structure, the OLI did not attempt to redefine the learning experience for its students and could only be considered marginally innovative.

THE OLI: A SYNTHESIS OF TRADITIONS

For many in the educational community and the Australian public, the mission and organisational structure of the OLI appeared revolutionary. Viewed from the wider context of organisational research, the OLI instead appears unique in terms of its particular synthesis of traditions. These are summarised in *Figure 3.4*.

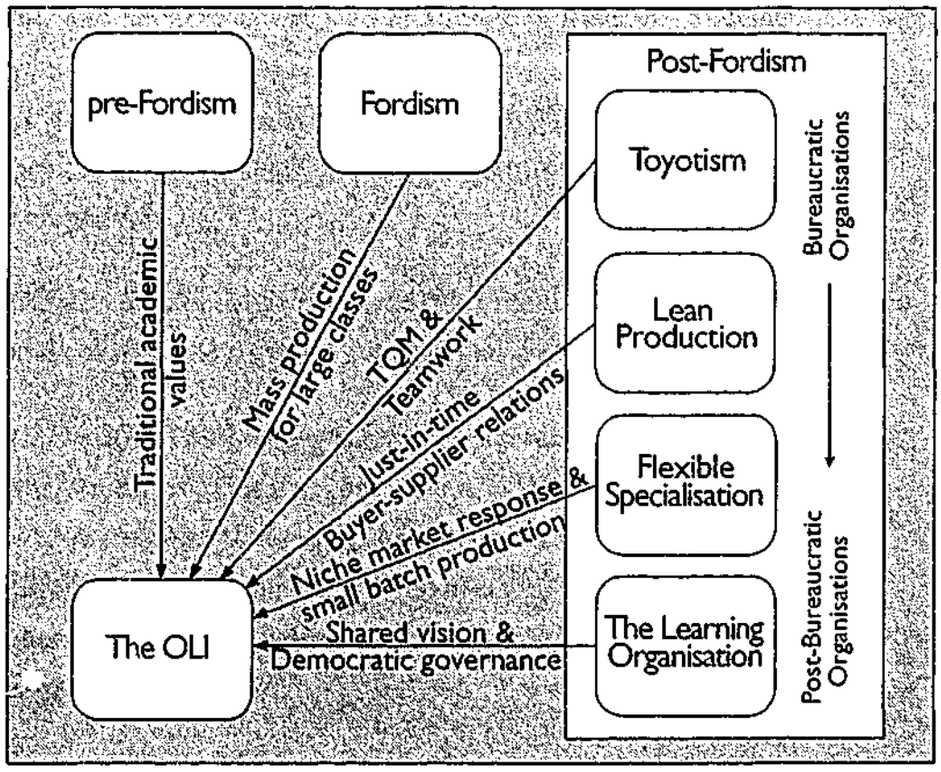


Figure 3.4 The OLI:A synthesis of traditions

The OLI was conceived as a new force in higher education with unique characteristics. It was a quasi university with the collaborative involvement of many established distance education providers and geared to the demands of a flexible operating environment. This enabled it to blend existing distance education practice with contemporary notions of organisational structure. The OLI is therefore represented by an amalgam of organisational traditions as shown below:

OLI and Pre-Fordism. Traditional academic values of craft-production, while evident, collide with notions of the 'new university' and its commercial emphasis on 'educational product'.

OLI and Fordism. Here, the government's sub-agenda for mass-provision and rationalisation by reducing duplication across the Distance Education Centres (DECs) drives organisational objectives.

OLI and Toyota-ism. The link here is with human activity through notions of continuous improvement, quality management and teamwork.

OLI and Lean Production. OLA maximised provider out-sourcing (brokerage) which was a structural feature both of the OLI, and of lean production. It entails integration between buyers and suppliers of services. Just-in-time practices promoted high levels of inter-institutional integration and competition.

OLI and Flexible Specialisation. In this tradition, niche marketing strategies, and collaborative networks amongst participants assume importance.

OLI and The Learning Organisation. Leadership and shared vision are introduced as integral components of the successful organisation. Within the OLI, strong leadership engendered a sense of shared purpose. Participative decision making structures were established, but these fall short of establishing a democratic, self-directed and post-bureaucratic organisation.

TECHNOLOGY AND INNOVATION

Technological innovation can be defined as a process which 'proceeds from the conceptualisation of a new idea to a solution of the problem and then to the actual utilisation of a new item of economic or social value' (Myers & Marquis, 1968, p70). From this perspective, an innovation can only be realised when its development proceeds to market deployment (Freeman, 1982). Using this definition, the OLI's engagement with innovative technologies cannot be considered entirely successful. The flagship of the OLI's engagement with technological innovation, Open Net, drifted into corporate insolvency and liquidation (Chapter 7). The *Innovative and Quality Enhancement Grants* which amounted to some $4.2 million were unsuccessfully implemented according to the government appointed OLI evaluators (Atkinson et al., 1996b, p65) (Chapter 5). The OLESS project was a pilot, and therefore, it did not strictly qualify as innovative, according to the above definition, because it did not reach the market (Chapter 6). Of all the technologies reviewed herein, educational television stands out as the most successful example of technological innovation (Chapter 4).

The use of educational technology as an effective tool is being widely researched and debated (Bates, 1995; Issroff & Scanlon, 2002; McLoughlin, 1999; Noble, 1998). This is especially true in the fields of Open and Distance Education (ODE), in which new educational technologies have intrinsic pedagogic significance (Evans & Nation, 1999). For, unlike face-to-face teaching, ODE has long relied on mediated communications to bridge the distance between teacher and learner. Successive communications technologies have been used in this field, although, print media predominates. Current research suggests that new ICTs offer significant advantages for the learner if the media-type is correctly matched to the learning activity (Laurillard, 1993). The use of computer mediated communications (CMC) in particular, compensates for the weakness of traditional distance education to cultivate an interactive and cooperative learning environment (Nipper, 1989; Peters, 2000a). On-campus educators are also taking a keener interest in educational technology, and in the principles of ODE, with many commentators speculating a merger of on and off-campus modes of learning. According to Bates (2001), this trend has been further spearheaded by internet

technologies, which in turn, are driven by innovators within the education community, by student expectations, by the forces of globalisation, by business leaders and by governments.

Technological innovation was central to the OLI's mission. The Federal Government saw in the OLI an opportunity to seed technological innovation in the post-secondary sector. In addition, there was also a perceived need to counter the encroachment of global education providers and international media networks (Gallagher, 2000). Experimentation followed the pattern of establishing a pilot study and then rolling-out a commercial venture to the public. Each of the TVOLP (educational television) and the OLESS (networked learning) were pilot studies, which led to OLA and Open Net, respectively.

From these projects, we can identify three strands of technology policy, which drove the OLI:

Television (1990–3). The use of educational television was strongly advocated by Minister Dawkins as a means of opening up public access to education. It commenced with the TVOLP (pilot) and grew into OLA (commercial venture). Under Minister Baldwin, print, computer-based courseware and educational networking superseded the earlier emphasis on television.

Computer-based courseware (1994–6). This policy thread started with the OLESS project. It sought to enhance student learning by providing infrastructure and content to support student learning. The concept was furthered with the provision of $4.2 million of Innovative and Quality Enhancement Grants which were administered by OLA, and made available on a competitive basis to unit providers.

Educational networking (1994–6). In the latter period under investigation, the development of a networking infrastructure became the major policy direction pursued by Minister Baldwin. This was reflected in the evolution of the OLESS into Open Net, the latter charged with a brief to expand educational access through the establishment of an educational computer network.

Over and above the policies of 'innovative educational technologies' listed above, various other learning media were embraced. These included the use of print, fax, telephone, radio, cassette tapes and video. Learning media were combined into what OLI staff referred to as a 'media mix' which varied considerably across the units under offer. The media mix approach, combined delivery mechanisms, ensuring that technology utilisation was flexible enough to match educational requirements and shifting Federal Government expectations. Innovation was also anticipated in support of teaching and in the management of administrative services. In this respect, the OLI provided streamlined registration, fee payment, as well as advisory and library services.

According to Kline and Rosenberg (1986), innovation consists of various complex and non-linear changes which involve not only technological hardware, but also the market environment, production facilities and the social contexts of the organisation. Innovation must extend beyond the mere rhetorical 'hum of corporate buzzwords' so that it actively engages staff in purposeful endeavour (Birnbaum, 2000). Furthermore, many organisations are pursuing a strategy of 'continual innovation' to maintain momentum (Asheim, 2000). In the case of the OLI, innovation was not merely desired by the government, it was mandated. All three strands of technology policy (listed above) were implemented according to formal contractual agreements between the government and the organs of the OLI (Atkinson et al., 1996b). We must therefore acknowledge government intervention as a determinant of the process and outcomes (successes and failures) of innovation. The work of Fölster (1991) is valuable in this regard. In his study of the theoretical principles of optimal subsidies, he points out that government innovation policy should avoid the following mistakes:

1. Subsidising projects which would have been carried out even without help from government;
2. Subsidising projects which do not have high social value

In later chapters, it will be shown that both of the above mistakes were made. That is not to say, however, that the failure to achieve technology objectives was simply a factor of government interference. The social process

of policy implementation must be considered, as well as limiting factors derived from the market and the technology itself (McLoughlin & Harris, 1997). In this sense, the environmental context had a considerable bearing on the innovation process (Dosi, 1988). In summary, it should be noted that the OLI encountered obstacles to the implementation of new technologies, including: lack of attention to educational objectives, lack of a shared vision, stakeholder conflict, resistance from academic staff, failure to read markets, and technological limitations.

SUMMARY AND CONCLUSIONS

The intention of this chapter has been to review organisational change relevant to the development of the OLI. The chapter examined four important questions, namely:

1. What recent environmental changes have impacted on universities in Australia?
2. How have these changes influenced the OLI?
3. What organisational models are relevant when describing and interpreting the early years of the OLI?
4. What uses of technology became important in the development of the OLI?

Further development of these questions will be taken up in subsequent chapters. The present chapter however, provides a contextual and theoretical reference for considering the operating environment of the OLI.

Change offers both wonderful opportunities and dangerous pitfalls in which work cultures are transformed. A changing environment engenders new organisational responses from universities, including: new approaches to teaching and learning, new organisational structures, flexible systems of labour organisation, and the harnessing of technologies to achieve these ends. In part, this accords with King (1994) who suggests that education can be studied as an industry.[11] For distance education, the post-Fordist organisational forms, manifest in other sectors, offer a valuable analytical

[11] For King (1994, p148), the application of new technologies to distance education force us to 'recast our view' of education *as an industry*.

perspective for the study of change. This approach has historical precedent in the pioneering work of Peters (1983; 1997), who suggested that distance education is an industrial form of educational provision. Campion and Renner (1992) extended this by categorising dedicated ODE providers as Fordist, but they did not prohibit alternative modes of delivery drawing on post-Fordist arrangements of production, particularly those which attempt to marry flexible approaches with efficient delivery technologies. The post-Fordist analysis provides a theoretical basis for analysing organisational change, the introduction of new technologies and for understanding contemporary approaches to producing educational services.

The body of theory applicable to emergent organisations is at best controversial and at worst, inadequate. In the present chapter, four traditions in post-Fordist theory were reviewed, exposing some of the compensations and tribulations of interpreting organisational theory. This chapter draws selectively from the theoretical models on offer to construct a summary statement (conceptual map) that describes the Open Learning Initiative, an organisation in change, from 1990 to 1997. The conceptual map (*Figure 3.5*) articulates the key elements and issues, which drove the development of the OLI. It shows interconnections between elements to represent the OLI as a dynamic and evolving system.

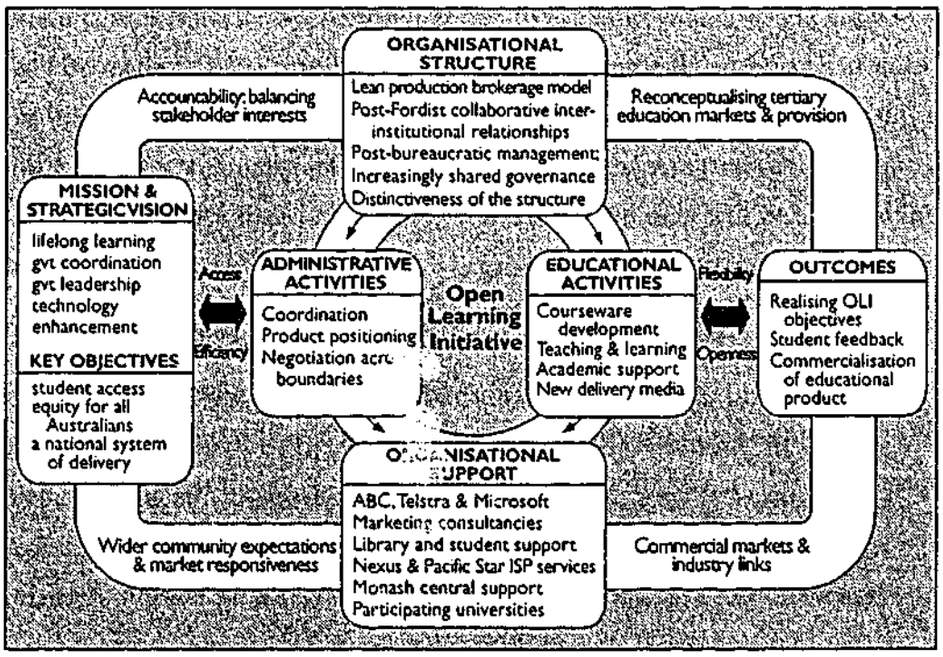


Figure 3.5 Conceptual map: organisational attributes of the OLI

The conceptual map also recognises the inseparability of pedagogical, technical and organisational aspects by showing the central position of the OLI in close juxtaposition to key inputs, outputs, processes and linkages. Elements in the outer-most ring are associated with the external operating environment. The innermost ring connects internal and operational organisational components. The model also recognises the strong influence of government policy on the system. On the left, the OLI *mission* contributes strongly through its directives (access and efficiency) impacting on internal organisational components. On the right hand side, the outcomes of the organisation are driven by concerns for flexibility and openness, and how through feedback these outcomes revitalised the system.

Clearly any model will fall short of showing the full complexity of a human system, and this criticism is true of the model offered above. Over its formative period, the OLI bears witness to this complexity, with its wide range of stakeholders, provider-universities, government institutions, corporate service providers, thousands of engaged staff and tens of thousands of enrolled students. Nevertheless, the conceptual map is a useful construct to help us understand the OLI as a system, its main attributes and its important outcomes. Where causative influences are implied, these are not considered absolute or unilateral. Rather, the intention is to show the main connections between components. In the following chapters reference will be made to these implicit complexities showing how an organisation in its infancy interacted with well-established organisations. In turn, the OLI built its own organisational framework, one which gives practical substance to its mission and stated objectives. The conceptual map will be checked in subsequent chapters as facets of the organisation are investigated. Finally, in Chapter 8 a critical response to the model will be presented.

The model strongly reflects the environmental imperatives imposed on OLA, particularly those of the Federal Government and not least by the expectations of Monash University and partner universities, ensuring the competing agendas of the participants were never far from the decision-making process. As we have seen in the present chapter, a key challenge for contemporary universities involves building a coherent corporate vision which is forward-looking, customer-focussed and concerned with

flexibility, innovation and entrepreneurship. This is particularly true of flexible, post-Fordist organisations, but is also evident in the trend away from subsidised provision and towards a user-pays principle. The organisations within the OLI matched this pattern, a consortium of institutions styled on a brokerage model, not a natural market response, but a model imposed by the government. It was structurally similar to a lean production model evident in industry, well-known for its capacity to integrate production on a just-in-time basis and engender high levels of flexibility at a relatively low cost. The mechanics of the brokerage model will be revealed in subsequent chapters, as well as consideration of important issues relating to strategic vision, leadership and administration.

4 The TVOLP: the seed of the OLI

INTRODUCTION

THIS chapter investigates the trial of broadcast television as a delivery medium for Open Learning. The television project was known as the Television Open Learning Pilot (TVOLP). Its successful implementation established Open Learning as a major component of the Federal Government's higher education policy, and marked a change in the culture and organisation of higher education in Australia. The TVOLP was strongly supported by the Federal Labor Government and its successful use of the national broadcaster (the ABC) strengthened and promoted open learning opportunities across Australia. In turn, the pilot matured and developed into a broader policy, known as the OLI, establishing OLA as a new and innovative organisational entity in Australia's educational landscape.

The chapter is structured around a sequence of questions: What was the TVOLP? How and why was it established? How did it impact on Australian Universities and on the Australian public? How did it impact on emergence of the Open Learning Initiative? The first part of the chapter is chronological. It details the growth of OLI from 1990 to 1993 during the life of the TVOLP, and documents the establishment and implementation of the TVOLP. The second part of the chapter is more analytical and explores the themes associated with questions raised, and sets the scene for the emergence of OLA.

BIDDING FOR THE TVOLP

In a media release of August 21, 1990, the Hon Peter Baldwin (1990), Minister for Higher Education and Employment Services, announced a new initiative in higher education as part of the government's 'commitment to the continued expansion of higher education opportunities and facilities'.

A 17.5% ($535m) increase in funding for the sector as a whole was declared. Much of this funding was allocated to deliver 11,000 new student places ($28.4m) as well as sufficient capital works investment to accommodate the new students ($198m). Furthermore, in line with Baldwin's emphasis on equity and innovation, an entirely new initiative was announced:

> A study and trial will begin in 1991 of the opportunities for extending distance education to students in isolated areas through television networks. Initially the study will focus on the provision of first year degree units. An initial $1 million will be provided for the project from previously announced higher education funding.
>
> (Baldwin, 1990)

Distance education in Australia was about to undergo a major experiment in rationalisation and in *modus operandi*. Acknowledging earlier efforts to consolidate distance education in Australia, and the timely nature of the proposal, the question remains what political machinations and objectives lay behind Baldwin's announcement? Who was behind this decision?

Speculatively, the immediate impetus behind the OLI emerged from the office of John Dawkins prior to the election of March, 1990, as a possible agenda for the Government's fourth term (Moodie, 1990a). According to Comrie Bucknell (1992), Minister Dawkins had commissioned a report 'on the feasibility of television broadcasting of educational and training materials to achieve a range of learning outcomes'. The minister was keenly interested in the pilot delivery of five first year university courses by television. Later, in the 1992 Budget Speech, Dawkins expressed this in terms of making university education available to 'every Australian with access to a television and a letter box' (Dawkins, 1992, p54). The original goal was to create an educational television channel, dedicated solely to education and training. To oversee the Open Learning Initiative (OLI), a National Open Learning Agency (NOLA) would coordinate and support open learning participants, comprising universities, TAFE institutions and existing community based learning centres. A paper to the 66th Australian Education Council (AEC) meeting entitled *A national framework for open learning* recommended that the sixth (and remaining) broadcast channel be licensed to deliver educational television (Bucknell, 1992). The Director of the National Open Learning Policy Unit, Dr Di Bolton said 'there was no preferred option, but

that they were interested in access to the sixth channel' (Monash University, 1992d). According to Moodie (1990a), 'the then principal adviser (Peter Reeves[12]) to Mr Dawkins expressed it this way: the minister wants to put higher education on television so everyone can have it'. Moodie went on to suggest that Peter Reeves gave its original form, by suggesting that discipline areas be shared amongst a consortium of institutions, ideally the eight DECs, based on the Hong Kong brokerage model. Relying heavily on Reeves's earlier proposal, Joan Walsh, a Ministry bureaucrat, prepared a formal paper which was later tabled at the meeting of the National Distance Education Council (NDEC) on the 3 October (1990), and became the seed of the OLI.

By 19 February, 1991 DEET had sent out letters to each university, inviting them to submit a proposal for the Television Open Learning Pilot Project, 'either individually, or as part of a consortium'. The letter stated that the Commonwealth had invited NDEC to help in selecting the successful tenderer and in implementing the project (Department of Employment Education and Training, 1991). The letter of invitation, however was merely a formality. The institutions of the Unified National System (UNS) had their own access to Canberra, and knew well the minister's preference for a large consortium approach. Monash, for example, had begun work on building a consortium as early as October of the previous year (Pritchard, 1991a). As noted previously, the Vice-Chancellor of Monash, Professor Mal Logan, was a key member of Dawkins's purple circle of policy advisors, was 'friendly with senior Labor figures' and was publicly and privately aligned to the Labor party's reform agenda (Marginson, 2000, p75). These elements may have worked to Monash's advantage in the subsequent bidding process.

The eagerness and determination of Monash to be successful in its bid for TVOLP had its genesis in the Dawkins reforms, and in its new-found status as DEC. Much earlier, in the 1960s and 1970s, Monash University had resisted pressure from the State and Federal Governments to engage in distance education, despite its statutory obligation to establish 'correspondence classes' and 'university extension classes' (Monash University Act, 1958, Section 5d cited by Moodie & Nation, 1993).

[12] Peter Reeves was Assistant Secretary in the Department of Employment, Education, Training and Youth Affairs (Robinson & Babblett, 1998).

The Government eventually gave up on Monash, instead establishing Deakin University as the primary vehicle for introducing distance education at the university level in the State of Victoria. However, by the mid-1980s, the new Vice-Chancellor of Monash, Professor Mal Logan, and his administration looked to distance education as a strategic component of Monash's future expansion and internationalisation. The Dawkins reforms had made it abundantly clear however that DEC status was a necessary prerequisite for growth in this mode of delivery. If Monash was to enter distance education, it had to join with an existing distance education provider (Moodie & Nation, 1993).

The Gippsland Institute of Advanced Education was the second largest distance education provider in the State, and had resisted amalgamation with Deakin University, the leading distance education provider (Moodie & Nation, 1993). Given its small size, and the prevailing climate of amalgamations, merger with a larger institution was inevitable for the Gippsland Institute. It had earlier rejected an approach by Deakin, preferring to explore the possibility of merger with Monash, initially as a 'university college' (Marginson, 2000). The Gippsland Institute and Monash University had much in common. They shared an association with Sir John Monash and in their different ways, had close associations with the State Electricity Commission of Victoria. Furthermore, their respective heads (Tom Kennedy and Mal Logan) had a very good rapport, and 'powerful ease' between them (Marginson, 2000, p111). The eventual merger prevented Deakin from becoming a monopoly provider of distance education in the State, and as Marginson (2000) observes, provided Monash with an immediate strength in distance education and eventually strong candidature for the Government's Open Learning Initiative:

> For Monash, the main attraction for merger was the long-term potential suggested by Gippsland's role in distance education. This could provide the university with a head start in the future competition in distance education... rather to the surprise of Monash and the chagrin of Deakin, the strategy succeeded. Victoria had two DECs, one of them Monash/Gippsland.
>
> (Marginson, 2000, p112)

Mal Logan, Vice-Chancellor of Monash, gave the job of building a consortium and bidding for the TVOLP to Anthony Pritchard, who was the Registrar of Monash. Pritchard was formerly the registrar of Deakin University and had been closely associated with the development and administration of distance education. Although Pritchard was respected and trusted by Logan, he felt additional expertise in distance education would be a great asset. Gavin Moodie was Logan's choice to fill this role. Moodie had also joined Monash from Deakin University and was earlier appointed Assistant Registrar (Distance Education Manager), a position designed to promote greater inter-campus coordination of distance education activities at the university, and a direct outcome of the merger between Monash and the Gippsland Institute (Moodie & Nation, 1993). He brought an energetic commitment to distance education, had a range of contacts at various DECs, and was well regarded by the distance education community. Together, Pritchard and Moodie would guide the Monash-led consortium to success in bidding for the OLI.

The Monash-led bid was engineered to appeal to the minister by addressing three important criteria. First, consortium members were to be invited from different states, thereby providing a national scope to the membership. Preferably, the invitee should be a well-regarded institution, with credentials in distance education. Initially, the University of New England (UNE) was approached (Moodie, 1990b), which was the oldest and arguably the most respected distance education provider in NSW, with its establishment in 1938 as a regional college of the University of Sydney. Moreover, the UNE had been using Sydney University's television production studio for developing educational television units. Curtin University of Technology was also approached for 'geographical reasons and because second to UNE, Curtin had the most experience in educational TV' (Moodie, 1990a). However, Curtin was a member of the Western Australian Distance Education Consortium (WADEC) which itself had a rival bid, and it pulled out of the submission. In place of Curtin, the University of South Australia (UNISA) was approached, and it became the third member of the consortium.

Second, in that the project was based on TV-learning, naturally it was considered a great advantage to have a broadcaster as part of the consortium.

The ABC was targeted over other broadcasters due to its 'prominence, experience and expertise in educational broadcasting, as well as [its] national approach and coverage' (Moodie, 1991a). Therefore, in October, 1990, Gary Neat, Director of Communications at Monash, was asked to bring the Australian Broadcasting Corporation (ABC) into the consortium. Neat made the initial approach using his contact in the ABC, Rory Sutton, who admitted that the ABC had no knowledge of the project. It was clear that the ABC had not been approached by the minister or by DEET, 'not withstanding that Reeves thinks that the ABC's participation is critical to the whole project' (Neat, 1990). Nevertheless it was understood that 'anyone who could demonstrate a working relationship with the ABC by the time the bids were submitted would enjoy a considerable advantage' (Moodie, 1990c). At first, the ABC remained non-committal, and SBS was approached for consortia membership. However, by February, 1991, the ABC had agreed to be involved provided its role was not simply that of carrier: 'As a broadcaster the ABC sees its role as the publisher of broadcast material, which not only involves legal responsibility for the purposes of defamation and copyright, but also responsibility for broadcast quality' (Moodie, 1991a).

Third, it was felt that the inclusion of The University of Sydney would add prestige and weight to the consortium (National Distance Education Conference, 1991). Sydney had significant expertise in television education, with a long-running television production studio on-campus. At first, Don McNicol, the Vice-Chancellor of the University of Sydney, showed interest in joining the consortium, however, over time, the pledge became vague, and eventually the university became 'unwilling to make any firm commitment' (McNicol, 1990).

Hence, membership of the consortium changed considerably in each subsequent draft of the bid. In the 'Fourth Draft Submission for the Open Learning Project' of 19 November, 1990, for example, the members were, UNE, WADEC and the University of Sydney, with SBS acting as the broadcaster, and Monash as the Project Administrator (Monash University, 1990). However, by the eighth draft of the proposal, the University of South Australia had joined, WADEC had been written out, and the University of Sydney was once again included after being excluded from the previous draft.

Concurrent with the consortium-building effort, Monash and UNE were striving to determine the fundamental ingredients of a successful bid, and the core rationale underlying government strategy. In an exploratory endeavour, Moodie requested a meeting with DEET to 'test our [Monash's] thinking' (Moodie, 1990d). The proposal was accepted (Watt, 1990) and the meeting which ensued was held in Canberra on 13 February, 1991. Present, were representatives of the National Distance Education Conference (NDEC), the Commonwealth and the Monash-led consortium (including Nick Collis-George of the ABC and Professor John Chick of UNE). The Commonwealth representative, George Zuber, reported that although the project was a pilot, it had important links with the proposal to establish a Credit Agency of Australia and was part of a wider strategy aimed at 'broadening access and equity and at generating demand in higher education from groups not traditionally represented' (National Distance Education Conference, 1991). An educational approach previously touted by Moodie (1991a) soon became a major theme of the Monash bid, and of the project proper: 'to treat television broadcasts as a central feature of the access strategy rather than an integral component of the curriculum content. On this approach, the main role of the television programs would not be to deliver course content or formal instruction but to broaden access to university study by presenting it in a non-traditional and accessible form' (Moodie, 1991a).

Eventually, on 28 March, 1991, the submission by the Monash-led consortium was finalised and was hand delivered to Canberra by Gavin Moodie (Moodie, 1991b; University of New England & University of South Australia, 1991). The final list of consortium members were: Monash, UNE, UNISA and the ABC with an acknowledgement that WADEC had withdrawn from the consortium due to a difference in approach (Howse, 1991a). The proposal emphasised accessibility, flexibility of study and assessment, and transferability of credit towards conventional courses. It indicated the consortium's desire to involve as many institutions as possible in the project and proposed the following units to be broadcast on ABC Television: Australian Studies (UNE), Developmental Psychology (UNISA) and Marketing Theory and Practice (Monash), each with 10–12 thirty-minute programs, commencing February, 1992. Tony Pritchard was nominated as the Director

of the Project (University of New England & University of South Australia, 1991) and Robin McTaggart and Stephen Kemmis of the Faculty of Education at Deakin University were to be project evaluators.

In addition to the Monash-led bid, seven other rival bids were received by the Commonwealth: WADEC, Deakin, Griffith, James Cook, Queensland University of Technology, RMIT, Wollongong and Victoria College (Moodie, 1991c). Of these, the Wollongong University proposal deserves special mention. The bid featured collaboration with the commercial network, WIN TV (based in Wollongong). It proposed to develop lower budget, Australian produced programs. The submission argued that a commercial provider would ensure greater penetration of target markets, air time paid by advertising and commercial sponsorship, greater producer knowledge of clientele expectations and access to the broadcaster's market research mechanisms for evaluation purposes (University of Wollongong, 1991). Despite the proposal being non-collaborative with other universities, and being locally focused on the NSW country region, it received strong support from Canberra as a venture independent of the OLI. Eventually, it evolved into the well-known Professional and Graduate Education (PAGE) Program, which delivered postgraduate TV-learning on SBS TV, and by 1995, had amassed a consortium of thirteen universities in its own right.

THE EXPANDED CONSORTIUM

The decision to grant the TVOLP to the Monash-led bid was officially announced on 13 May, 1991, in a press release issued by Minister Baldwin (Daniels, 1991). The first screenings were to begin on ABC TV in February, 1992. Open Learning students would not be included as part of the university's student load and would pay a fee similar to HECS. Additional study materials and assessment were to be purchased on a cost recovery basis. Furthermore, due to the interest which had been received from the press, prospective students and other institutions, the minister declared an expansion of the project (Pritchard, 1991a). First, by doubling the budget from $1 million to $2 million (Baldwin, 1991b). Second, by requiring the Monash consortium to invite the unsuccessful bidders to join the consortium (Fray, 1991; Pritchard, 1991b). Invitations were sent on 24 May, 1991 (Pritchard,

1991g). Each of Deakin (James, 1991), Griffith (Bennett, 1991a), UNE (Chick, 1991) and Wollongong (Chipman, 1991) accepted the offer directly. Deakin also agreed to the invitation for Professor Jocelyn Calvert to be an adviser on the project and for Professor Stephen Kemmis to lead the evaluation of the TVOLP (James, 1991). By late June, 1991, Charles Sturt, Macquarie, RMIT and the University College of Southern Queensland had also submitted expressions of interest to join the consortium.

Problems associated with forming an expanded consortium soon become apparent, as the new entrants became aware they would not be granted full membership. Rather, the intention by the founding members was for new entrants to be 'participants', providing study units, but without Board or management rights. Thus, collaboration would form a three-level hierarchy: Monash would be the project administrator, UNE and UNISA would join Monash on the Board in tier two, and other universities would later enter on tier three as unit providers and compete with the others when study-units came up for tender. Each of Griffith, WADEC and Wollongong were now reconsidering their options, and voicing their dissatisfaction to the minister. Meanwhile, WADEC stipulated their participation was contingent on producing and shooting their own television unit, *Life and the universe* at a cost of $290,000 (Howse, 1991b). In fact, Monash and UNE had, from the outset, favoured Curtin, which was an original bid member. Monash argued that it was easier dealing direct with a single institution, than a representative body, and that resources were only available for one Western Australian university to be involved (Pritchard, 1991e). Dealing directly with Curtin, however, had the effect of subverting the government-brokered arrangement in which the three universities collaborated in providing distance education in Western Australia. Thus, Curtin remained outside of the consortium for the time being.

An additional problem was the substantial cost of producing television programs, which meant that only a limited number of subjects could be considered, fewer than the number of universities involved. As universities were entering into joint production negotiations, there was a counter-tendency for them to carve out areas of exclusive control within the subject areas. Old rivalries between institutions were also appearing. Griffith, for

example, who were participants but not full members of the consortium, objected to collaborating with UNE in the production of the Australian Studies television unit (Bennett, 1991a).

Relations between the universities and the ABC were also stretched, especially over the relative allocation of funds between content providers (universities) and the content producer (the ABC). In September 1991, a dispute erupted between the ABC and Griffith. The latter insisted that $150,000 be spent on adapting and readying an existing course for production. The ABC argued the money would be better spent in the production studio, and that Griffith's position was 'well out of proportion with all other financial aspects of the open learning project' (Pritchard, 1991f). The conflict was resolved, when Griffith backed down and accepted the terms mediated by the Monash administrators. Nevertheless, in an atmosphere of inter-institutional rivalry, it had become obvious that a legal agreement between parties on inter-institutional arrangements would need to be prepared.

By September, 1991, the 'expanded consortium' comprised Monash, UNE, University of South Australia, Deakin and Griffith. Under development were the TV-based units of: Anthropology, Australian Studies, Environmental Studies, French, Marketing Theory and Practice, and Statistics for the Social Sciences. Considerable effort now went into meeting the February deadline. Whilst this effort may have helped to diffuse tension among consortium members, dissatisfaction remained in those who were critical of Monash's management role and in its power over the other universities. Naturally, the government was concerned about the appearance of favouring a single institution, and a more independent project structure was constituted. First, the Department of Employment, Education and Training (DEET) advised Logan that a project steering committee had been appointed, comprising representatives of DEET, the Higher Education Council, the Department of Transport and Communications and independent persons from the higher education system who would meet biannually (Daniels, 1991). Second, Monash was asked to 'revise its submission' and in effect, distance itself from the project. In reply, Logan wrote: 'In order to avoid too prominent a Monash presence which might discourage other institutions' involvement in the project, the central coordinating office has

been established separately from the four Monash teaching campuses at 43 Exhibition Street, Melbourne (Logan, 1991a). In addition, a separate trading name was established, and on 2 July, 1991, the 'Open Learning Agency' letterhead was used for the first time (Moodie, 1991e).

ESTABLISHMENT

In the period leading up to the commencement of broadcasting, the TVOLP had to make a transformation from conceptual to working model. Various practical issues had to be decided on, and put into operation, such as the organisational structure, financial and administrative management, curriculum and production, as well as marketing and public relations. Each of these operational issues will be considered in the present section.

ORGANISATIONAL STRUCTURE AND MANAGEMENT

Building an organisational structure was the first step in bringing the TVOLP to reality. The structure was reconceived each time the consortium bid was redrafted, and in its final form included both centralised and decentralised aspects. At the centre were a small and dedicated team from Monash, headed by Anthony Pritchard, who were responsible for project administration, liaison with the steering committee and ensuring government expectations were being met. His was a demanding and multifaceted role, managing inter-institutional rivalries, approving the budgets of consortium members, developing cash flow plans and schedules, overseeing financial management and accounting, and administering student enrolments and student records.

Peripheral to project administration were the consortium members (full members) and consortium participants (partial members). Consortium members were responsible for the design and development of their designated unit. They were required to develop print-based study materials to complement the television component, and worked closely with the television production staff to ensure components were integrated. They had academic responsibility both for instructional design, and instruction, including student tuition, assessment, and feedback.

The role of ABC TV was intended to be largely that of support during development, and carrier of the final product. However, with its expertise in

material design, advertising and production scheduling, it too came to play a central, coordination role, as publisher of broadcast material. It oversaw all aspects of the television component to ensure a consistent 'look and feel' for the viewer. It developed television advertising segments, as well as graphics and credits at the beginning and end of each programme (called 'topping and tailing'). At times, this overlapped with the marketing and public relations role played by Monash, with some predictable tensions over policy. Within the ABC, Don Perlgut was the designated project manager for the TVOLP, and was the main contact for all parties during program development.

To assist in drawing up the basic form of the project, several consultancies was awarded. The first of these was to Ken Widdowson, early in 1991. Widdowson had personal experience in the delivery of television education. His company, Educational Media Australia Pty Ltd (EMA), based in South Melbourne, had mounted a broadcast educational television project (*Learning by doing*) for five hours per week on the ABC over 1987–8. Due to Widdowson's 'comprehensive educational broadcast experience in Australia', EMA was briefly considered as a potential consortium member or collaborator (Moodie, 1990a), but instead became a consultant to the project in that the government did not consider Widdowson's involvement essential. The consultancy provided expert advice, liaison with the course development teams and suggestions for building a consortium structure. The recommendations of the consultancy were:

a) to vest copyright of the units in either the consortium or in the Commonwealth;

b) to differentiate clearly between design and production phases, the former having been completed, a better indication of the production costs and the deadline could be determined;

c) to draft separate agreements with the ABC for delivery and production;

d) to have clearly defined rights for artists and writers, and;

e) to establish a mechanism for broadcasts to be duplicated and sent to students (Widdowson, 1991).

While his advice was listened to carefully, it is worth noting that few of his suggestions were acted on. The TVOLP was drawing on expertise around it, but was creating something quite new in Australia, and was following a path of its own.

CURRICULUM AND PRODUCTION

While the first six months of setting up the TVOLP structure was bedevilled by inter-institutional rivalries, the demeanour soon shifted to the energetic development of broadcast, curriculum and study materials. A development structure was decided on so that each study unit had two teams, one for project management and another for academic development. The 'project team' for each unit had responsibility for project management, budgeting, scheduling and reporting. The 'course team' was responsible for academic development and instructional design. Both categories of team included a representative from the ABC.

By September, 1991, seven units of study were in production. Two units were Australian productions, with a development budget of $300,000. Of the Australian produced productions, *Australian environmental studies: the unique continent* (UNE) was conceived as the flagship for the TVOLP. It was a large-team exercise, with the television component as well as the study materials being purpose designed, with 'special instructional design arrangements' (Television Open Learning Consortium, 1991b). The other locally produced unit was *Images of Australia: an introduction to Australian studies* (Griffith). The unit brief was for a multi-faceted look at historical and contemporary images of Australian culture and identity, from Aboriginal and European perspectives. It sought to address various aspects of Australian identity, its historical context, the role of the bush and urban Australia (Moodie, 1991g). It was an ambitious design, but initially suffered from difficulties in coordination, and in obtaining suitable television material. The remaining five units were purchased from EMA at a cost of $2000 per half hour with unlimited repeats over a two year period. The combined development budget for purchased programs was $300.000. *Anthropology: faces of culture* (Deakin) was a double unit which investigated basic concepts in social anthropology. *French in action* (UNE) was a double unit in French language. *Marketing: theory and practice* (Monash) explored introductory

marketing concepts. *Statistics: against all odds* (Deakin) considered basic statistical methods used in the humanities and economics (Television Open Learning Consortium, 1991a). *Religious studies: the long search* (Deakin and UNISA) consisted of 13 half hour episodes. It was purchased from the BBC at a cost of $55,000 with the option to 'put it to air' four times (Perlgut, 1991a). The overall costing for the television component was later summarised. It was found, on average, that Australian productions (13 half hour episodes) consumed $500,000 for production, while purchased programs required $25,000 for annual broadcasting rights, making the former about twice the cost of the latter if amortised over a ten year period (Moodie, 1992a).

During unit development, the production teams had to grapple with issues of delivery and curriculum design; the scheduling of television programs; the relationship between the study materials and the television component; the choice between buying, making or adapting content; the effective placement of assessment tasks; feedback to students; and means for general student support and examination. Whilst issues of curriculum and the mechanics of academic support are outside the scope of the present study, it should be pointed out that the project relied heavily on the experience of the DECs in planning student contact, administration of the units and the publishing of the print components. Students were required only to pay for the cost of their study materials (to a maximum of $100) and for the cost of assessment (to a maximum of $100) (Television Open Learning Consortium, 1991b). Utilising the existing DEC infrastructure was therefore essential because low revenue from student fees barely covered the variable (or per student) costs. Thus, the TVOLP was based on marginal costing in which production costs were calculated on variable fixed costs, while excluding the fixed costs of infrastructure, administration, library access, and to some extent development costs. Much of the cost of student support, was absorbed by the DECs. In other words, although production was funded by the government, there remained significant residual expenses which were not adequately recovered from student fees.

Similarly, the issue of library access generated a great deal of concern from librarians at the participating universities, not least because it was an important expense which had been overlooked in the initial budgeting

for Television Open Learning. The Monash University Librarian, Professor Edward Lim, for example, was alarmed that although there was an expectation that 'materials will be available for loan from consortium members' libraries... there has been no discussion to date between the libraries and the consortium' (Lim, 1991). In his reply, Pritchard (1991d) acknowledged that the intention was for Open Learning students to use the library on a fee for service basis, but the details of cost recovery were not specified in the correspondence. It was not just the university libraries which expressed their concern. It was believed that many prospective students would be studying at a distance from campus libraries, and would rely heavily on regional and public libraries. Fearing their services would be used without compensation, libraries around Australia began voicing their opposition. The *Australian Council of Libraries* accumulated and summarised a list of demands from its members, which included the following: a) libraries should be fully briefed on Open Learning developments so that they can service clients who require assistance with Open Learning research requirements b) reading lists should be comprised of commercially available material c) provider libraries should be primarily responsible for servicing their own students d) public libraries need specific funding to acquire recommended reading texts e) students need to be instructed on how to effectively use a library (Australian Council of Libraries, 1992).

The other pressing issue at hand was how to deal with student registrations and requests for information on Television Open Learning. Perlgut suggested that student contact could be handled at a central point, using a 0055 number with voice activated options (Television Open Learning Consortium, 1991b). Enquiries made to the 0055 number would be directed to a recorded message advising them of a contact address to obtain a student prospectus.

MARKETING AND PUBLIC RELATIONS

Issues such as student support, library access and providing information to prospective students were debated at each consortium meeting during 1991. A large part of the problem was that there was no way to gauge the number of enquiries the project would receive, and of these, how many would convert to enrolments. A wide range of figures were suggested. Sceptics sug-

gested total numbers of around one hundred student enrolments across the whole project. At the other extreme, optimists envisaged tens of thousands. Anticipating demand had direct ramifications on the budgeting of print runs, study guides, staffing, and of the relative allocation of funds between advertising, production and administration. Thus, market research and public relations consultancies were set up early in 1991.

The market research consultancy was contracted to Brian Sweeney and Associates who surveyed 1,275 men and women across Australia during the weekend of 6–7 July, 1991 (Brian Sweeney and Associates, 1991). Subjects were asked questions to elicit their initial reactions to the concept of an Open University utilising television tuition. The objective was to determine which segments of the population might represent key target audiences. In answer to the question: 'How interested might you be in enrolling in such an institution?', 17% expressed a definite interest and a further 21% said they would probably be interested. The study cross-referenced its results with classification criteria. This revealed the following segments with the highest levels of interest in an Open University: a) interest tended to be marginally higher in capital cities than in provincial cities and towns; b) females expressed marginally more interest than males; c) the 25–34 age group were the most interested, followed by the 45–54 age group; d) interest was highest amongst 'lower white collar' workers; e) part time workers were more interested than full time workers; and f) those in the 14–34 age group who were married with children expressed a strong interest in the 'Open University' concept (Brian Sweeney and Associates, 1991). Overall, the results were encouraging. It was clear that strong enrolments could be expected from various segments of the Australian population.

The task of public relations was appointed to Synergy Communications on 29 October, 1991 (Pritchard, 1991i) following receipt of their proposal (Synergy Communications, 1991a). Synergy were advised to 'maximise PR' and remain 'as independent as possible of the ABC's large promotion engine' (Pritchard, 1991i). In effect, Synergy's role was to represent academic interests in the face of the ABC's potential to overtake the project. The ABC had superior market access, considerable market penetration and final control over carriage. For the universities, it was important that Open Learning was

perceived primarily as an academic initiative, and that maximum exposure of their brands were achieved in TV, radio and print. It would be fair to say, however, that these fears would prove to be largely unfounded, and that the universities were generally satisfied with the television exposure they received on advertising promotions, as well as in program credits. Indeed, it could be argued that it was this television exposure, coupled with inter-institutional rivalry, which provided a strong motivation for universities to accomplish such high levels of production quality, and would ensure the success of the TVOLP.

Thus, at the outset, Synergy Communications were set on a collision course with the ABC's marketing and graphic design staff. For perspective, it should be noted that Synergy was a small operation, centred around its principal, Ms Laura Black, whereas, the ABC employed a large staff of highly experienced publicity and customer relations personnel. Within three weeks of having been appointed, Moodie (1991h) noted that the publicity approaches of Synergy and the ABC differed considerably. The first clash occurred with the development of a project logo, and continued with the production of the student prospectus (Pritchard, 1991k), and other promotional documents such as envelopes, launch invitation proofs and even Christmas cards (Black, 1991a, 1991b; Perlgut, 1991b; Teasedale, 1991a, 1991b). The public launch of the project was jointly managed both by Synergy and the ABC. However, after the launch was completed, Synergy retreated from engagement with the ABC and found respite in 'print media management' for OLA. This latter role included the issuing of press releases, and the monitoring of media coverage.

An additional consultancy was carried out by Ross Bishop. The goal was to bring corporate support to the project both through direct commercial sponsorship as well as commercial registrations in the units offered (Bishop, 1992b, 1992c). The consultancy covered a one month period, from mid-January to mid-February, 1992. The final report by the consultancy showed that some 285 organisations were contacted, of which 17 agreed to become 'foundation corporate supporters' through a small monetary contribution and by consenting to enrol at least one staff member from their organisation in an Open Learning unit. Among the high profile corporate supporters

were, Boral Ltd, Elders, ICI Australia Ltd, Suncorp Finance, The Australian Institute of Management, Cascade Brewery Company and Westpac Banking Corporation. In return for their support, the companies were acknowledged in print material going out to students, and were also announced at the launch of the TVOLP (Bishop, 1992a). Given the limited rate of response, and the small sponsorship funds received, the consultancy was not considered successful, and was discontinued.

An important issue was that of credit transfer, not least because it was a central expectation of the government. For enrolling students, the issue was even more significant: How would completing an Open Learning unit provide a pathway towards gaining a university qualification? Which university would confer the degree, and what degrees would be available? More than just an academic matter, credit transfer expanded into marketing and operational concerns, as it called on significant cooperation among the participating institutions. Ultimately, it was decided that upon sitting a 'challenge examination' students would gain 'unspecified credit' for completed units, should they satisfy university entrance requirements in one of the participating universities (Moodie, 1991f). Put differently, they would receive credit in place of taking elective subjects at university. It was therefore a prerequisite for consortium membership that universities recognise the academic standards of the other participating universities. Prior to the TVOLP, Monash and UNE had been working together on the government funded Australian Credit Transfer Agency (ACTA) which aimed to establish a national database of university courses, prerequisites and equivalents. The ACTA was expected to operate in conjunction with the TVOLP to 'assist in the negotiation of credit' (Pritchard, 1991g, p4) by encouraging consortium universities to participate. In Mid-August, 1991, Deakin requested to take part in the ACTA project (James, 1991) to pave the way for its inclusion within Television Open Learning. The TVOLP and ACTA appeared to be complementary projects.

Examinations were to be invigilated at designated locations, or in cases where students were too remote, special arrangements would be made in places such as schools, or libraries by the student in consultation with the DEC. Other assessment tasks were unit-specific, but generally, these were

in the vein of regular distance education. That is, students would complete assessable tasks, and send them in by either fax or post to the DECs, for handling by regular administrative systems. Typically this would involve workflow tracking, sending confirmation of receipt and then forwarding the assessment piece to the academic staff responsible for grading.

THE LAUNCH

With operational arrangements in order, and unit production near completion, the TVOLP was ready to make the leap from concept to reality. However, there was one last hurdle, the project launch. Synergy Communications, the public relations consultant for the launch, coordinated the planning, preparation, execution and monitoring of the event. Over the six month period of the consultancy, three public relations exercises were conducted. The first was in November, 1991, in which the subjects on offer for 1992 were announced in a series of media releases. Various types of media releases were issued, including an 'ethnic version' (Synergy Communications, 1991b), and a version which included snap shots from the market research generated by Brian Sweeney. A list of 800 journalists were contacted, and of these 150 received follow up phone calls. 'By the time of the launch and initial broadcasts, the media was well and truly warmed up and very receptive to our message' (Synergy Communications, 1992b). The second exercise was in January, 1992, in which the student prospectus was distributed to interested parties. The third exercise was the launch itself for which a media kit was developed comprising a information on each of the seven units as well as an overview of the project. In addition, a background paper on the TVOLP was issued to the consortium members to ensure consistency of messages given to the media (Synergy Communications, 1992b).

The public relations consultancy came up against constant opposition from the ABC. The consultancy's brief to represent university interests was compromised by the ABC's natural bias towards the television component. In Synergy Communication's final report, it was suggested that:

> The consultancy became a lightening rod for conflict between the two approaches... [and I] was required to negotiate a minefield of conflicting requirements between the educational side and the television side. The ABC staff

> seemed unable to grasp this, imagining some sort of conspiracy to do harm to the ABC, ridiculous!
>
> (Synergy Communications, 1992b, p4).

At one point, the consultant was refused access to the video tapes of the unit programs, and 'the ABC was rarely or never satisfied with Synergy's print and graphics', resulting in a number of revisions and 'personal invective' on occasion (Synergy Communications, 1992b, p3).

Nevertheless, arrangements for the event proper went ahead smoothly. Tasks, such as drafting the running schedule, organising the venue and contacting dignitaries and speakers were carried out. The ABC's Managing Director, David Hill was invited (Pritchard, 1992b), along with the Vice-Chancellors of each participating university. This group would make up the 'official party' of the launch. The date of the event was changed several times to allow for individual schedules (Collis-George, 1991b; Moodie, 1992c). For the keynote address, each of Bob Hawke (out-going PM), Paul Keating (in-coming PM), John Dawkins and Kim Beasley were invited to speak (Logan, 1991b, 1991d; Pritchard, 1992a; Vaughan, 1992), but this was really just a matter of protocol. Baldwin was sent the first invitation, a few days before the others (Logan, 1991c). He was the minister most closely associated with Open Learning, and it would have been perhaps, inappropriate for anyone else to deliver the key address.

Thus, on 17 February, 1992, the TVOLP was launched at the Radisson President Hotel, where Minister Baldwin made the first formal address, followed first by Mal Logan, and then by David Hill. A display of program materials appeared on a video wall after which guests individually inspected materials displayed at the five consortium members' booths (Moodie, 1992d). 'Nearly 200 journalists and invitees attended the launch... it was a great success' (Synergy Communications, 1992b, p2). In his speech, Baldwin emphasised the fundamental objectives of the OLI:

1. Improving access to higher education. 'The Television Open Learning project fits very well into the government's objectives for higher education. It will extend access to higher education to people who for various reasons are unable to attend on-campus courses'.

2. Increasing participation in 'post secondary education and training to help realise national and social objectives'.
3. Diversifying the delivery of higher education programs by 'examining the potential of communications and information technologies to improve the quality and efficiency of higher education provision'. 'television is of course only one of a range of technologies which could be used for educational delivery', but has the advantage of 'being possibly the most widely accessible form of technology within the community'.
4. Increasing public awareness of the possibilities within higher education by 'providing a taste of higher education to people who would not normally think of undertaking university study. As well as viewing the courses, they can 'test their interest and aptitude for university study'.
5. Testing 'the feasibility of using broadcast television as a means of delivering educational programs'.

   (Synergy Communications, 1992c)

The minister commended the high degree of cooperation which had been achieved between the consortium members and the broadcasters. 'All associated with the project are to be congratulated for their energy, initiative and co-operation in taking up the challenge, sometimes in the face of opposition and some scepticism, to trial a new educational venture' (Synergy Communications, 1992c). In a media release, 17 February 1992, Minister Baldwin (1991a) proclaimed: 'This is the first time in Australia that five universities have come together with a national television network to develop and deliver university-level units', and the expectation that through technology 'greater flexibility within the system' would be achieved (Baldwin, 1991a).

Coupled with the launch, were a range of public relations exercises designed to further extend public interest in the TVOLP. On ABC television, a 30-second generic promotion, produced at a cost of just $2000, was aired at the time of the launch, which encouraged people to ring the 0055 telephone number information service. The TVOLP was also featured on ABC television's high rating shows, 'The 7:30 Report', 'Landline' and 'Compass' (Perlgut, 1992b). One week prior to the launch, a media release was issued. Australia's unique environment (UNE); Marketing (Monash); Anthropology

(Deakin); Statistics (Deakin); Religion (Deakin and UNISA); Images of Australia (Griffith); and French (UNE) were each featured with descriptions of the programs and the curriculum (Pritchard, 1992d).

Public response to the launch occurred immediately and at an unanticipated scale. For example, sooner than one week after the launch, the '0055 hotline' had received 25,000 calls, and a further 5,000 enquiries had been made to unendorsed points of contact, such as university admissions centres and ABC offices (Perlgut, 1992a). A reprint of the prospectus had to be ordered due to high demand from prospective students (Muttray, 1992). By 3 March, enquiries on the 0055 line had reached the 30,000 mark (Perlgut, 1992c). Public interest in Television Open Learning was primarily built on effective media exploitation, which drew on, but was not confined to television promotion. The public relations campaign had also made excellent use of print media, including the main Australian newspapers, *The Australian*, *The Age* and *Australian Financial Review* (Black, 1992b). A month after the launch, Synergy Communications estimated that the newspaper coverage alone resulted in over 20 million exposures for the project. Of the 200 monitored press clippings and 100 radio interviews, it was found that over half of the articles had appeared in regional newspapers and much of the coverage occurred in New South Wales. In addition, the consultancy found there were 'very few unfavourable articles or radio items' (Synergy Communications, 1992b).

Typical of some of the more positive newspaper commentaries was an article published in *The Australian* by Helen Trinca (1992) entitled 'Class act has television students glued to the box'. It suggested the project was 'a great promotion for higher education in particular, and education in general', acting as 'a catalyst for others actually to start a course'. The article called the standard of program production 'very palatable', but suggested that there were more efficient ways of teaching off-campus students and meeting unmet demand. The article reflected on the demise of the University of Sydney's television service which had just been closed after 28 years of documentary and video production. 'Mr Andrew Grieg, [the Director of the service] said it was ironic that it was being closed just as the national television Open Learning project was to start broadcasting' (Trinca, 1992, p5). An

article by Phillipa Murray which appeared in The *Sunday Herald Sun* newspaper (9 Feb, 1992, p94) was entitled 'Monash's manager of tough options'. It provided a biography of Tony Pritchard, painting him as a compassionate administrator: 'Mr Pritchard feels keenly the anguish of school leavers whose hopes rest on a university place' (Black, 1992c). The *West Australian* newspaper, devoted a liftout section to the TVOLP entitled, 'A new view of learning' (Black, 1992a). The *Campus Review Weekly* (Feb 20–26, 1992, p3) ran with an article by Guy Healy entitled 'Open learning launch: trial by TV for higher education' which found the launch to be 'suitably high-tech... with a wall of television screens as a backdrop and the presence of the five Vice-Chancellors of the universities involved' (Black, 1992a).

The press reaction was substantial and generally positive. However, some concerns and criticisms were raised. John McCallum's (1992) article in *The Australian* (15 January 1992), for example, critically appraised preview samples of TVOLP offerings. He pointed out that 'the marketing program is boring... because it consists almost entirely of the standard two-camera interview'. However, he congratulated the *Long march* (religion), a BBC production, as well as Statistics, French and the Australian studies programs. He was disparaging of the telelogo in which 'a clever and graphically interesting series of shots of paper and grids and rulers and pens animatedly draw the word *open*. It evokes an image of dry technical work... which open learning... should avoid like the Martians'. He made other more general criticisms: 'What is the point of using television at all if what you show is talking heads? Television is a well developed medium with an audience which is highly sophisticated at reading it'. Moreover, his opening remark was: 'In the days of modems, CD-ROM and teleconferencing, the use of broadcast television is itself controversial...' (cited in Synergy Communications, 1992a). Geoffrey Maslen's (1992) article, entitled, 'Doubts over value of TV university' was perhaps the most scathing. He made the following criticisms: 'The project could be an expensive failure' due to 'too little federal seeding money, too many foreign programs, and too costly course materials' (Maslen, 1992, p9). Citing Rob Walker (Deakin) in an interview, the article expressed the view that 'the organisers missed the chance to create something really new... instead what is being offered is conventional off-

campus study with 30 minutes of television as an add-on... it is important that the broadcasts do not become televised lectures–in the same way we have televised parliament and the televised courtroom' (Maslen, 1992, p9). The article also included an interview with the Chairman of the Australian Vice-Chancellors' Committee (AVCC) and the Vice-Chancellor of Wollongong University, Prof. Ken McKinnon, who gave the opinion that the project would likely collapse after its two year trial due to its high production costs (Maslen, 1992).

DELIVERY

Although television delivery was novel in Australia, other aspects were indistinguishable from regular distance education. Indeed, it is worth repeating that each of the participating universities were linked to active Distance Education Centers (DECs), and many of the staff involved in setting up the study units were experienced distance educators. Moreover, unit development occurred very rapidly, with much of the activity and the budget allocated to the television component. Residual effort that went into instructional design and academic planning drew heavily on staff with experience in distance education design and delivery. Once students were enrolled in the study units, the DECs essentially took over the administration and servicing of the students, although there was no requirement that Open Learning students should receive the same level of tuition and academic support associated with conventional campus-based or distance education (Pritchard, 1991h). In many ways, project success can largely be attributed to the expertise and infrastructural support which was brought by the participating universities and their respective DECs. Therefore, after enrolling, students were sent study guides, were required to submit assessment tasks and sat examinations in the same way that regular distance education students had done. The television component was just that. It was an add-on to what would otherwise be regular correspondence education. Television took the place of the lecture, and added additional interest and a new dimension to the 'media-mix'.

Some aspects of delivery were especially challenging for the institutions involved. First, there was the rapid semester cycle. Four back-to-back study

periods (each of 13 weeks in duration) per year were scheduled. This was partly to utilise the scheduled air-time, and partly to maximise the number of entry points for students. Nevertheless, this had some drastic consequences on the coordination of resources and staffing. The universities were geared up for a two semester year, sometimes with an additional summer semester. The TVOLP study periods ran in 13 week blocks, with no break between them. Examination schedules regularly overlapped the start of the next study period. University staff were often required to operate their Open Learning units out-of-sync with their regular university courses, while administrative services had to make considerable staffing adjustments. Students were often admitted after the start of the study period, to maximise student enrolments. Unit enrolment lists were assembled by the TVOLP office staff, and then transmitted to the providers, on a just-in-time basis. It was therefore difficult for providers to predict enrolment numbers, print-runs, required staffing levels and demands for other variable resources. Units which experienced unexpectedly high enrolments, were particularly susceptible.

Of the TVOLP units under offer in semester one, *French in action* (UNE) was substantially over-enrolled. Many students complained about the slow delivery of study materials and unhelpful replies to student enquiries (Pritchard, 1992f). Pritchard (1992o) wrote to Professor Chick (UNE) that the TVOLP office had received 'scores of criticisms and complaints about UNE's service to Television Open Learning candidates'. The problem was two-fold. First, UNE had increased the cost of the print component by $20, following higher than expected purchase costs, and over enrolment in the unit. From the student perspective, this was in breech of the advertised price of $100. Second, holdups in the delivery of study materials to students were another cause of concern, as students were receiving the materials well after the start of semester. This highlights the problem of coordination between the central brokerage and the provider. The difficulty to project student numbers, and transmit this information in time was only a part of the problem. The other issue was one of assuming responsibility. The central office was naturally keen to distance itself from issues of delivery, however, this was impossible, when the delays in the admissions process had a direct impact on activities carried out by the providers. Responsibility for deciding on budget

allocation remained largely with the central office, whereas, delivery and academic costs were the responsibility of the provider. In that the providers had limited control over admissions and were operating on a marginal cost recovery basis, they may have felt justified in passing on any additional costs to the student. The problem of French was eventually resolved, but these tensions would remain with the project into the next phase and beyond.

EVALUATION

Formal evaluation of the TVOLP was in disarray even before programs went to air. Robin McTaggart and Stephen Kemmis of the Faculty of Education at Deakin University were originally appointed as project evaluators, as per the original bid submission to the government (Pritchard, 1991c). Despite this, documentation of the evaluation plan was slow to materialise, moving Pritchard to ask the Deakin evaluation team to put more work into the evaluation design. It appears that the composition of the team had changed during the course of 1991. By late in that year, Rob Walker and Terry Evans (Deakin) had assumed responsibility for the evaluation. There was also another problem at hand. Since the original submission, Deakin had become a full member of the consortium. They no longer had enough distance from the project to satisfy the government need for impartiality. By 18 November, 1991 George Zuber (1991) of DEET had written to Pritchard, concerned that the evaluation proposal was inadequate. The government wanted to ensure that evaluation was an effective tool both in keeping the project allied to government objectives, and in staying independent of the operational activities of implementing the project. This criticism was later reiterated by Bennett (1991b). Finally, Pritchard informed the Deakin evaluation team that their proposal had been rejected by DEET, and that the evaluation would be open to tender by public advertisement (Collis-George, 1991a; Pritchard, 1991j). Ultimately, a team headed by Bruce Keepes of The University of Sydney won the tender, and in early February, 1992, they were advised that their submission had been successful (Pritchard, 1992c).

On 20 March, 1992, the new evaluation team released its first *Preliminary evaluation report* from a questionnaire survey of 204 respondents (Keepes et al., 1992). The findings are summarised as follows:

1. A total of 2571 students purchased study materials for the *first study period*, broken down as follows: French (1150), Marketing (570), Australian Studies (368), Religion (305), Statistics (198).
2. Almost three-quarters (73%) of respondents indicated they would probably undertake formal assessment.
3. The age distribution differed from what was anticipated in the Sweeney survey. Over 60% of the respondents were 40 years of age or over, and 18% of these were 60 years of age or older, while only 16% were younger than 30 years old.
4. Only 16% of respondents had applied for a place at university and had not been accepted.
5. Main reason for students being unable to attend on-campus courses clustered around work and family commitments (57%).
6. The majority of respondents expected to videotape the programs (84%) and almost all respondents (92%) thought that television was a good supplement to print materials

   (Keepes et al., 1992).

At the conclusion of Study Period One the government was advised by the evaluators and by government advisors that the TVOLP was a huge success. Public response was strong and favourable, with 30,000 enquiries received before the first program was broadcast on 2 March, and with 2,500 orders for study materials. The majority of enquiries were from women (60%), with unusually large numbers from regional and rural areas (Pritchard, 1992m). Nevertheless, the TVOLP was limited in its range of offerings, with 'glaring gaps' in the curriculum, and no commitment to provide students with the option to continue their studies, or complete qualifications (Moodie, 1992b). The ball was now in the government's court to build on the success of the pilot and to expand the OLI into a comprehensive service.

The *Preliminary evaluation report* (Keepes et al., 1992) provided an indication of project success, but was limited in its capacity to provide policy advice for the debate over the future of the Initiative. The *Final report* (Keepes et al., 1993) was not published until the following year. Filling this void, an informal evaluation report written by Tony Bennett (1992a), *TV Open Learning: possible futures*, was rapidly circulated. It gave a measured

reflection on project progress, and suggested possibilities for expansion. The reported successes of the TVOLP included: effective inter-university collaboration, rapid production of unit materials and programs, the workability of a dispersed model of production, and the involvement of universities on the basis of their relative strengths in particular curriculum areas. Bennett's evaluation also offered a number of considerations for future expansion, including a need for a reduced emphasis on television, an expansion into other delivery media such as radio, a means of conferring degrees within the consortium, and the codification of a set of consortium relations between the unit providers, student support services, and the central apparatus authorised to determine curriculum policy (Bennett, 1992a).

Debate over Bennett's evaluation continued at the TVOLP Consortium Meeting (3 April 1992), with the views of members polarised between those who preferred horizontal expansion (increasing the range of first year units to make efficient use of the broadcast medium), and those who suggested vertical expansion (the provision of sequential studies to second and third year levels, and a shift away from reliance on television). The former of these positions was also favoured by some government bureaucrats who felt horizontal expansion might provide a cost effective 'proving year for people to transfer to conventional places in year two' (Bill Mutton cited by Moodie, 1992e). Division over this issue (Bennett, 1992a; Moodie, 1992b; Pritchard, 1992e), prevented consortium members from uniting behind an agreed structure for the future OLI.

CONCLUDING COMMENTS

The launch of the Television Open Learning Pilot (TVOLP) by Minister Baldwin on 17 February, 1992, formally recognised an important government sponsored initiative in higher education. Government policy backed by active support began a succession of organisational and educational changes with a national profile. Critics claim that change was being imposed on higher education by the Federal Government. Indeed, the objectives announced by Baldwin on 17 February were a clear statement of government intent, facilitated by a persuasive government grant.

This chapter has documented the government policies and practices associated with the introduction of broadcast television for open learning. These documents confirm that organisational and management problems were experienced, often created by those seeking to maintain their institutional autonomy. Tensions were experienced on several fronts: between project administrators and members of the TVOLP consortium; amongst the five universities in the consortium; between public relations consultants and the Australian Broadcasting Corporation; and between project decision makers and officers of the Federal Government. The chapter also covers the beginning of the Open Learning Initiative – three demanding years, 1990–2. Difficulties were encountered when autonomous consortium members were expected to share their resources. Further difficulties were experienced when enrolment numbers could not be anticipated and managed in condensed 13-week semesters. Despite a generous initial government grant, the provision of high quality television programs from a diminishing budget could not be sustained. In the event, DEC funding and shared distance learning expertise from the participating universities helped to sustain a budget-hungry project.

These early years of the OLI show that external difficulties were matched by internal commitment. For example, difficulties were encountered when TVOLP management endeavoured to implement substantive organisational change that impacted on well established, geographically spaced, autonomous institutions; and the commitment of the TVOLP management team and experienced distance education staff who were expected to realise the objectives of the OLI in the face of documented disputes and divided loyalties.

From its launch in February, the TVOLP gained a national image. It promised new approaches to teaching and learning for all willing to participate, backed by government willingness to harness communication technologies to benefit higher education. The public response was substantial, if unpredictable. Despite unevenness in enrolments in the first year, participating universities were encouraged to convert courses to a television format, thus beginning the brokerage approach to open learning still employed by OLA.

But the debate continued. Could these impressive initiatives best be described as educational or industrial in orientation? In Chapter Three, it was noted that open and distance education displayed Fordist elements of mass production, economies of scale and division of labour. Yet, where the TVOLP evidenced multi-skilling, teamwork, and combined flexible approaches with efficient delivery, it could be better described as post-Fordist – an organisation combining lean production strategies with flexible specialisation. Clearly, these several descriptors, Fordist and post-Fordist, are industrial rather than educational. On balance however, the stated objectives of the TVOLP, access and equity, were educational and political imperatives.

The TVOLP uncovered conflicts and uncertainties. It never fully overcame problems associated with institution-centred priorities. Yet it achieved where some may have predicted failure by building an organisational entity with a national profile serving thousands of Australians. So began the organisational changes in 1992 that in the following decade became known and accepted as Open Learning Australia (OLA).

5 OLA: establishment of a brokerage

INTRODUCTION

THIS chapter covers the emergence, consolidation and growth of the company registered as Open Learning Agency of Australia Pty Ltd, but commonly called Open Learning Australia (OLA). The company was formed to manage and run the Open Learning brokerage, which emerged out of the TVOLP. Government objectives for the OLI had shifted considerably, and the OLA had an even more challenging brief than did its predecessor. OLA constituted *Phase Two* of the OLI, not simply a continuation of the TVOLP, but a major expansion.

The chapter traces the development of OLA from its inception in 1992, until early 1997, the end date of the present study. The political processes and other underpinnings to its establishment are investigated, and in its final form the OLA is shown to be a result of a negotiated settlement between the DECs and the Federal Government. OLA is analysed from five different perspectives: unit provision, the operations of the central office, its approach towards openness, its rationalisation objectives and its commitment to innovation and technology. The chapter documents how the government attempted to instil competitive and collaborative elements in this new system of distance education provision.

BUILDING ON THE PILOT

An article appearing in the *Weekend Australian* (11 July 1992) entitled 'Open Learning just the beginning: Baldwin' (Cribb, 1992, p42) advised Australians of a bold new initiative by the Labor Government. It confirmed the government's satisfaction with the TVOLP, and claimed that the project had 'exposed huge latent demand for higher education'. The article went on to assert that the next phase of the OLI would be much expanded, and would:

- open up a new pathway into higher education
- be primarily marketed to mature age students
- go beyond TV, and explore new kinds of educational technology
- receive significant initial seed funds, but would pay its own way (Cribb, 1992)

The government was firmly committed to expanding the OLI on two counts. First, the TVOLP was seen as enormously successful. Success was primarily measured in terms of public response and student enrolments. Within one week of the launch of the project, there had been 25,000 enquiries from prospective students (Perlgut, 1992a), and the first study period saw 2500 students purchase study materials. From the government's perspective, the project was successful in meeting government objectives, and in establishing an emergent brokerage. Furthermore, as opposed to other forms of education, the TVOLP was a relatively high profile enterprise, with daily broadcasts on national television, and ongoing coverage in the print media. Awareness of the overwhelmingly positive media exposure attached to the project was a strong motivation for the government to forge ahead and expand on their plans for the OLI. In addition, several other encouraging signs were in evidence. In February, 1992, DEET had received enquiries from tertiary institutions in New Zealand who had expressed interest in participating in the project (Whittlestone, 1992). Potential was there for international opportunities to extend television learning into the Oceania region. Furthermore, interest from other sectors, including TAFE institutions and secondary schools indicated a broad acceptance of broadcast media for educational delivery.

It should be pointed out that even prior to the launch of the TVOLP, policy aimed at expanding the OLI had been gaining considerable momentum from within government circles. Minister John Dawkins had commissioned various reports to study the television open learning concept, with an implicit aim to extend delivery. In April 1991, a working party, which had been established by the Australian Education Council (AEC), was widened by the Commonwealth to include representatives from each sector of education, and related interest groups from industry and government. At

the establishment of the working party, Minister Dawkins had signalled his intention to commission several additional reviews to consider establishing an open learning brokerage as well as a dedicated educational television channel (Australian Education Council, 1991).

With Dawkins's surprise retirement from the education portfolio on 27 December 1991, the succeeding minister, Kim Beazley became the new senior minister responsible for education. Despite this change, Peter Baldwin, remained in the 'junior' position of Minister for Higher Education and Employment Services. Minister Baldwin's term (May 1990 to March 1993) spanned both ministries (*Appendix B*), enabling a degree of continuity in OLI policy. With Dawkins's departure, however, Baldwin appeared to gain a much freer hand in the Initiative, which became more closely associated with his office and more ambitious after this point. Less emphasis was placed on television and more on print and alternative modes of delivery (Pritchard, 1992u). During the Dawkins Reform period in the late 1980s, a number of government reports had called for concerted action to ensure that telecommunication technologies (particularly television and satellite applications) were being harnessed to improve teaching and learning. With Baldwin, this brief was now being extended to include all telecommunication technologies which could be used in education delivery (Australian Education Council, 1991).

With the transition from pilot to fully-fledged system, the true colours of the government's agenda for Open Learning were emerging. Under Baldwin, government rhetoric was openly calling for the OLI to act as a vehicle to rationalise DE, to answer the problem of unmet demand and support a substantial effort in electronic modes of delivery (Pritchard, 1992h). The DECs were keenly aware of this change in government policy, and were even preparing to derail the OLI. In the later half of 1991, the government advisory body responsible for the OLI was renamed *The Australian Education Council (Working Party on a National Education Communications Framework).* The change in government posture was heralded with the announcement of six OLI-related research consultancies, which would be open for tender (Australian Education Council, 1991). The AEC called for 'A feasibility study for a national body to facilitate/coordinate national communications and related

open learning techniques', for the first time referring specifically to the use of new communication technologies for Open Learning. The consultancy titles were as follows:

1. 'Assess the feasibility of establishing a small national collaborative education communications body';
2. 'Assess the desirability of a national brokerage facility to service educational training providers of open learning';
3. 'Identify opportunities for establishing... national technical specifications for telecommunications and computing equipment to be used in the delivery of open learning';
4. 'Identify improved educational outcomes that can be addressed by open learning delivery...';
5. 'Evaluate broadcast television as a delivery mechanism for education and training';
6. 'Evaluate existing and potential use of learning centres to deliver open learning by a range of education/training providers.'

   (Australian Education Council, 1991)

Tenders for the consultancies closed 27 November 1991 (Australian Education Council, 1991), and of the successful tenderers, a joint proposal from UNISA and SA TAFE won the Open Learning and communications technologies brokerage (this would later develop into the OLTC); and Ken Widdowson (EMA Pty Ltd) secured the television delivery consultancy (Moodie, 1991i).

It should be clear that even prior to the commencement of the TVOLP, there were considerable government expectations of the OLI. Furthermore, in its entirety, OLI initiatives also encompassed the TAFE and secondary sectors, and with Baldwin's entry, delivery technology now included the use of *new* communications technologies such as computers and the internet. Success of the TVOLP launch fuelled these expectations, and the minister's considered strategy for the OLI was revealed at the TVOLP consortium Meeting of 3 April, 1992 (Pritchard, 1992e): 'Mr Baldwin, the Minister for Higher Education and Employment Services, was impressed by the Project's progress so far, and shortly would be considering proposals to expand open

learning arrangements'. The key ministerial considerations were recorded as: the minister's interest in alternative modes of delivery, the need to deal with unmet demand, access for rural and mature age people as well as those with non-traditional entry qualifications, flexibility in teaching and learning, credit transfer, and cost-effectiveness (Pritchard, 1992e)

BIDDING FOR PHASE TWO

Just two months following the launch of the TVOLP, bidding commenced for the opportunity to manage Phase Two of the OLI. Rumours from Canberra were shedding light on the minister's approach (Moodie, 1992f). First, there was the minister's interest in alternative modes of delivery. Second, there was the aspiration for open learning to be utilised to absorb unmet demand for tertiary study. Third, the minister was preparing for a substantial expansion of the OLI, supported by a generous budget. Even so, there was an understanding that an expanded project could not support a high proportion of TV-based units. Instead, the minister was inclined towards the use of conventional print-based distance education practices, augmented by alternative modes of delivery for a smaller subset of units. Underlying these plans, however, the subtext was for a major rationalisation of distance education. Baldwin was of the view that the system of distance education in Australia was 'highly fragmented' and that competing universities offered similar courses, with the result that hundreds of courses were available, but the majority had very small enrolments. The solution was 'to consolidate the distance education system... by making available that quite broad array of courses which have been developed throughout the Australian university system' (Baldwin cited by Brown, 1992a).

Late in 1991, the minister had received an influential proposal from the University of Queensland for the establishment of 'The University of Australia' (King, 1992b). The 'Queensland idea' called for the establishment of a distance education brokerage, run by the University of Queensland, with the goal of centralising and coordinating the offering of distance education courses in the Australian higher education sector (Pritchard, 1992h; Wilson, 1992b). Although the proposal was separate from the OLI, the minister was keen to combine the Open Learning Initiative with the

Queensland proposal. The government agenda had shifted from the piloting of broadcast television to the rationalisation of distance education resources: 'Mr Baldwin is now eagerly pushing for the merging of the Television Open Learning scheme and the resources of the DECs around the country under the umbrella of a main player which will act as a broker' (Brown, 1992a). A series of meetings between the minister and Brian Wilson, the Vice-Chancellor of the University of Queensland, laid out a general structure for the brokerage, but bringing in the TVOLP would require the compliance of Monash, and of the DECs.

Knowledge that the government favoured a joint Monash-Queensland bid for the brokerage aroused concern from the rest of the university sector, and the Government was obliged to hold a briefing in Canberra for interested parties (King, 1992b). On 2 July, 1992, DEET called for expressions of interest in the OLI, and *Phase Two* became 'open for tender' to all universities (Gallagher, 1992a). At the same time, however, the University of Queensland and Monash University were asked by the minister to make a joint submission for Phase Two of the OLI (Pritchard, 1992k). The target date for submission was August 6, 1992. Surprisingly, the two university Vice-Chancellors agreed in principle on a joint submission, despite the fact that the minister favoured Queensland as the major player (Logan, 1992a). On 8 May, 1992, Wilson advised Logan that the government had endorsed the joint brokerage proposal and submissions made by other universities would not be considered (Pritchard, 1992k), with 'the need to tender... abandoned' (Wilson, 1992b). The form of the joint proposal was that an 'agency' be formed to avoid the allegations that the government was 'providing cash to institutions', that the agency would have 'two contractors–Monash for television studies, and UQ for print' and that the agency be located in Brisbane (Wilson, 1992b). According the Wilson, it was natural that the University of Queensland should appropriate the OLI, 'because the print arm will be the largest', 'because UQ does not incorporate a DEC' and therefore perceived as more independent, because 'UQ was the original distance educator in Australia' and finally, because 'it was really my idea that started this roller-coaster' (Wilson, 1992b). The idea of a central office in Brisbane was rejected by Monash, instead a distributed model was proposed (Pritchard, 1992g).

In *Report on the Open Learning Initiative* (Pritchard, 1992h), the details of the joint venture were further developed. The plan was for the two arms of the OLI to be managed independently but marketed together under the Open Learning logo. The print arm run by Queensland (called UniLearn) would be added to the existing television project (retaining the name Television Open Learning). The 'Monash-Queensland Open Access Agency' was to be an expansion of the TVOLP concept, coordinated by both institutions, but involving the participation of other universities (Logan, 1992a). The Commonwealth would write 'separate cheques to the University of Queensland and us [Monash], which would be in the order of $10 million capital and development funds to each over 1992–5, with recurrent costs recovered from student fees comparable to HECS... We would be expected to gear up to soak up the bulk of unmet demand, which might be 10,000 students in 1993' (Pritchard, 1992h). Additionally, the Commonwealth would provide funding for a significant number of 'Open learning candidates to transfer to mainstream courses in second and subsequent years' (Pritchard, 1992h). The proposed time scale was from 1993 (offering 30 print and 20 electronic mode units), until 1995 (expanding to 80 print and 40 electronic mode units). 'Electronic mode' units referred to those utilising TV, radio and other electronic learning modes. But provision was made for 'at least 1 unit in an 'innovative electronic mode' [computer assisted learning] to be developed each year' (Pritchard, 1992j).

The joint venture offered 'a significant number of attractions for Monash' (Pritchard, 1992h). Alternative delivery was of particular interest. The university had recently put together plans for a new high-tech campus, utilising computer and information technologies as a central means of educational delivery. The OLI promised funding for a substantial effort in innovative electronic modes of delivery. There was also Monash's Credit Transfer Agency and its international marketing strategy. Other spin-offs included television marketing opportunities and the introduction of 'a new generation voice-response student enrolment system' (Pritchard, 1992h). The OLI was a 'mechanism for bringing together Monash's interest in TVOL, Berwick,[13] TAFE transfer, continuing education, single subject enrolments

[13] Monash University's new 'high-tech' campus in outer Melbourne

and international exchange students' (Pritchard, 1992h). Gearing up for Phase Two, Faculty Deans of Monash University were invited to submit proposals to offer units with radio or other forms of electronic modes of delivery: 'The Commonwealth is keen to see us prove innovative forms of teacher-learning. They currently have in mind Computer Assisted Learning, but any feasible innovative development would attract their interest' (Pritchard, 1992i).

On 21 May 1991, Pritchard had informed the consortium members that Monash was entering into a joint bid with Queensland. Reaction to the joint bid from the existing TVOLP consortium members was one of anger and apprehension. The consortium members felt that they had been 'sold-out' and deceived by Monash. Consortium members' sentiments were revealed at two meetings. The first was the National Board of Employment Education and Training (NBEET) meeting in June. Subsequent to the meeting, Logan was advised by Professor Brown of Monash who had been in attendance, that many of the DECs 'were in close and explicit agreement about the undesirability of the Monash initiative progressing any further' (Brown, 1992b). The second was a meeting between the Commonwealth, the consortium, including Monash, and the University of Queensland. Logan (1992b) reported, at the meeting, 'consortium members are critical of what they see as Monash's appropriation of the project'. Non-consortium members were also discontented. Murdoch University, for example, which had been making a late effort to join the OLI, expressed alarm at how the tendering process exhibited a 'complete lack of openness and consultation' (Gawthorne, 1992). Tensions were causing the consortium to break up, and Monash was becoming isolated from the other consortium members. Pritchard writes: '[I can] no longer manage by consensus, even if this were desirable' (Pritchard, 1992l).

Gauging the mood, Logan (1992h) called a dinner meeting to 'check the views' of TVOLP consortium members and to 'discuss the future of Open Learning'. Initially, the invitees consisted of the Vice-Chancellors of each of the participating universities (Logan, 1992c, 1992d, 1992e, 1992f). The invitation list was subsequently enlarged to include potential members, and was rescheduled for 20 July 1992 (Logan, 1992i). At the meeting, the

invitees put forward their dissatisfaction with Monash, and particularly with Monash's unpopular alliance with Queensland. Logan implied he had not ruled out bidding independently of Queensland, but given the minister was keen on the Queensland proposal, it was 'politically wise to address that matter' (Pritchard, 1992t). Nevertheless, Logan put to the audience the case for the Queensland-Monash proposal. At the conclusion of the meeting, the invitees were asked to consider their positions and send these back to him in writing, indicating their support or otherwise of a Monash-led bid. A range of replies was received. Howse (WADEC), for example, gave an open offer of support (Howse, 1992). Hay (Deakin) simply confirmed his backing for Monash to act as the project manager of any new development (Hay, 1992). Blake (CSU) expressed an interest in joining as a full member (Blake, 1992b) along with Curtin, 'to provide a genuinely national coverage', provided the University of Queensland did not manage print, as the separation of television and print 'draws an unreal distinction between delivery medium use.' (Blake, 1992a). Robinson (UNISA) agreed to be part of the bid (Robinson, 1992a), provided Deakin, rather than Queensland, were the managers of the print side (Robinson, 1992b). Finally, Webb (Griffith) agreed to join a Monash-led expansion of the TVOLP, provided the University of Queensland was excluded (Webb, 1992b).

During July and early August, Monash also approached other parties to build support. The ABC was contacted, as were various TAFE institutions (Logan, 1992g; Monash University, 1992a; Pritchard, 1992q). While NSW TAFE accepted the invitation (Ramsay, 1992), the ABC was more circumspect. Hill (1992) wrote a letter of cautious support: 'the ABC is prepared to work with the successful tenderer. If your bid is successful, I would like to confirm the ABC is prepared to maintain its commitment to Television Open Learning with expanded broadcast times and production facilities'.

Although the TVOLP consortium felt let down by Monash, the University of Queensland was the principal focus of resentment. Queensland's actions were seen as opportunistic. There was an impression it was attempting to hijack the project from the consortium members who had worked so hard to build it. The model, which Queensland had originally put to the minister, was also of particular concern. It positioned Queensland as the

potential coordinator of the all Australian DECs, despite the fact it was not itself a DEC. The motives behind the proposal were therefore in doubt, and the prevailing view at the NDEC meeting (of 29 July, 1991) was that the University of Queensland could not be trusted (Pritchard, 1992r). Aware of the strong feeling against their involvement, the University of Queensland circulated a letter to DEC universities asking for a measure of willingness to be involved in the joint Queensland-Monash bid' (Wilson, 1992a). However, their attempt to seek support was too late. With 'the backlash' gaining strength, Monash, too, had already begun distancing itself from Queensland. Rumours suggested the University of Queensland might pull out if the DECs wanted to support Monash and not cooperate with the University of Queensland.

With the position of Queensland weakening, Monash hedged its bets. A decision was made to 'make a separate submission from the University of Queensland' (Logan, 1992j), while keeping their options open. Logan (1992j) indicated he was 'still prepared to work with them', but only if Queensland won the bid. The final version of the Monash-bid was prepared on 4 August, 1992 (Pritchard, 1992s). The bid proposed the formation of an 'Open Learning Institute of Australia', fully owned by Monash University, but allowing 'significant participation by other universities, particularly members of the Television Open Learning Consortium'. The Board of Directors, the Executive (budgeting and scheduling) and the Board of Studies (academic matters) would each be chaired by Monash representatives, but would include membership from the consortium constituents (Monash University, 1992b).

Queensland's fate was sealed in August 1992, when the other consortium members rejected the Queensland-Monash proposal and the separate Monash-bid. They hastily launched a counter-bid under the name 'University Partnerships Pty Ltd' (UP) which was the entrepreneurial arm of the University of New England (King, 1992b, 1993). David Evans, the CEO of University Partnerships provided leadership for the consortium. The core group comprised Charles Sturt University (CSU), the University of New England (UNE) and Deakin, with Griffith, Curtin, The University of South Australia (UNISA), The University of Southern Queensland (USQ),

and the Central Queensland University (CQU) included as secondary members. Their bid was hastily put together and submitted on the final day for lodgement of expressions of interest (Ray, 1993). The proposal called for the formation of an 'Open University of Australia', jointly owned by participating universities, and offering generic degrees in 'general studies' (University Partnerships, 1992). The approach of the UP bid was highly collaborative, with participating universities able to buy shares in the venture. This contrasted with the proposal from Monash, which they saw as a 'steam roller' (Webb, 1992a; West, 1992). Significantly, Monash was invited to join the UP consortium as a shareholder, if that bid was successful (Evans, 1992a). On the other hand, the UP consortium explicitly rejected Queensland's involvement in Open Learning. Ultimately, without support from the DECs, Wilson was forced to withdraw the Queensland bid (King, 1993; Porter, 1992).

The government was keen to reconcile differences between Monash and UP before coming to a decision on the final structure. Several meetings were organised amongst the parties to this end. One such meeting occurred 25 August 1992 in which Richard Johnson, representing the government, aimed 'to reach agreement between the UP and Monash parties on an acceptable management structure and mode of operation for the OLI' (Gallagher, 1992b). The key issue was shareholding and control over the proposed Open Learning Agency. Monash stood by its 'executive model', in which Monash had majority Board rights and full ownership. As already mentioned, the UP proposal called for devolved control and distributed shareholding (King, 1993). However, Monash stood firm: 'Prof West[14] emphasised that he could not agree to Monash having less than majority control of any governing body' (Gallagher, 1992b). Advocates of the Monash model felt that the UP proposal would 'not lead to an agency able to make firm and decisive decisions. Rather, it would devolve into a committee of constituents' (Moodie, 1992i). Moreover, a decentralised model remained in doubt while the conduct of the universities continued to be openly factional and competitive. Thus by the meeting of 3 December 1992 (convened by Baldwin, with representatives from DEET, Monash, Deakin, Curtin, UNE and UNISA), the

[14] Pro-Vice-Chancellor (International Programs and Development) at Monash University

minister indicated his preference for Monash to proceed, in consultation with the other members of the consortium (Pargetter, 1992).

The government's decision on the future structure of the OLI was slow in coming to fruition. In September 1992, Baldwin advised Logan that 'in principle' Monash had won the bid for the OLI (Baldwin, 1992b). However, the final decision of the Evaluation Panel remained 'in limbo' right up to January 1993 when Monash and the Commonwealth signed a formal agreement. During the intervening period, concerns arose that Baldwin was stalling to consider other options (Pritchard, 1992u). These concerns were put to rest in December, when David Evans (University Partnerships) wrote to West, advising him that UP had stopped lobbying for the OLI, and that rumours in the media that UP was considering legal action against Monash were to be disregarded (Evans, 1992b). Ultimately, the OLI Evaluation Panel 'did not accept that the University Partnerships proposal would provide efficient or sufficiently strong management' and their preference swayed towards Monash (King, 1992b). Reaching final agreement with DEET however, required continual negotiation and appeasement. On three separate occasions, the government asked for 'further clarification', 'additional details' and 'agreement to the minister's terms' (Gallagher, 1992c, 1992e, 1992d). The indecision centred on the issue of the 'media mix' between print, television and electronic delivery. Whereas, Monash favoured a significant television presence, the government was more intent on print (consolidation of the DECs) and on computer-based learning (innovative delivery). Informed of a large cut to the television budget, Pritchard wrote:

> Baldwin is badly misreading the value of television. Apart from some educational value, its main point is publicity and the flow-on access effects. It is not as expensive as he imagines – given that the ABC does not charge for use of facilities and there is no charge for broadcasting... with less television we cannot be as sure of our student number forecasts.
>
> (Pritchard, 1992u).

Monash's strategic plan for the OLI was repeatedly revised to incorporate Baldwin's preferences: 'by 1995 television will be only involved in a small proportion of subjects' (Logan, 1992k). To consolidate the print-based offerings of the DECs, the minister was also keen to involve as many DECs as

possible. Thus, the Monash proposal was altered to read 'implicitly, our submission makes it clear the enlarged group could offer all modes of delivery, with an emphasis on print-based distance education sequences' (Pargetter, 1992). To satisfy the government's appetite for innovative electronic delivery, Logan (1992l) presented a paper to DEET entitled *Laying the foundations of an electronic university*. The paper outlined a three-stage vision for the development of the OLI. The first stage was to establish electronic means for administrative transactions (providing general information on courses and allowing students to check registration details online). The second stage was to provide students an electronic means for simple communications (eg computer access to libraries, electronic mail and computer conferencing). The third stage was for more sophisticated educational applications (eg computer managed learning, electronic document retrieval and the production of courseware materials on CD-ROM). Indulging the minister's preference for innovative delivery only went so far, however. The paper emphasised the importance of television: 'The popularity of television, and the high level of VCR ownership... suggest that Australians are comfortable with electronic forms of communication' (Logan, 1992l). Television was also given a lift, with the unveiling of a plan by *Australia TV International* to broadcast Open Learning programs in the Asian region (Logan, 1992m).

The final proposal by Monash anticipated a total of ten units to offer 'medium level course components' (at a cost of $22,000 each) and a further six units to offer 'significant full course electronic delivery' (at a cost of $100,000 each) (Logan, 1992l). This was despite the prevailing view within the Monash executive that the government's obsession with computer-based learning was misguided. Pritchard (1993a) noted, for example, 'the use of computers may appeal to segments of the electorate, but it is just a distraction from our core business'. Even Moodie (1993a) perhaps, more sympathetic towards the use of innovative delivery technologies, regarded computer-based learning unlikely to be of any significant value at that time. These views would become prophetic within just a few years of OLA's establishment.

OLA IS ESTABLISHED

On 10 February 1993, the minister launched Phase Two of the OLI in Sydney. The final form of OLA represented a compromise between Monash's insistence on both ownership and control, and the government's desire for a shift away from television. The minister's media release, on the same date, summarised government aspirations. The expanded project would offer a total of 19 units in the March study period with the number increasing to 75 by the end of the year, and a proposed figure of 150 units by the end of 1995. The programs would be delivered through a variety of media. 'All will incorporate print material. Some units of study will be enhanced through the use of television, radio, or computer-based learning' (Baldwin, 1993). In addition, the minister announced a large increase in funding. The newly formed Open Learning Agency of Australia Pty Ltd (OLA) was to receive a sum of $28 million in seeding funds, with a further $25 million provided for 'separate technology support and AUSTUDY payments', the latter of which would be available to full time students. The minister's press release also revealed Monash's domination of the company's Executive and Directorate. The Agency would be Chaired by the Vice-Chancellor of Monash, with four other Monash nominees on the Board of Directors (providing an outright majority). The remaining four Board Directors would comprise the Vice-Chancellors of CSU, Curtin, Deakin and UNISA. Other participating universities would be involved via representation on the Academic Programs Board (Baldwin, 1993). OLA was, therefore, to be 100% owned and controlled by Monash. Notwithstanding, the 'UP universities' that had staged a late challenge, were consoled with Board membership. According to King (1993), the decision to make the brokerage agency a 'company' resulted from the Labor Party's commitment not to charge upfront fees for undergraduate university education. Because the enrolment (registration) fee was the only requirement for student participation, it was important that this was paid to a company, rather than to a higher education institution.

The broad objectives of the OLI Phase Two were set out in the *Agreement between the Commonwealth and Open Learning Agency of Australia Pty Ltd*, signed 18 January 1993[15] (Commonwealth of Australia, 1993). The 18 January

[15] This was a signed contract between the Commonwealth (Minister Baldwin) and Monash University (King, 1993).

agreement outlined the management structure of the brokerage system, the terms of provision of brokered study units, as well as the financial and legal arrangements. The key objectives were set forth in Section One as follows:

- to widen and facilitate access to tertiary access to tertiary education through the provision of off-campus courses in a wide range of subjects in high demand;
- to increase flexibility and innovation in the provision of high quality tertiary education programs;
- to build on the experience, expertise, range of course offerings and infrastructure of distance education, the pilot TVOLP and open learning initiatives in the TAFE sector

(Source: Commonwealth of Australia, 1993)

The remaining sections of the present chapter show the key features of the OLA brokerage model, and their impact on the performance of OLA. The timeframe is from the inception of OLA in January 1993 until January 1997, when the company was reformed. Five main sections follow. The first section (*unit provision)* looks at the brokerage model from the perspective of the consortium members. It gives an overview of the study units under offer, and reveals academic and operational issues arising from provision. The second section (*the central office*) covers the operational concerns of the OLA central office. The third section (*access and openness*) is concerned with student-centredness and how this was managed by the providers and the central office. The fourth section (*rationalisation*) looks at the processes behind rationalisation of distance education and to what extent government expectations of cost-effectiveness were met. The fifth section (*innovation and technology*) explores OLA's engagement with technology, both innovative and non-innovative. The chapter concludes by introducing a further shift in government policy, one which more explicitly embraced new computer-based technologies as tools of innovation and change.

UNIT PROVISION

By 1995, the original consortium of six universities enlarged to include nine full members: Charles Sturt University, Central Queensland University, Curtin University of Technology, Deakin University, Griffith University, Monash University, the University of New England, the University of South

Australia and the University of Southern Queensland. Consortium members were required to accept unspecified credit for Open Learning units offered through the OLA brokerage, and direct credit for those units which contributed to particular awards.

In addition, non-consortium members were invited to contribute study units. These institutions were not bound to accept credit for units offered by other institutions, although in many cases they did. The non-consortium members included: La Trobe University, Macquarie University, Murdoch University, Northern Territory University, RMIT, Southern Cross University, Swinburne University of Technology, the University of Adelaide, the University of Queensland, the University of Sydney, the University of Melbourne, and the University of Wollongong. OLA also developed a limited TAFE involvement. In the TAFE sector, the non-consortium unit providers were: Adelaide Institute of TAFE, Barton Institute of TAFE, Holmesglen College of TAFE, the Open Training and Education Network, Outer Eastern College of TAFE, South East Metropolitan College of TAFE, and the Australian Rural Business Management Training Network (Atkinson et al., 1996b).

The number of units under offer in each of the first three years was set according to the agreement between the government and OLA. In clause 2.4 of the 18 January agreement, there was a stipulation that the program should commence with 15 units in March 1993, growing to 75 units by the end of the year, and maintaining a minimum level of 150 units in 1995, until the

Discipline	1992[16]	1993	1994	1995
Arts / Social Sciences	5	21	72	94
Languages	1	8	24	30
Science and Technology	0	9	30	50
Applied Studies	0	2	2	2
Business	1	10	48	59
TAFE units	0	0	10	31
Totals	7	50	186	266

Source: Atkinson et al. (1996b)

Figure 5.1 OLA units offered by discipline area: 1992–5

[16] This column of data relates to the TVOLP.

expiration of the agreement in 2002. In addition, the Initiative was required to offer units in 'areas of demonstrated high demand', such as 'business studies, social sciences, humanities and education' (Commonwealth of Australia, 1993). This led to the establishment of five broad 'discipline areas': Arts/Social Sciences, Languages, Science and Technology, Applied Studies, and Business. *Figure 5.1* shows the rapid growth of unit offerings in undergraduate and TAFE delivery.

In addition to undergraduate and TAFE units, by late 1995, there were also 158 postgraduate units offered across twenty postgraduate programs. In total, 57 Open Learning units were supported by ABC Television broadcasts: Arts/Social Sciences (19); Languages (18); Science and Technology (12); Applied Studies (2); and Business (6). Broadcasts were 30 minute programs scheduled for weekday mornings (3:30 AM–8:30 AM) and for Saturday mornings (9:00 AM–11:30 AM). A further 16 units were supported by ABC Radio National. Radio broadcasts were scheduled for two weekday sessions: early morning (4:10 AM–6:00 AM), and late morning (11:05 AM–12:00 PM).

The student pass rates across all Open Learning units stood at about 50%. This may seem a low rate, but it should be remembered that first year Open Learning units were available without entry restrictions. A large percentage of unit failures were attributed to 'student dropouts', or non-completions, which were often reported as failures (Atkinson et al., 1996b). These statistics may also have been inflated by the practice of recording late withdrawals as fails, because providers were able to retain full student fees in the latter instance. Many such students did not submit even their first assignment, indicating a low level of motivation for the self-directed study. Effective study skills are important for all forms of study, but are even more important in external studies. On the other hand, completing students tended to achieve higher than average grades, thus displaying an 'inverse bell curve' distribution of grades, a phenomenon consistent with other distance-education programs (Keegan, 1990).

Unit registrations across the four study periods per year were relatively consistent. In each of 1994, 1995 and 1996, unit registrations surpassed the 20,000 mark. In 1994, there were 8963 students who registered in one or

Year	Study periods				Total student registrations
	SP1	SP2	SP3	SP4	
1994	7019	6472	5136	3618	22425
1995	6566	5909	5348	3892	21715
1996	6517	6030	5248	4294	22089

Source: Open Learning Australia (1995c, 1996b, 1997a)

Figure 5.2 Total OL unit registrations by year and study period

more undergraduate units and in 1995, there were 8465 such students (Atkinson et al., 1996b, p29). There was a very late pattern of registration, with most students attempting to register from one week before the study period commenced until one week afterwards, which led to significant logistical problems for the providers. Initially, late registrations were accepted, but in late 1994, the policy was changed to only allow registrations up to 2 weeks before commencement. *Figure 5.2* shows registrations in the first 16 study periods of the OLA's operations.

Decisions about which units to offer, the proportion of units in each of the five study areas, and other curriculum issues, were undertaken by the *OLA Academic Programs Board* (OLA APB). The OLA APB was composed of an academic representative from each of the consortium members. These representatives were responsible for ensuring their respective university was well placed to receive approval for the offering of units. However, in keeping with the brokerage philosophy, all units were subject to a tender process, which was open to any educational institution (including non-consortium members). The units open for tender were advertised in the national newspapers. With publicity, attracting submissions was relatively easy.

To encourage institutional involvement however, many of the Vice-Chancellors approached departments directly. In 1991, when Monash University departments were invited to participate, responses were few and mostly unenthusiastic (Morgan, 1991). With the success of the TVOLP, OLA was receiving a flood of unsolicited proposals (Cas, 1992; Probyn, 1992; Rae, 1992).

Following advertisement, a Tender Reference Panel made up of 'eminent individuals' reviewed bids. It was the job of the Panel to make a recommendation to the Academic Programs Board. This was a subjective and sometimes political process, making the Academic Programs Board, perhaps, the liveliest decision-making body within OLA (the other key bodies will be discussed in the next section). Initially, unit selections were *ad hoc* (see Bennett's comments in Monash University, 1992c) and made by an *Interim Academic Programs Board* (OLA IAPB) represented by the former TVOLP consortium members. Eventually, formal procedures were established, including the introduction of guidelines, which required the ranking of submissions according to objective criteria such as the quality of materials, student services, academic and institutional support, as well as reputability and parity of esteem.

The OLA APB helped facilitate the rapid development of units, sustained collaboration amongst competing institutions, and ensured a dispersed production model. In addition, the OLA APB helped to prevent unplanned unit selections, through curriculum planning, and ensured that credit-transfer obligations were being met, because all selected units had to be endorsed by the consortium members and guaranteed degree pathways established. The successful participation of non-DEC universities was also a significant achievement. New institutions were regularly brought into the brokerage as a result of their successful applications via the open tendering process.

The OLA APB was responsible for deciding on which units would be offered for tender, and the proportion of units offered in each of the discipline areas. Various pressures helped to guide this process. First there was the 18 January agreement, which stipulated that units should be offered in 'areas of demonstrated high demand' (Commonwealth of Australia, 1993). Second, there was the financial pressure of marginal cost recovery, which made units with low enrolments uneconomic. Third, for the development of 'enhanced units', such as those which utilised broadcast media, there was a strong tendency against specialist subject matter. This was because the broadcast component required general public appeal. Thus, specialist units tended to remain at the fringe, and seldom received additional funding. Fourth, there were the discipline specialities of each of the consortium members. Monash,

for example, was keen to promote itself in relation to business studies. Similarly, other consortium members attempted to propose new units in particular markets in which they enjoyed a comparative advantage. However, the necessity for generalist units, and the diverse membership of the OLA APB composed of rival institutions helped to counter this tendency.

Despite the achievements of the OLA APB, political tensions erupted on occasion. Such eruptions occurred in both mid-1993 and early-1994. In both instances, Monash was accused of bias and of using its alleged control over the OLA APB to its own benefit (the Chair of the Board was a Monash representative). In June 1993, various consortium members made independent allegations to DEET. Michael Gallagher (1993b) summarised these allegations as follows: a) that the course materials ratified by the Academic Programs Board were 'cut down' for open learning b) that Monash was vigorously targeting school leavers to bolster its 'Year 13 Program' (the Program was designed to attract highly able school-leavers into Monash University courses, whereas, the government had intended Open Learning to be primarily for mature age students) c) that the tender process was unfairly biased in favour of Monash, and d) that 'off the shelf' courses could no longer be offered for tender. The implication, in this latter allegation, was that Monash units were being given preferential treatment over existing external studies units offered by other DECs, whereas, the 18 January agreement specifically required the OLI to build on the existing range of course offerings to keep the charges to students down. Responding to the allegations, Pritchard (cited Department of Employment Education and Training, 1993a) wrote in strong support of the impartiality of the OLA APB, and of the tendering process. He stated that the allegations resulted 'either from misinformation or mischief' (Pritchard, 1993c). Preference was not given to Monash, because, the selection process was controlled by a committee of representatives made up of the consortium members. According to Pritchard, the Year 13 Program merely 'added value' to Open Learning units, and 'off the shelf' courses were a mainstay of Open Learning and were not being 'cut down'.

Nevertheless, an investigation of unit registrations reveals that Monash University was indeed relatively more successful in the tendering process than the other universities, particularly in its ability to win tenders for the most

popular units. By late 1995, Monash-provided units attracted about half of OLA enrolments (Atkinson et al., 1996b), although comprising less than one quarter of the total number of units. They had a large stake in business units, as well as in those supplemented by broadcast media. Monash's success was perhaps, not a symptom of irregularities in 'the process', but from better exploitation of those processes. Furthermore, Monash's rivals were often lesser ranked in the discipline areas that Monash was targeting. When Tender Reference Panels met to consider proposals, Monash submissions may have out-competed rival bids due to academic, rather than political considerations. Logan, for example, pointed out that the DECs were over-confident in the bidding process. They expected OLA to immediately and unquestioningly adopt their off-the-shelf material: 'Although some [DECs] have a high reputation for the quality of the material product, the quality of the intellectual product is far less clear' (Logan, 1992k).

Furthermore, Monash felt justified in its bidding success from a purely business point of view. Monash was the leader of the Initiative, and it took full financial responsibility both for success and for failure. The seed funds provided by the government were intended to establish OLA. However, the 18 January agreement stipulated that the Initiative must operate for ten years, even after the seed funds had been exhausted. Should OLA fail to break even, Monash would be financially responsible for any debts. Thus, there was a strong incentive for Monash to be successful in unit tendering and also to run the project in a profitable manner. Responsibilities to the government and the providers were maintained, such as ensuring brokerage impartiality, fairness in unit tendering and other consortium decision-making procedures, but only if they did not conflict with the commercial interests of the organisation's shareholder.

THE CENTRAL OFFICE

The *central office* was the heart of OLA operations. A continuation of the TVOLP, it began in the same office at 43 Exhibition Street, Melbourne. It operated from there until late January 1994, when it moved to 30 Collins Street, a location owned by Monash University at the 'top end' of the Melbourne central business district (Pritchard, 1994b). The central office was

responsible for all operational aspects of coordinating the brokerage model, including: branding and marketing, student enquiries and registrations, student records administration, the coordination of the providers, financial control and the implementation of new policies. In this way, OLA central office was not directly involved in academic aspects of the Initiative. Teaching, assessment and academic support were the domain of the providers.

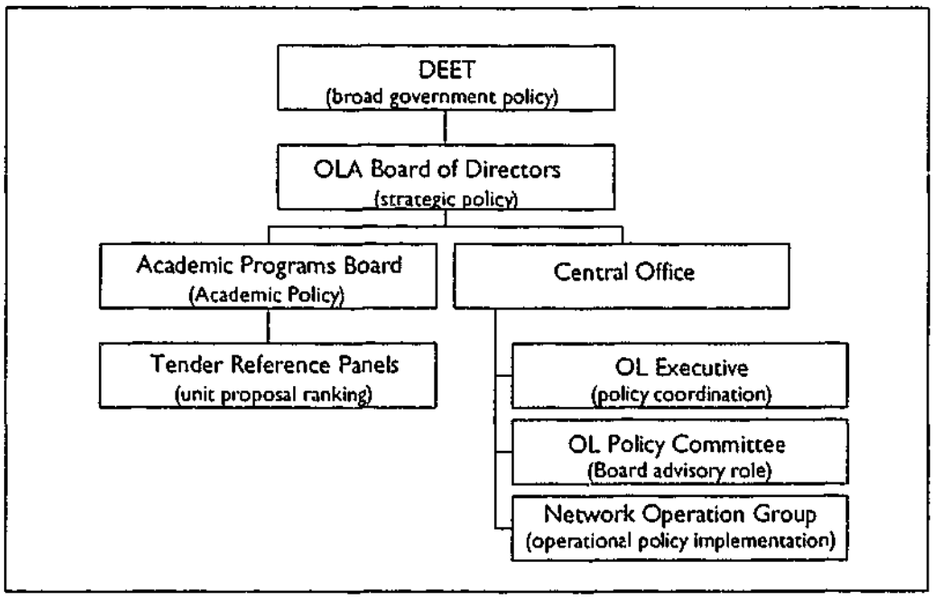


Figure 5.3 Organisational chart: OLA decision making bodies

Broad policy for OLA was decided by the Board of Directors. As discussed in the previous section, the Academic Programs Board was the key curriculum planning body and had involvement from all consortium members. Within the central office, there were other internal decision making bodies covering the bulk of operational policy: the *OL Executive* (coordinating broad policy across the three tiers), comprising the Chair of the Board of Directors, the Academic Director, and the Executive Director; the *OL Policy Committee* (advising the Board on policy), comprising the Executive Director, and the Staff and General Managers; and the *Network Operation Group* (coordinating operational tasks), comprising staff from all operational units within the OLA central office. The organisational chart (*Figure 5.3*) shows the hierarchy formed by the key policy making bodies.

The governance structure was workable, but there were regular disagreements, especially on the OLA Board of Directors. According to the central office, The Board of Directors, which had the greatest policy making input, suffered from various conflicts of interest. It was felt that its composition 'did not reflect the commercial charter of the company' (Atkinson et al., 1996a, p A9.11), and in particular was driven by the sectorial interests of consortium members rather than by any commercial imperatives. In other words, there was an impression that the non-Monash representatives tended to act against the best interests of OLA by promoting their own interests over those of the company. However, non-Monash Directors held the counter view that Monash had appropriated the project, and was seeking to maximise benefit from its involvement. The governance structure, which gave Monash representative control over the Board of Directors, was seen as a means by which Monash could systematically promote its own interests. Furthermore, as previously noted, Monash enjoyed 100% shareholding in the company, held the Chair of the Academic Programs Board, and had filled many of the key positions within OLA with former Monash staff.

The question must therefore be asked: 'why did the government give control of the OLI to Monash?' First, based on its track record with the TVOLP, Monash had proven it could bring the DECs together into a successful working relationship. Second, with the withdrawal of Queensland, speculatively, Monash was the government's natural choice as 'leader', and being a high-ranked university, it would lend prestige to the Initiative. Third, the alternative model proposed by University Partnerships was untested and a source of suspicion in government circles. Perhaps a collaborative model would devolve into factionalism and in-fighting amongst the DECs, or perhaps it would be used to serve their collective best interest rather than that of the government. Either way, the UP proposal did not promise decisive decision making, nor compliance with government directives if loose collaboration led to committee management and decentralisation. Fourth, by giving full control to Monash, the government had Monash's tacit agreement to act as an agent of the government, as an instrument of change.

The model proposed by Monash satisfied the Commonwealth Government's requirement for diverse institutional participation, accommodated an

expanded membership beyond just the DECS, and promised a coordinated approach to the growth of distance education. The centralisation and rationalisation of Australian distance education provision were familiar objectives:

> Whilst unmet demand may have been the trigger for the OLI, reform and rationalisation of distance education became the underlying issue. It seems to me that the OLI will become the vehicle for distribution of general distance education to large numbers of people in a relatively restricted range of discipline areas... the challenge for individual DECs will be to firstly make the most of the OLI, and secondly look to the development of niche markets that will not be addressed by the OLI.
>
> (Pritchard, 1992t).

Ultimately, the Monash-bid was considered a feasible means of consolidating the DECs. In that the government's primary objective had shifted towards consolidation and rationalisation, the model chosen was that considered most likely to achieve that end.

Monash staff from the TVOLP were carried forward into the new OLA structure and occupied the majority of key positions. At the conclusion of 1993, there were 23 contract staff, with additional services performed by consultants. In early 1994, the staffing structure was based on five operating areas: Academic programs, Development and Marketing, Operations, Corporate Services and Students Information Services (Pritchard, 1994c). By mid-1994, the key staff were: Tony Pritchard (Executive Director); Sarah Davies (Marketing Manager); John Evans (Operations and Systems Manager); John Julian (Programs Manager); Bill Priem (Company Secretary); Gavin Moodie (Special Projects); Anne Gilmore (Executive Officer–Academic Projects). By 1996, the staffing had evolved to include: Tony Pritchard (Managing Director); Sally Joy (General Manager–Academic); Bill Priem (General Manager–Finance); Di James (General Manager–Student Services); Gloria Caruso (TAFE Coordinator); and Anne Gilmore (Executive Officer–Academic Projects). Missing from the 1996 line-up was Gavin Moodie, who took on the role of consultant to the OLA, before leaving to become Assistant Director, South Australia Tertiary Admissions Centre (Pritchard, 1993b).

The staff in the OLA central office were a team of highly dedicated individuals who worked tirelessly to mitigate the provider rivalries. They worked in a politically charged environment that was, perhaps, an inevitable consequence of such a brokerage model. As Pritchard stated in 1994:

> No matter how you look at Open Learning Australia a tremendous amount has been accomplished in little over a year. The Open Learning model chosen by the government is unique and imaginative but also complex and loaded with implementation difficulties.
>
> (Pritchard, 1994c).

One of the first tasks of the OLA central office was to decide on a trading name and develop an effective brand. Starting in July 1992, Denise Kerr, the Monash solicitor, made repeated visits to the business registration office. First, registration of the name and logo 'Open Learning' and 'Open learning Australia' were attempted (Pritchard, 1992p). However, Kerr (1992a) noted that they had already been taken, as had 'OLA' and 'Open Channel'. Next, 'TV Open Learning' (Kerr, 1992b), 'Open Learning Institute of Australia' (Moodie, 1992g) and 'Open Learning Centre of Australia' (Kerr, 1992d) registrations were appraised, the latter of which was registered. However, the word 'institute' was a reserved term which required legal sanction (Kerr, 1992c) and the term 'centre' was disliked. So, on 6 August 1992, the business name, 'Open Learning Agency of Australia' was finally registered after a lengthy process of elimination (Kerr, 1992e). However, the business name was thought too cumbersome for marketing purposes, so Open Learning Australia (the original preference) was employed as the trading name to appear on letterhead and promotional materials. The familiar Open Learning logo was used for the first time on 10 February 1993 when the new student handbook was issued (Open Learning Australia, 1993a).

Marketing the OLA brand was accomplished through dissemination of information about the OLI to the press, and to prospective students. Public relations for OLA were initially handled by the public relations firm, 'Royce' (Gilmore, 1992). However, this role was soon brought in-house with the employment of Sarah Davies (Marketing Manager). From the perspective of the central office, advertising in daily newspapers was the main promotion strategy, and in terms of information dissemination, circulation of the OLA

Student handbook (or 'Student Prospectus') was the fundamental means of communicating to prospective students. The 0055 Hotline, which had been employed during the TVOLP, was continued into Phase Two. Advertising on ABC TV and Radio were considered lesser strategies, because the OLA central office had little or no control over what promotions the ABC engaged (Atkinson et al., 1996a). 'OLA can only comment and advise on the strategies which the ABC adopts. It has no control over promotion'. (Atkinson et al., 1996a, p A9.4). However, all stakeholders recognised the central role the ABC occupied in promoting the Initiative. Promotions by the ABC attracted about 400 phone calls per week to the 0055 line and were considered 'very successful' even though they were only run as a favour to the Initiative (Atkinson et al., 1996a, p A9.4). This appears to match student perceptions. Of 326 students surveyed studying OL units in Study Period One, 1994, the Atkinson Evaluation found that 30.9% of responses confirmed that exposure to television promotions and the Open Learning programs on ABC TV were 'the only or most important source of information' leading to registration in OL units. On the other hand, exposure to print media (newspaper/magazine articles, or advertisements) accounted for 21.7% of registrations (Atkinson et al., 1996a, p A4.3.27).

Student registrations and student administration were an important function of the central office. New registrations were received by post or fax, and data were entered into a local database. At the start of each study period, data were then organised, fee payments verified, and providers sent a list of registered students. The downstream provider would have data migrated into the relevant university database so that the student could be administered via regular university procedures. On unit completion, the university would then send the finalised results back to OLA for data consolidation. At the beginning of operations, this process was relatively 'low tech'. It involved a single computer at OLA, running a customised database application. Data transfer was accomplished by sending floppy disks by courier, or sometimes by sending an email attachment. At the conclusion of 1993, the IT facilities consisted of: staff computers, a dedicated computer for the student database, printers, modems, office software, and several fax machines (Open Learning Australia, 1994f). Internet communications were made available by modem

connection to the Monash Computer Centre, reflected in the obscure nomenclature of the public email address, 'openl@monu1.cc.monash.edu.au' (Moodie, 1992h). By early 1994, the inadequacies of the system were becoming exposed, and a decision was made to purchase 'Powerhouse', the Monash DEC Student Database, used at the Gippsland Campus, which incorporated a specialised capacity for DEET reporting. (Joyce, 1993; Pritchard, 1993d). Later, steps were made to develop an integrated information system, to introduce web services, and to develop a branded internet presence.

OPENNESS

Openness was 'a given' for the Open Learning Initiative. Each major component of the broader initiative had the term 'open' employed in the title: Television *Open* Learning Pilot, *Open* Learning Australia, *Open* Learning Electronic Support Service, and *Open* Net. As mentioned elsewhere in this present study, there are various definitions of *openness* in learning. In the context of OLA and its operations, *openness* had two broad meanings. First, openness meant student *access* to tertiary education. Whereas conventional education actively sought to restrict entry via competitive entry mechanisms, OLA was required to accept all students, no matter their prior level of education (*Figure 5.4*). Second, openness also meant *flexibility*. This concept required OLA to provide a minimum of flexible *conditions* for learning. That is, the units had to be offered frequently through the year, and should not discriminate on the basis of the geographic location of the student (*Figure 5.5*). The requirements for openness, as they appeared in the 18 January agreement, and in the agreement between OLA and the providers (where the latter are more exacting) are summarised in *Figures 5.4* and *5.5*.

The Atkinson Evaluation team conducted a comprehensive analysis of access and flexibility. In their final report, they found the OLI had 'satisfactorily addressed access requirements', but that 'flexibility [was] largely left to the providers' (Atkinson et al., 1996b, p23, 47). The report contains considerable quantitative detail regarding the extent to which various sub-categories of access and flexibility were achieved. In the following discussion, summaries of these findings are included alongside the findings of the present study. In so doing, a number of pertinent issues relating to openness are revealed.

Category	Terms and provisions
Entry	• 'the Company shall... not refuse entry to any persons, provided they meet the requirements specified in this agreement' (Commonwealth of Australia, 1993, Clause 2.9).
	• 'No person shall be refused entry to units or sequences but may be offered appropriate counselling about the requirements and demands of the units and sequences' (Open Learning Australia, 1994a, Clause 35)
Access	• 'There will be no quota or limit on the number of people studying the unit' (Open Learning Australia, 1994a, Clause 36)
	• 'The units will be offered throughout Australia' (Open Learning Australia, 1994a, Clause 37)

Figure 5.4 Student entry and access provisions for OLA

The objective of 'unrestricted entry' was well met by OLA in that no entry barriers were imposed. However, the evaluators expressed disappointment that the Initiative had 'only been marginally successful in increasing the participation of under-represented groups' (Atkinson et al., 1996b, p28). Instead they found that OL student profiles showed a considerable overlap with regular tertiary distance education students. There was a high incidence of upper socio-economic occupations; the majority of males were in full-time employment; a significant group of females in unpaid home duties; and the majority of students (68.4%) had undertaken some tertiary studies before. Participation rates among disadvantaged groups were reportedly lower than that of the tertiary sector as a whole, particularly for Aboriginal and Torres Strait Islanders (Atkinson et al., 1996b, pp23-41).

The Atkinson Evaluation suggests that promotion and marketing are important aspects of access because 'if prospective students are unaware of the Initiative, they cannot exercise their option of registering' (Atkinson et al., 1996b, p25). The marketing strategies employed by OLA were found to be comprehensive. The use of advertisements in daily newspapers; ABC TV and Radio; targeted mailing lists; and the active seeking of publicity opportunities via feature articles and information sessions in schools were all applauded. The issue of 'timing' was considered to enhance flexibility by

Category	Terms and provisions
Timing	• 'the company shall... ensure that each of the units offered normally has multiple commencement dates and multiple assessment opportunities per year' (Commonwealth of Australia, 1993, Clause 2.8)
Location	• 'the company shall... arrange for the provision throughout Australia of tertiary open learning opportunities' (Commonwealth of Australia, 1993, Clause 2.1)
Credit transfer	• 'the company shall... enable participants to obtain an award, including a degree, through at least one established Australian university or TAFE college' (Commonwealth of Australia, 1993, Clause 2.2)
	• 'facilitating the movement of participants into and out of campus-based courses' (Commonwealth of Australia, 1993, Clause 2.2.2)
	• 'the services provider certifies that if a student successfully completes the unit through Open Learning the student will be given academic credit towards an accredited tertiary award at that institution if the student should become an enrolled student in that institution for that award' (Open Learning Australia, 1994a, Clause 33)

Figure 5.5 Flexibility provisions for OLA

allowing students to commence their studies in any of the four study periods per year, by registering in whatever number of units the student desired. Similarly, because there was no residential component to OLA units, student location was no barrier to participation.

Credit transfer was considered an important aspect of the Initiative, in that it increased the flexibility of admission policies and gave students various pathways into and through the TAFE and university systems. Nevertheless, government requirements for credit transfer could not be considered demanding. Institutions were only required to give academic credit towards their own units. During establishment, the OLA Board surpassed this requirement by obliging consortium members to accept credit for all OL units offered by the other members. Non-consortium members often accepted credit, but were not obliged to do so. Information on credit transfer, sequences and pathways was communicated to students via the publication *Degree pathways through Open Learning* (Open Learning Australia, 1995a).

By 1995, 18 degree pathways had been developed by the consortium to enable students to transfer into regular university programs. In addition, the following degrees were developed so that students could complete an entire degree with OL units:

- Bachelor of General Studies (Charles Sturt, UNISA, Monash)
- Bachelor of Arts (Griffith)
- Bachelor of Business Studies (Monash)

When interviewed, the OLA executive found that the consortium had 'totally' fulfilled their membership obligations with regard to providing degree pathways to students (Atkinson et al., 1996a, p A9.6).

Openness was also influenced by assessment procedures. Although the agreement with the Commonwealth was not specific, in the formal agreement between OLA and the unit providers, all units were required to offer an exam at the end of the unit. Unit providers were obliged to 'have an assessment load of two assignments together totalling approximately 4500 words' (for a normal 13 week unit), and 'three assignments, together totalling approximately 8000 words' (for a 26 week unit). In both cases, the assessment load of the units stipulated 'satisfactory completion of the externally invigilated assessment [being] a requirement of a pass in the unit overall' (Open Learning Australia, 1994a, clauses 34a-b). In *A study of assessment procedures in Open Learning units* a total of 84 units offered in Study Period 2, 1994 were studied. The report, to which the present author contributed, found that:

- The weighting of the exam as a proportion of total unit assessment varied from 10% to 100%
- Only 50% of units required an exam pass to obtain a pass in the unit
- Only 4 units of the 84 under study fully complied with OLA regulations (Quartly et al., 1995).

The findings of the report were indicative of the academic independence the unit providers had achieved from OLA. Without central coordination, providers took responsibility for providing feedback to students, administering assignments and exams, awarding grades, and dealing with student appeals. Nonetheless, openness was a key component of the examination procedures

applied by the provider institutions. In cases where students were located close to libraries, schools and college, 'providers use a network of examination centres... drawing upon universities and other locations' (Atkinson et al., 1996a, A9 p7). In cases where students were more remotely located, the university, in conjunction with the student, arranged personal invigilators.

The Initiative also saw access to library resources 'open up' extensively via an innovative scheme. General agreements to guarantee borrowing rights were established nationally with consortium member libraries, and with public libraries. This was achieved via a voucher system, in which students would receive vouchers (totalling $20 per unit) along with their initial unit enrolment package, and present them to a participating library when borrowing materials. The library, in turn, would redeem these vouchers for cash from OLA. In cases where the student requested more expensive services (such as inter-library loans), the library was entitled to levy additional fees on the student. Despite the provision of the scheme, in practice few students actually used the system. A surprising 73.8% of OLA students never used any of their vouchers, even though 65.7% of students lived less than 9 km from a public library, and 82.4% lived within a 19 km radius (Atkinson et al., 1996a, p. A4.5). Of course, non-redemption of vouchers benefited OLA, profiting from the non-payment of these funds. From the student perspective, access to library services could be considered at least adequate, given the limited budget available.

Notably, the OLA registration process was itself a realisation of openness. Lacking entry restrictions, the registration process was very light on paperwork and very student focussed. The registration form was a single sheet of paper, with the OLA registration details on the front and the statistical information required by the Commonwealth Government on the reverse side. The 1994 *Registration form* (Open Learning Australia, 1994d) consisted of just 10 questions on the front side, comprising, name and contact details, prior registration details, the units for which the student was registering, and the payment method. Three methods of payment were possible: a) Open Learning Deferred Payment Scheme (OLDPS[17]), b) cheque or money order or, c) credit card. Students would submit the completed form along

[17] OLDPS commenced in January 1993 as a deferred payment facility for OLA students modelled on HECS (Snowdon, 1993).

with payment via post. In cases where students elected to pay by credit card, the registration process could either be conducted entirely over the phone, or by faxing the completed registration form. Registration was therefore relatively quick, simple and flexible both in terms of the payment method, and the means of submitting the form. It stood in stark contrast to standard university enrolment processes.

Finally, it would appear that OLA was also successful in transforming university practices within the faculties, particulary those within Monash University. Since the early 1990s, Monash been increasingly engaged in various open access initiatives:

- entry scheme for students who complete alternative year 12 programs
- mature age direct entry scheme
- Monash Orientation Scheme for Aborigines (MOSA), a transition program for Aboriginal students
- special admission for students without standard year 12 completion
- entry for students with three or more years relevant work experience (Moodie & Nation, 1991)

These initiatives were being harmonised into a broad commitment to open entry principles, though limited by quota, faculty and course. Monash had also been encouraging diverse teaching practices, through the establishment of its new campus at Berwick. This was a joint TAFE-Monash initiative, to extend beyond campus-based teaching by incorporating new communications technology with alternative modes of delivery (Moodie & Nation, 1991). Moreover, the OLI had begun to galvanise these separate programs into a systemic approach to equity. With leadership from Logan, elements within even the most conservative faculties at Monash were now eagerly embracing the open learning concept.

RATIONALISATION

Rationalisation was a fundamental government objective for the OLI. The very concept of a brokerage implies rationalisation, or at least coordination. The basic idea was for the brokerage to seek out the best existing external

studies courses in each subject area to be offered nationally. Over time, it was assumed these select courses would replace the myriad of similar courses, which were being offered by the DECs. Reducing duplication in courseware was therefore a key goal of the brokerage model. Another closely related objective was extending the market reach of courses. Although many distance education providers were offering their courses nationally (even internationally), in practice, most of their students were drawn from their home state or hinterland. National provision, promised larger markets, greater market share, and in turn, higher unit enrolment figures. Open entry would only increase enrolments and would lead to even greater market penetration. Larger enrolments would also mean improved economies of scale, lower costs per student, and significant cost savings by the government. Thus, the government's objectives in regard to rationalisation were two-fold: to reduce course duplication and to increase marketability.

Rationalisation objectives were discreetly stated in the 18 January agreement between the Commonwealth and OLA. The concept of reducing duplication was couched as 'building on infrastructure', and 'purchasing existing courses'. The objective of increasing course marketability was reversely stated to imply a demand-driven approach: 'the company shall... concentrate on areas of high demand' (Commonwealth of Australia, 1993). The main stipulations of the agreement are shown in *Figure 5.6.*

Category	Terms and provisions
Reduce duplication	• 'the company shall... build on the experience, expertise, range of course offerings and infrastructure of distance education...' (Commonwealth of Australia, 1993, Clause 1.3)
	• 'the company shall... arrange for the provision throughout Australia of tertiary open learning opportunities by identifying and purchasing existing tertiary education courses and units of study...' (Commonwealth of Australia, 1993, Clause 2.1)
Increase marketability	• 'the company shall... concentrate initially on areas of demonstrated high demand' (Commonwealth of Australia, 1993, Clause 2.5)

Figure 5.6 Rationalisation provisions for OLA

A clarification of the government's position can be found in the bidding process for the OLI Phase Two. In the early bidding phase, the Queensland proposal was taken very seriously. Indeed, as has been shown herein, the government initially favoured the Queensland proposal, even though that university had been unsuccessful in achieving DEC status. This reveals the relative importance the government placed on rationalisation, as well as the government conviction that the brokerage model would be the most effective vehicle for open learning provision. Indeed, the government never suggested other models of provision, indicating the government may have regarded rationalisation of distance education as 'the end' and the development of open learning as 'the means' to this end.

The 18 January agreement (Commonwealth of Australia, 1993) contained no references to a pedagogy of open learning. Instead, the focus was on utilisation of existing resources, delivery, brokerage, and access. For the government, openness was rather more concerned with open *entry*, than open *learning*. Furthermore, Baldwin's earliest comments about the Initiative made scant reference to openness at all. His initial public comments were concerned with the cost of government investments in distance education courses. Baldwin was of the view that if costs were not spread over a substantial number of students:

> ...then you simply fail to reap significant scale economies. I think that's a key weakness in the system we now have... [The aim of the OLI is to] develop a single agency to select the best that is available and make it far more widely accessible on a national basis.
>
> (Baldwin cited Cribb, 1992, p42)

A guiding principle of the 'rational model' is: as economies of scale are realised, surplus is reinvested, to perpetuate a system of growth and innovation. In an educational context, this would mean that revenues would be cycled into better courseware, enhanced student support, improved administrative and staffing arrangements, or perhaps, the development of television and computer components. Expanding markets, and increasing profitability would therefore lead directly to higher quality. Herein lies a key weakness of the OLI model. The funding structure never allowed for a surplus, and thus quality was jeopardised.

In 1993, the student enrolment fee per unit was set at $300. This rose slightly to $305 in 1994, and $308 in 1995. In 1993, the basic student fee was allocated as follows:

- $100 – OLA (central administration and student registration)
- $180 – Provider institution (assessment, student support and administration)
- $20 – Open Learning Library Information Service (OLLIS; to cover student borrowing rights)

(Atkinson et al., 1996a, p A9.9)

University involvement in OLA as a unit provider was unprofitable. Normally, in conventional distance education, an Australian university could expect to receive about $1000 per student enrolment.[18] On the other hand, an OLA provider institution in 1995 received just $185 per OL student registration. Of this money, some was appropriated for student administration, examination costs and other non-academic expenses. Atkinson (1996b) reported that the amount actually received by the academic department for academic support, tuition, and assessment varied across the institutions from $90–$130 per student. As a result, almost all providers operated on a marginal cost recovery basis, and more than half were found to be operating on a break-even basis, or at a loss. There were fears expressed that 'if OLA is able to demonstrate that university units can be delivered to students who pay only $300 per unit, DEET might reconsider its present level of funding for on-campus and distance education courses' (Atkinson et al., 1996a, p A9.11). The other alarming thought was that universities might accept funding from DEET at the regular on-campus rate, and subsequently register students in the cheaper OL version of the unit. Implicitly, this would involve the channelling of money away from teaching, and would also see OL units rebranded as on-campus units. Funding was therefore the main concern of staff at most of the provider institutions. Staff interviews revealed the following additional comments:

> Funds are insufficient and are so limited there is little scope for contingencies.
>
> Distance education operations are subsidising the Open Learning Initiative.
>
> There is inadequate allowance for providing a high level of student support.
>
> (Atkinson et al., 1996b, p95)

[18] This is a calculated figure, where one unit-enrolment is equal to 1/8 of EFTSU at an average of $8000 per student per year, in 1995 figures.

Many in the DECs continued to view the OLA with 'suspicion and mistrust' and there was a perception that equity considerations were given insufficient attention in relation to student access (Hayford, 1996, p177). In her study of the impact of the OLI at the University of South Australia, Hayford (1995) found that staff disaffection with the OLA also resulted from stress relating to the rapid development cycle and inadequate channels of communication between the provider and the central office. Nevertheless, providers continued their involvement. One can only speculate on their motives, and the benefits to the institutions, to the departments and to the individuals. Perhaps, as Atkinson suggests, they saw OL students as a potential source of new enrolments for their own institution? Or, were they aiming to benefit from the additional funding available for new technologies and television courseware development? Was the lure of promotion on television a compelling reason for involvement, or could the personal satisfaction of being involved with an innovative project be a key motivational factor?

One way in which providers were able to gain financial benefit, was in the rebranding of courses. Some unit providers modified OL units so that they could service several student populations at the same time (Jevons, 1994). The Monash Year 13 Program, and the Enhancement Program are good examples. The latter of these programs was initially suggested to Pritchard by Miss Dorothy Pizzey, the Principal of St Catherine's School in Melbourne, who recommended that the OLI target 'another possible group of students: year 12 students wishing to take advanced courses while at school' (Pizzey, 1992). Other examples include the dual use of OL unit materials in regular on-campus teaching, and in other distance education programs. In this way, unit providers were drawing on their experience in dual-mode provision, which was a common practice in distance education in Australia. Ironically, this practice had begun to be dismantled with the introduction of the DECs, and was further challenged as centralisation was pursued by the government. Nevertheless, dual-mode delivery and other 'rebranding' strategies helped to maximise marketing opportunities, increase unit registrations and thereby regain some financial benefits.

By 1995, the government had abandoned the idea of the OLI being a cheap alternative to conventional tertiary education. In the *Commonwealth*

Submission to the Evaluation of the Open Learning Initiative (Department of Employment Education and Training, 1995a), a government representative, acknowledged that the superficial unit cost of $305 per student was misleading. The total cost would need to include: the investment of seeding funds ($28.412m for OLA and $10m for the OLESS); additional funding for the Open Learning Tutorial Assistance Scheme; AUSTUDY; the Open Learning Deferred Payment Scheme; and other program costs. The total of these costs would need to be amortised across unit registrations for the 10-year period of the agreement. However, from the outset there was some scepticism voiced that OLA would be able to remain self-funding at that level and avoid a deregulation of student fees (Kemp, 1993). The government argued that the OLI was creating additional interest and demand rather than displacing or undermining the distance education sector. Over the period of 1992–5, external enrolments in conventional higher education increased. The Federal Government countered this trend by encouraging institutions to spread their upfront investment in OLA course development across an even larger student group. Furthermore, institutions should be able to reduce their per-student costs by implementing new communications technologies to increase market access (Department of Employment Education and Training, 1995a).

Students did not consider OLA a cheap alternative to regular university education, most likely because the fees were comparable. Fees were pegged to the cost of HECS, so there was minimal observable difference for the student.[19] Similarly, OL students were eligible to defer their payments (HECS equivalent) through the Open Learning Deferred Payment Scheme (OLDPS) if they were studying at least a 75% full time load over any two consecutive study periods. Overall however, Atkinson et al. (1996b, p90) and Williams (1995) found that students perceived the benefits of studying through the OLA outweighed the costs.

Rationalisation was a key government objective of the Initiative, which was downplayed in much of the official documentation. Yet, its significance was not missed in newspaper commentaries. Nor was it missed by the DECs

[19] There was no discount for upfront payment via the Open Learning Deferred Payment Scheme (OLDPS), as was the case for HECS.

and the other providers who were often critical of the model, and of the consequences of the funding structure. In attempting to alter the provision of distance education in Australia, the government had made a significant miscalculation. They had assumed that by opening up entry requirements and reducing EFTSU costs, those units would logically grow their enrolments and thereby develop greater economies. They had also assumed that these economies would lead to an improved ability to finance educational endeavours related to quality, and to the use of new media in distance education. However, they were mistaken on two counts. By 1995 it was clear that the OLI had stopped absorbing unmet demand, which prevented economies of scale being realised in many of the units. And secondly, the implementation and uptake of new media, which the government hoped would be a natural consequence of rationalisation, did not automatically occur. Instead, technological innovations were closely linked to and limited by additional funding and to political processes which lay behind gaining access to these funds.

INNOVATION AND TECHNOLOGY

For many Australians, Open Learning was synonymous with the ABC. Even well after the OLI was decoupled from television,[20] public perception held fast to the notion that OL was TV-based. This was partly a by-product of the OLI's roots in the TVOLP, but also a measure of the high exposure of its television component. As print-only units burgeoned however, those that were TV-based came to occupy a shrinking proportion of the overall number of units. Nevertheless, the OLA central office, and the consortium members themselves, were keen to expand the television arm, in spite of the government's preference for print-based units. Taking the existing TVOLP programs as a starting point, new programs (both purchased and Australian-produced) were regularly added to the broadcast timeslot.

In March 1992 the TVOLP commenced with 5 hours per week of programs. One year later, this increased to 17 hours per week, increasing again in March 1994 to 22 hours per week. By March 1995, OL programs totalled 22.5 hours of broadcast programs per week, or 13% of the ABC TV's weekly

[20] The decoupling occurred with the establishment of OLA.

broadcast timetable. This level was maintained into 1996. Australian audience figures monitored by the Nielson Company, indicated that 25% of all households tuned in to OL programs on a four-weekly basis and at peak timeslots, such as Saturday mornings, OL programs received as many as 500,000 concurrent viewers. During all timeslots, the programs were rating well, with millions of general (non-student) viewers per week. As an advertising vehicle, the television component was unsurpassed. Prospective students could use the television programs as a shopfront window, enabling them to see a sample of the shop offerings, but with no obligation to buy (Australian Broadcasting Corporation, 1995).

The value of the television component was not based solely on its impressive marketing and advertising capability. The television broadcasts had a number of other pedagogic advantages in support of *open* learning:

- Supplying content of the courses, which is of particular value where social and cultural contexts can be more fully experienced through television
- Motivating and pacing students via weekly broadcasts
- Providing flexible materials, in that the programs can be video-taped by the student, reused and watched at the student's own pace[21]
- Demystifying education by showing that the topics are 'understandable, engaging and of value and interest'

(Atkinson et al., 1996a, p A10.3)

Although the benefits of television were well demonstrated and understood by all stakeholders, there was a continuing perception, especially by the government, that it was a costly delivery medium. In 1992/3, for example, OLA made available for television a total of $1,742,104 ($447,633 for purchased programs and $1,294,471 for Australian productions). By 1993/4, this increased to $2,618,774 ($785,000 for purchased programs and $1,833,774 for Australian productions). The average cost to OLA of producing a 30-minute, locally made program was calculated to be $65,000. Whereas, the purchase cost for 'unlimited Australian free-to-air broadcast rights over a five year period' was about $4,000 (Atkinson et al., 1996a). However, over and above

[21] In fact, over 60% of students surveyed by the evaluation team frequently recorded the television programs, and only 5.6% of students indicated they never did so (Atkinson et al., 1996a, p A4.4.39).

the funds provided by OLA for purchases and production, the ABC made significant contributions to the project. For example, the ABC provided the Initiative with free access to resources, facilities and archival materials. The ABC donated archival materials, such as documentary and news footage, which were extensively used in the production of local programs. Use of studios, cameras and production equipment were also contributed free of change, as were the salaries of the executive producer, and the project director. In addition, the ABC covered the costs of scheduling, programming and airing the OL broadcasts. This was extended to include free satellite broadcasting via the ABC's international service, *Television Australia,* which began broadcasting selected Australian-produced programs in the South-East Asian region (Australian Broadcasting Corporation, 1995). Overall, the Initiative gained much from its involvement with the ABC, and many considered the funds allocated to the television component to be relatively modest.

As part of the $13.7 million budgeted to OLA for innovation and technology, a proportion was set aside for funding innovative projects and quality enhancement initiatives. The government funding available for such use was budgeted as shown in *Figure 5.7*. Of particular interest in *Figure 5.7* are item numbers 1 and 2. Monies from these two sources were pooled to form a combined reserve of $4.2 million, known as the *Innovative and Quality Enhancement Grants*. A four-person panel, comprising the Chair of the

Item	Budget	Description
1	$1.5m	piloting 'innovative projects (excluding broadcast television and radio)
2	$2.7m	quality enhancement initiatives for course materials and service delivery
3	$0.3m	investigating how quality of learning can be enhanced and accessed
4	$9.2m	development, purchase or adaptation of units with a broadcast television component
	$13.7m	Total funding available

Source: Commonwealth of Australia (1993, Clause 1.2)

Figure 5.7 OLA funding available for innovation and technology

Board of Directors, and three other academics sat periodically to receive and review proposals for the allocation of this reserve. In each year over 1993–6, an average of ten proposals were accepted as recipients of the grants, with an average of $32,290 awarded to each recipient. The Atkinson Evaluators found the overall picture to be wasteful and unsatisfactory, with the need for 'more rigorous accountability requirements... [applied] to grant recipients' (Atkinson et al., 1996b, p65).

An important concept regarding the use of technology was the 'media mix'. This involved deciding on inclusion of different delivery media both within a particular unit, and across a sequence of units. In the first few years of OLA's existence, the media mix included print, television, radio and computer technologies. Each of these media had their own characteristics. Print was the cheapest delivery method available. It was also a proven educational technology. Print also had the advantage that the majority of the units offered through the DECs had solid study guides and other print-based materials crafted by instructional designers. Television was relatively expensive, but had the greatest potential for changing the way education was conceived. It promised a full, multi-media experience for the viewer, and was received by the student at no cost (as it was delivered free-to-air on national television). Thus, it had the other advantage of being equitable, and of improving access, while offering considerable marketing opportunities for the individual, the institution and for the brokerage. Radio was a cheaper form of broadcast. Audio programs were quicker to develop, and could be enjoyed by the student while undertaking other activities. Computer technologies were included in the media mix, although it should be pointed out that unlike the other media, provision had to be made for students without computer access. In other words, computer based learning was usually implemented as an add-on, rather than as a core technology.

Given the high cost of development, and the attractiveness of broadcast media, much discussion went into determining which units would feature a television component. In most cases, the Board of Directors, rather than the Academic Programs Board made these decisions. Television-based units were shared out amongst consortium members, and it was an important drawcard for enticing new universities into the brokerage. Moreover, full

consortium members were keen to preserve existing membership arrangements. For, an expanding circle of consortium members would mean a shrinking share in their television production rights (see Monash University, 1992c). The allocation of television program funds was essentially a political process. Given the politics inherent in the brokerage model, and the incentives for the full consortium members to close ranks on new providers, some suggested a move towards an alternative management model. As early as 1991, Professor Johnson (cited Pritchard, 1991c) recommended that management be separated from provision, and that an educational broadcasting body manage the brokerage. Others such as Tony Bennett (1992b) favoured a highly cooperative approach with weak central control.

For the ABC, the issue was more about marketability. In *Draft discussion paper on a further expansion of the TV Open Learning Project*, (which appeared in the Minutes of the Television Open Learning Consortium Meeting Agenda for 3 March, 1992), Moodie (Monash University, 1992c) summarised the main issues at stake. He suggested that the ABC had a vested interest in expanding the TVOLP horizontally, in that specialist units were less accessible to the general viewer. On the other hand, the universities were more likely to aim for a vertical model, emphasising sequential studies: 'So that students can complete a whole program by television open learning'. Tony Bennett (1992b) in particular put a strong case for vertical development being linked to 'the essential strength of the use of television'. Moodie suggested a compromise, to expand the TVOLP vertically, but 'offer lower production value television programs, by radio... eventually reducing the pedagogic distinctions between Television Open Learning and more traditional forms of distance education' (included in Monash University, 1992c).

Moodie's suggestion of a compromise, however, was not adopted. Universities became aware of an alternative strategy, which would boost enrolment figures for their institutions: by increasing the horizontal expansion of the project (i.e. the expansion of first year units rather than creating progressive three year pathways), students would be expected to transfer to conventional university places in their 2nd year (Mutton cited Moodie, 1992e). Subsequently, the decision was made that television broadcasts should have

general appeal, and engage large numbers of participants. Henceforth, they would largely be restricted to first year units with no prerequisites (Pritchard, 1992n).

The use of television attracted a great deal of debate, particularly amongst academic commentators. An article by Patrick Guiton (1991), for example, argued that television is just one of many media that can be used, and that it should not be given too much prominence in the mix of delivery technologies: 'The ABC's capacity to reach 98% of the population is an important asset and one which of course it shares with Australia Post' (Guiton, 1991, p16). Guiton expressed concern that an Open University, which strove to maximise economies of scale, might be the only way the high production costs associated with television could be recouped. This raises the inevitable question: To what extent was the implementation of technology driven by non-educational considerations? (Moodie & Nation, 1991). Responding to criticism regarding the use of television in the TVOLP, Moodie writes:

> The primary role of the television component is not to deliver course content, ... [because] television's strength as a medium is not in delivering content. The television programs will be used mainly to illustrate the print-based materials, and pace students working through them... I accept the criticism that the project does not attempt any major educational innovation, even that it does not exploit the full potential of media and technologies already available. I also concede that the Commonwealth's primary motivation for promoting the project is not educational. The basic strategy underlying the project is to maximise student access and to minimise the costs and risks of the project.
>
> (Moodie, 1991d).

Several important factors limited the level of technological innovation within OLA. Mixed messages were received from Canberra. On one hand, the 18 January agreement specified the need to purchase 'existing tertiary education courses' and to build on the 'existing infrastructure of distance education'. On the other, there were statements from the minister about the need to engage in innovative, high tech activities. Thus, there were the contradictory demands of improving efficiency and cost effectiveness, while experimenting with relatively new and expensive technologies. Yet, the government saw no contradiction. It appears that the prevailing view was that the use of computer-based technologies would somehow lead to more efficient teaching and

learning outcomes. Nevertheless, leading edge technologies[22] commanded a premium in terms of cost. And it was cost which remained a barrier to access by student-consumers.

The majority of units provided through OLA were existing distance education courses, bringing with them elements of conventional educational wisdom. Innovators may have been stifled by firmly entrenched procedures operating within their home institutions. And as mentioned earlier, the funding structure allowed for limited flexibility in operations. Unit providers were constantly aware of the need to further streamline their activities, and minimise wastage. Engagement with new technologies had ongoing cost implications, particularly when such innovations would require the provision of additional services to students. If these services were provided on a fee-for-service basis, many felt that this would have equity implications, and take-up rates would be too low for economies to be achieved. Furthermore, additional services involved additional recurrent costs, even if seeding funds were available.

From the perspective of OLA as a whole, innovations, particularly those that used computer-based technologies, were accorded a low-priority. Initially, the main concern was the rapid expansion of provision. The need for rapid growth in the number of units provided (from 7 to 266 in the first three years) drew focus away from new ways of doing things. Instead, it was 'far more practicable to build on existing resources than give priority to the inherently risky and time-consuming strategy of all-out innovation' (Atkinson et al., 1996b, p63).

CONCLUDING COMMENTS

The Open Learning Agency of Australia, which traded as Open Learning Australia (OLA), emerged in 1993–4 as the courseware broker for the Open Learning Initiative during a period of growth, uncertainty and changing priorities. OLA grew from the success of the Television Open Learning Pilot, a project that projected Open Learning programs across the country, thereby increasing student enrolments and generating a public presence. Govern-

[22] At that time (1994-5), the emergent World Wide Web was a main attraction for education technologists.

ment and university leadership could see that the two national priorities, access and equity, could be achieved. As shown earlier in this chapter, the idea that sparked the proposal came from the University of Queensland, a university which was reassessing its distance education options in light of the fact that it was not a designated DEC:

> While it is undeniable that the initial proposal which led to the OLI came from the University of Queensland, the legitimation it received from Government, indeed the immediate and almost overwhelming enthusiasm it bestowed upon the project, provides some measure of how closely the Queensland proposal accorded with Commonwealth aspirations.
>
> (King, 1992b, p88).

It became apparent that a brokerage model would facilitate the linkage of university courseware providers to a central agency responsible for the national marketing of such courses. But uncertainties, controversy and competitiveness during the bidding process stalled the establishment of OLA. Federal Government vacillation and inaction added to these complexities. Throughout this period (1992–3) however, the Federal Government maintained its commitment to the principles of access and equity, and impressive financial support inevitably demanded a measure of accountability. With government as the driver of the Initiative, there came the danger of allowing political rather than educational concerns to undermine the process. Due process and transparency were compromised during the tendering phase owing to government interference and the actions of the leading DECs.

Yet OLA emerged in 1993 from a period of tension and uncertainty as an organisation with a sound workable structure capable of coping with the projected expansion of the OLI. Minister Baldwin encouraged the OLI to adopt and implement convergent communication technologies including online delivery, but in 1993, financial support from the Federal Government and student enrolments proved to be inadequate. Furthermore, the OLA leaders were not convinced of the educational suitability of online services, preferring to build on the proven success of educational television which also brought the advantage of public exposure for the fledgling organisation.

Many universities held strong reservations about the OLI, in terms of institutional interests, the level of fees and the threat of further rationalisation of distance education practices. One could argue that universities should have been indifferent to being drawn in as an OLA provider. As we have seen however, a great many universities chose to be involved, both as providers and as full consortium members. In explaining this anomaly, King (1992b) observes that even at the time OLA was proposed, non-involvement was simply a non-option to 'stand aside and observe its consequences' (King, 1992b, p90). He further suggests that involvement brought considerable advantages, particularly by influencing the direction and operation of the Initiative, through subsidised television production, the potential of very large numbers of student enrolments; and by showing that the institution had responded to the national need (King, 1992b). Nevertheless, by the mid-1990s, proactive support for the OLA was weak within higher education circles and particularly in the distance education community (Australian Vice-Chancellors' Committee, 1994). This was most pronounced in newer universities, where admissions policies may have been threatened by the new benchmark of open access. For the DECs, there was the added threat that OLA might eventually incorporate their external studies offerings, or that OLA, with its national coverage, would emerge as a direct competitor. Low returns for university involvement was an additional inhibitor. Many feared the new fee structure might set a precedent for differential funding of regular on-campus and distance education courses (Hayford, 1996).

OLA succeeded in establishing itself in spite of institutional opposition. Several explanations account for the early success of the Initiative. First, OLA benefited from strong, even aggressive, leadership from its executive staff and its Monash patriarchs. Along with significant government support, this sense of purpose drove the company to rapid expansion. Second, the principles of open access and equity resonated with the views and aspirations of many of the staff involved. Most of the teaching staff consulted by the present author expressed the view that they were making a real contribution to Australian education. Some described themselves as agents of change, breaking new ground and transforming old, out-dated practices. In each of these ways, OLA's success was attributable to a sense of shared educational

vision which helped to unite geographically dispersed staff from many competing organisations. Third, the compliance of the partner universities was sustained by what Baldwin (1997) later called the 'pot of gold principle', by offering funding incentives to bring about organisational change and institutional compliance. This principle created new opportunities as well as new stresses on the fledgling OLI, with the unveiling of a new government plan for organisational expansion to be described in Chapter 6.

Evidence from discussions with staff at the OLA suggest that false optimism prevailed in 1994 when the government announced its plans for the establishment of an Open Learning Electronic Support Service (OLESS). The government sought to build on the achievements of the TVOLP and OLA by adding a technology arm to the Initiative which was expected to leverage open learning into the new information age. The development of an online capacity for the OLI is the subject of the next chapter.

6 | The OLESS Pilot

INTRODUCTION

THE Open Learning Electronic Support Service (OLESS) was an additional component of the OLI. It was conceived and funded by the Commonwealth Government to trial the use of computer technology and electronic networking to support Open Learning students. Representing a new direction in Open Learning policy, the OLESS was born from a conviction that online learning had the potential to dramatically transform higher education, offering cost savings in delivery, improvements in student access and higher quality learning materials. It was both an expansion of the OLI and an experimental precursor to the establishment of a national educational network later known as Open Net (discussed in Chapter Seven).

The OLESS pilot project ran from September 1994 to February 1995, and was split up into two sequential studies, the *First Pilot* and the *Second Pilot*, designed to run in tandem with the third and fourth OLA study periods respectively. The First Pilot studied networked learning amongst 132 students, enrolled in four OLA units (Accounting 11, Australian Studies 13, Child Development 11 and Child Development 12), which were offered OLESS support. In total, 96 students were provided with computer equipment suitable for connecting from their homes (IBM laptops, modems, and in some cases, printers) and a further 36 students were provided with LAP (local access point) access to Nexus, a South Australian dial-up computer network. The Second Pilot ran from December 1994 to February, 1995, and involved 126 OLA students from 5 units. Students in both pilots were granted free access time to the network, and received technical support via a free-call help desk. The study also set in motion a detailed evaluation of the educational aspects of both pilots. A team led by Dr Elaine Atkinson of the University of Melbourne conducted the evaluation.

THE OLESS PILOT LAUNCH

The launch of the OLESS pilot was held on the 14 September 1994 at the Regency Institute of TAFE (SA). Speeches from Minister Crean (Minister for Employment, Education and Training), Tony Pritchard (OLA) and Julie Carr (OLTC) were followed by presentations by three OLA students who demonstrated the technology to the press (Open Learning Australia, 1994b; Pritchard, 1994e). The event, considered successful by its organisers, attracted favourable and extensive media coverage. Minister Crean's address at the launch laid open the government's expectations for the project (Crean, 1994d). The minister was keen to advance the OLESS as an important arm of the Open Learning Initiative, intended to work alongside and help realise the objectives of OLA (Crean, 1994a). It would help improve access by providing students with an electronic networking service, which had the capacity to ameliorate their relative isolation from teaching staff, fellow students and course administrators (Crean, 1994b). It would fill the communication gap by providing much needed student support in a mode of study in which this was apparently lacking. A further claim was that the OLESS would go beyond what was educationally possible at that time. The OLESS would do this by exploiting what Crean referred to in his speech as 'the revolution in information and communication technologies, what is often described as the emerging *information superhighway*' (Crean, 1994d). Aside from this perhaps crude reference to the IT jargon of the day, Crean was articulating what had then become a fundamental conviction in government policy-making circles: the crucial role of technology as a 'technological fix' in the transformation of Australian society.

The minister's press release, *Education superhighway under construction*, on 14 September, 1994, announced the $1.4m budget for the OLESS pilot, with a promise for additional funding when the OLESS proceeded beyond the pilot stage. The OLESS was promoted as an:

> ...unprecedented opportunity to take Australian education forward into the information age... Around 140 Open Learning students will participate in the OLESS pilot project... expected to rise to over 300 with the pilot's second stage in December.
>
> (Crean, 1994a)

Minister Crean also sketched a future vision for the OLESS. 'I can see scope for the OLESS to become a common national infrastructure for the electronic delivery of educational services for students in all education sectors – schools, TAFE and universities – not solely open learners' (Crean, 1994a). Like the management model of OLA, the OLESS would act primarily as a broker of services rather than as a supplier in its own right (Crean, 1994b). This model sought to avoid 'unnecessary duplication' of services by utilising existing resources and encouraging synergy among institutions in an effort to improve economies of scale:

> Students will be able to gain access to the OLESS from their own homes, from community based facilities such as schools or public libraries or their workplace. In this way the service will also be capitalising on resources the community already has available to it... the OLESS will not be a direct supplier of services but will act as a broker. In that way it will be able to take advantage of both market forces and technological changes to put together the best possible package of services and support for students.
>
> (Crean, 1994d)

The government's high expectations of the OLESS were confirmed when Mr Brian Johns (Chair of the ABC and of the Broadband Experts Group) was announced as the new independent Chair of the OLESS (Crean, 1994d). Two other high profile independent Directors were later appointed to the Board (18 October, 1994), Dr Terry Cutler (a consultant and leading government advisor) and Mr Daniel Petre (Microsoft Australia Executive).

Following 'full rollout', the primary service of the OLESS was to be that of an internet service provider (ISP) for students around Australia. Initially, however, subscribers would comprise OLA students who would connect via computer modem to a national computer-network which provided the following basic services: communication with other students (bulletin boards and email), electronic submission of assignments, feedback from tutors, library catalogue browsing, and access to course and administrative information (Crean, 1994d). It was also envisaged that students would be able to gain access to the OLESS from community-based facilities at public libraries and schools, thereby satisfying equity concerns. However, as a pilot project, the first stage of the OLESS was promoted at the launch as a controlled trial,

entrusted to: 'provide valuable information and insights for the further development of the service prior to its full implementation...' (Crean, 1994d).

In his launch speech Tony Pritchard (1994e) offered a subtle divergence in expectations from those of the government. Whereas Minister Crean's speech focussed almost solely on delivery and connectivity issues, the concern of OLA was educational courseware. Pritchard saw an opportunity to propel higher education into the information age by stimulating the production of efficient information exchange and 'new and much needed computer aided learning software' (Pritchard, 1994e). It was noted by the author during the course of archival research, that this difference in purpose was due to OLA's closer proximity to administration and educational operations issues. However, as will be shown later in this chapter, it may have also have been forged out of the tendering process in which lines of demarcation had been drawn among the key players: the OLTC, OLA and the Commonwealth.

The launch of the OLESS marked the formal commencement of the first OLESS pilot project. However, the birth of the OLESS can be traced back to 1993 when plans for the project were first announced and interested parties were invited to tender expressions of interest.

THE BIRTH OF THE OLESS

On the 20 July, 1993, a *Request for initial proposals* (RFIP) was circulated by the Commonwealth Government to announce the OLESS and to elicit tenderers from amongst interested parties. The primary role of the OLESS was stated: 'to assist open learning students who do not have access to support services that mainstream students have... This network would provide electronic library services and allow open learning students to communicate with their tutors and other students electronically' (Department of Employment Education and Training, 1993c, p2). The RFIP also provided background to the OLESS project:

> As a first step in establishing the electronic support services network, the Commonwealth in early 1993 commissioned Deakin University and Strategic Technology Management to undertake a study developing a strategy for the establishment of an electronic network. The consultants were asked to identify

> current and future needs of tertiary open learning students and to identify how these needs could be met through access to an electronic support network. They were also asked to identify the existing arrangements for electronic access in tertiary education and community facilities which could be used to provide electronic access services. Finally, they were asked to identify relative costs and benefits of available technologies and to develop a strategy for providing facilities for electronic access to meet independent tertiary open learning student needs... a key part of this strategy was to ensure that open learning students could access electronic support services from their homes and from work. For those open learning students who do not have access to the necessary communications equipment, provision would also be made for access to the network from community based facilities.
>
> (Department of Employment Education and Training, 1993c, p3)

Many recommendations from the 'Deakin Report' (Deakin University, 1993) flowed to the OLESS brief. These are evidenced in *Section 5: OLESS requirements* of the RFIP (Department of Employment Education and Training, 1993c), which outlines the key features of the project. It stipulated, the OLESS service should:

a) be operational by June 1994, with a smaller pilot study of some 200 OLA students to allow evaluation and refinement to the networking strategy (based on recommendations from the Deakin University and Strategic Technology Management Report);

b) commence full implementation in December, 1994;

c) have the capacity to extend its client base beyond OLA students on a full user pays basis and to meet the needs of other groups, such as mainstream distance education students;

d) provide the following minimum services: electronic access to library services, electronic information exchange (email), electronic academic and administrative advice/information, and a phone/email help desk;

e) be easy to use;

f) be substantially and appropriately marketed;

g) avoid unnecessary duplication of infrastructure which has already been established, often with government funding; and

h) have a national geographic spread (Department of Employment Education and Training, 1993c).

The Deakin Report, *Electronic facilities network to enhance tertiary open learning services* (Deakin University, 1993), suggested that 40–45% of students would be likely to subscribe to computer based services and that they would be prepared to pay about $70 per unit. However, according to John Mitchell, a key OLA consultant on the OLESS project:

> The Deakin Report, on which the OLESS was based, was really a technology report, saying that the technology exists. Anything related to education was built on hopes and dreams, rather than demand.
>
> (Interview with John Mitchell, 2002)

The OLESS was born at a time when the Commonwealth was taking a particular interest in new technologies, and had commissioned a range of reports to explore the potential (Cochrane et al., 1993; National Board of Employment Education and Training, 1992b, 1994a, 1994b; Taylor et al., 1993; Taylor & White, 1991). Two such reports advocated substantial government investment in 'state of the art' technologies, which had considerable influence on the formulation and nature of the OLESS: Roy Lundin's (1993) *Overseas experience in non-traditional modes of delivery in higher education using state of the art technologies: best practice* and Richard Caladine's (1993) complementary report entitled *Overseas experience in non-traditional modes of delivery in higher education using state of the art technologies: a literature review*. Roy Lundin's (1993) report provided a system-wide rather than academic-level perspective of ICT in higher education. He emphasised the importance of systems level design, requiring considerable government attention to matters of infrastructure provision (Taylor et al., 1996). For Lundin (1993), ODE could be naturally coupled with ICT. He understood the articulation of ICT with ODE as part of a more general trend away from face to face teaching and toward a distance model of higher education. This was not premised on a desire to discriminate between delivery modes but rather, his findings held that the application of ICT is best realised when there is a demonstrable need, rather than just an educational opportunity. The expanding ODE sector, with its greater demand for flexibility and connectivity across geographical space seemed the prime candidate for this type of approach. Lundin, argued that ICT designs should cater for all student needs, accommodate the requirements of the subject matter, take account

of the teachers' choices and expertise, and reach out to students at no additional cost per person (Lundin, 1993, pp13-16). Aspects of Lundin's report find parallel in the OLESS project, for example the emphasis on infrastructure provision, on system-wide (national) scope, and on open and distance education students as the primary clients.

Caladine's (1993) literature review of the use of ICT within higher education found only a 'small percentage' of existing literature dealt with theoretical issues, instead, focussing on 'the technology of delivery and educational outcomes', with a bias towards 'success stories' (Taylor et al., 1996). Reflecting on this he noted that '...if the system [of ODE] is driven by technological determinists rather than educators, the learners may become the victims of the process rather than its beneficiaries' (Caladine, 1993, p9). Taking a critical stance, Caladine (1993) reviewed a key theoretical problem with the implementation of ICT in higher education: the 'transactional', or psychological distance between learner and teacher. He argued that the quality of dialogue between student and teacher should be addressed by careful design of courseware. However, one of the most important determining factors he suggests is the medium of communication, and how this impacts on the transactional distance. Broadcast technologies, for example, act to increase the transactional distance by limiting opportunities for effective dialogue, and by being relatively unresponsive to learners' individual needs. In contrast, the new medium of interactive multimedia is customisable, and supportive of a dialogic approach by its nature. Caladine (1993) therefore endorses the use of ICT in ODE environments vis-a-vis broadcast, based on their lower fixed costs (production), enhanced interactivity (email and online connectivity), and potential to reduce the transactional distance between teacher and learner (Taylor et al., 1996). This finding was reflected in the government's shift from broadcast-television towards the establishment of a distributed system of networked learning.

The other major work to appear at the time of OLESS policy formulation was Diana Laurillard's (1993) book entitled *Rethinking university teaching: a framework for the effective use of educational technology*. Laurillard was based at the UKOU's Institute of Educational Technology, but had achieved recognition in Australia during a period as Visiting Fellow (1988–9) at the

Centre for the Study of Higher Education at the University of Melbourne (Open University, 2002b). In her work, she provided a blueprint on how to harness technology to best develop an effective organisational infrastructure. She argued that quality education is encouraged by inter-institutional collaboration (rather than competition), that ICT should be developed on a cyclical (continuous) improvement model, that new technologies should be integrated with all aspects of learning to ensure success, and that educational activities should be focussed on developing integrative and reflective knowledge in students, rather than fragmented, informational knowledge. These recommendations reveal a need for amortising costs and expertise across a collaborative network of institutions, which was evidenced in the structural aspects of the OLESS.

A number of government initiatives gave focus to the educational technology agenda. In 1992, the Committee for the Advancement of University Teaching (CAUT) had been established to enhance the quality of teaching, research and scholarship across the higher education sector (Australian Universities Teaching Commission, 2002). CAUT had a substantial influence in promoting information technology within higher education, particularly with its National Teaching Development Grants which distributed $4 million for projects in 1993, 63 per cent of which involved computer related technologies (Hayden & Speedy, 1995). There was also the establishment of the Senate Standing Committee's Enquiry into *The present and future role of Open Learning* (Senate Standing Committee on Employment Education and Training, 1994) which provided relevant policy advice to the government.

As discussed earlier, momentum had been building within government circles for a major investment in educational computing infrastructure. This was led by Ministers Baldwin and Beazley (1993), government advisors and from senior public servants such as Di Bolton (The Director of the government's National Open Learning Policy Unit). Furthermore, media and industry lobby groups were lobbying for a national strategy to 'kick start' popular internet usage and the rollout of networking infrastructure (Brown, 1993).

TENDERING FOR THE OLESS

Tendering for the OLESS commenced with *Request for initial proposals: to establish and operate an Electronic Support Service for Open Learning students and other clients* (Department of Employment Education and Training, 1993c). The document invited 'eligible organisations to submit proposals to establish and manage an Open Learning Electronic Support Services (OLESS) network for clients of OLA; and other clients' (Department of Employment Education and Training, 1993c, p1). Organisations eligible to submit bids were identified as 'The OLA; institutions as defined in the Higher Education Funding Act, 1988; and other incorporated bodies' (Department of Employment Education and Training, 1993c, p4). Initial submissions were assessed, and a shortlist was made of organisations invited to submit final proposals. The assessment panel comprised officers from DEET, and an independent representative who acted as the overseer of the process. The minister was positioned to make the final decision based on recommendations from the panel.

OLA, the OLTC and UNE-NR (University of New England–Northern Rivers) initially formed an unstable consortium to bid in the first round. Each of the three organisations had strong interest in the OLESS. OLA as implementer of Stage One of the OLI had considerable concern, as the OLESS would provide services to its own students: 'OLA will be judged on whether the OLESS works well or not... if, for what ever reason, the OLESS does not work well, this could lead to severe damage done to the core activities of the OLA' (Logan, 1993).

The OLTC was a new, high profile, company set up by Federal and State governments to manage the introduction of open learning technologies. Clearly, the OLTC found in the OLESS an opportunity to work on a project highly relevant to its organisational brief. The UNE-NR had invested considerable effort in developing a student network which it felt could be expanded to provide national coverage. However, the OLTC was not convinced that UNE-NR could contribute effectively to the consortium. This was because the OLTC was planning to manage and operate its own networking solution

from its base in Adelaide. Thus, Ms Julie Carr, the OLTC Director wrote to Pritchard on 4 December 1993:

> We were disappointed to learn from Terry McMaster [acting on behalf of OLA] that [OLA] had given undertakings to UNE-NR which you had not tabled at our meeting on Dec 2nd and which... were not negotiable. The matter in question related to our concern regarding ownership of the OLESS service. Terry McMaster admitted that OLA has negotiated with UNE-NR that it sell its network to the proposed OLESS service in return for a third share of the company. This is contrary to our meeting of Dec 2nd when we agreed that the UNE-NR network would not necessarily be the OLESS network, but that it would be subject to evaluation as to its suitability.
>
> (Carr, 1993)

Four days later (December 8, 1993), the OLTC pulled out of the OLA-led consortium. OLA records indicate the reasons:

> We [OLA] were advised by the OLTC late on Wednesday 8 December, 1993 that it was withdrawing from the proposed consortium. The reasons for its withdrawal relate to differences of opinion regarding the proposed technology and an unwillingness to share the control and the management of that technology with the other consortium members'
>
> (Open Learning Australia, 1993b, Attachment 4: 'Electronic Student Support')

In the first round (expressions of interest) the OLTC bid separately from the OLA/UNE-NR consortium. Di Bolton, a great supporter of the OLTC, was also a member of the OLESS Selection Panel (Pritchard, 1994a), which gave the OLTC a degree of confidence in developing a separate bid. The OLTC emphasised a brokerage model for contracting ISP and other networking services, whereas the OLA/UNE-NR approach was to use existing networking solutions developed at UNE-NR. The OLA-led bid emphasised the strength of its approach: 'the electronic support service is based on existing technical and educational systems and does not duplicate any government funded services... this means that the cost of setting up the service is minimised... [and] does not have the risks and uncertainties associated with other technologies' (Pritchard & Macleod, 1993, Covering letter to the Joint OLA/UNE-NR bid for the OLESS).

Deakin University was a strong contender for the OLESS, as part architect of the OLESS's feasibility study. Aware of this strength, OLA had previously approached Deakin to form a joint bid:

> Early discussions with Deakin University indicate that it preferred not to join an OLA consortium and that it would be putting in its own proposal but that it was prepared to work with OLA on an alternative basis should its proposal not be accepted
>
> (Open Learning Australia, 1993b, Attachment 4: 'Electronic Student Support')

Deakin's bid was unsuccessful, the Selection Panel jointly favouring the separate bids of the OLTC and OLA on the basis that: 'existing university networks eg Deakin, SCU and ECU should not automatically be used as carriers of the service because it may lock the OLESS into particular suppliers too early' (Creagh, 1994a). On 19 April 1994, Minister Crean wrote to Julie Carr and Tony Pritchard:

> Dear Ms Carr and Mr Pritchard, ...I have decided to invite you to submit a detailed joint proposal to establish and operate the OLESS. I have accepted the advice of the assessment panel that the best proposal was provided by the OLTC and that the next best proposal was provided by the OLAA. The panel preferred the model of OLESS management put forward by the OLTC, whereby the OLESS would act primarily as a broker of services rather than a supplier in its own right. It also advised that the OLTC was the organisation best positioned to enable the potential benefits of the OLESS to be extended into other educational sectors and into the community more generally. The OLA is also well positioned to gain the support of the higher education sector.
>
> (Crean, 1994e)

The decision by the government favoured the networking proposal of the OLTC, which effectively gave little room for a contribution by UNE-NR. As a result, OLA and the OLTC formed a 'shot-gun' consortium and set about redrafting their earlier proposals as a joint bid (Open Learning Australia & Open Learning Technology Corporation, 1994). The decision stipulated a further requirement: '...the first stage of the OLESS's implementation must coincide with the commencement of the first stage of OLA's third [September] 1994 study period' (Crean, 1994e), which gave the parties little time to

debate the details. John Julian, Manager–Technology and Communications at the OLA, made the following observation:

> It will be difficult but not impossible; although it will frankly be to satisfy the very real political necessities of life... ministers want to see things, have pictures taken, issue press releases and the like.
>
> (Julian, 1994b)

Thereafter, the OLESS moved quickly into final planning and made rapid progress towards implementation.

SETTING UP THE OLESS PILOT

Throughout the establishment phase of the OLESS pilot, OLA and the OLTC endeavoured to build a cooperative working relationship, and to devise a suitable division of responsibilities (Pritchard, 1994d). It seemed inevitable, from their respective areas of expertise and from the minister's advise in the letter quoted above, that OLTC's role would be to implement the technical aspects of the network, while OLA would be responsible for educational considerations, clients and marketing (Open Learning Australia & Open Learning Technology Corporation, 1994). The key people assigned to work on the project were John Toner, Ralph Leonard (OLTC), John Julian and consultant John Mitchell (OLA). During this phase of negotiating the final operational form of the OLESS, a number of tensions between the two organisations were evident (Julian, 1994g). The main source of disagreement was in the service provider chosen by the OLTC.

Determining managerial and working arrangements for the OLESS were also key areas of contention between OLA and the OLTC. Roles for the two organisations were defined in general, but not in detail (Creagh, 1994b). Furthermore, the OLTC made a relatively slow start in setting up and establishing the ISP for the OLESS. Concern by OLA staff started mounting as the September deadline approached. OLA was in a tight situation, because it was difficult for them to proceed with educational aspects of the service, without the settling of issues regarding technical infrastructure. In an internal report, *Strategy for dealing with the OLESS project*, Julian (1994c) referred to the situation as 'critical', 'awkward', and 'exposing OLA to massive political

embarrassment'. Julian (1994c) listed 21 areas of concern with the OLTC, including the inability to comprehend the scope of the task, poor teamwork, a lack of reporting and unminuted meetings, lack of suitable staff employed on the project (staff consisted of one consultant and one new recruit), poor communication channels between the OLTC and OLA, and a lack of understanding of the needs of OLA students. The OLTC's financial plan was thought to have overestimated the size of the potential student market and public statements were criticised for their 'excessive hype and use of clichés' (Julian, 1994c).

The brokerage model for the OLESS networking services gave the OLTC the task of requesting and short listing tenderers, evaluating responses, negotiating contractual obligations and 'rolling out additional infrastructure and features on a demand driven basis' (Open Learning Electronic Support Service, 1994a, 'Agenda Item 19'). However, due to time constraints in meeting the September start for the OLESS pilot, the Minister for Employment, Education and Training, Minister Simon Crean, allowed OLA and the OLTC to 'discharge brokerage functions, without the need in the first instance to determine that they are the most cost-effective providers of those functions' (Open Learning Electronic Support Service, 1994a).

NEXUS SERVICES

Nexus, a network service provider based in Adelaide, was selected from amongst three ISP tenderers to host the OLESS (Atkinson et al., 1994). This was an existing service to primary and secondary schools run by the South Australian Department for Education and Children's Services from the Angle Park Computing Centre. Nexus provided email, bulletin board and library searching facilities to students.

At the time of the trial, it would be fair to say that Nexus was not cutting-edge technology. In fact, it was well out-dated, being typical of a networking solution from the early 1980s. The interface was based on command line VT100–terminal emulation (Open Learning Australia, 1994e; Open Learning Electronic Support Service, 1994c). This meant that it operated only in black and white, had restricted cursor movement, poor screen redrawing

and no facilities for displaying graphics. World Wide Web services, were not provided, even in text-mode (Lynx), despite the recent installation of an Australian Academic and Research Network (AARNET) gateway, allowing access to the wider Internet. Furthermore, it suffered from slow connection speeds (2400 baud through Auspac) and sluggish timesharing on the server. This would not be an easy service for novice users, especially those from remote locations around Australia.

For critics, Nexus was a poor choice of ISP, with respect to networking options available at that time. Roger Aitkinson (Murdoch University), for example, expressed some general concerns:

> The thinking is host oriented instead of network oriented; ...Nexus does not have modern server and client capabilities (eg no POP, no SLIP, no Pine, no Lynx, no listserver). Absence of SLIP is most unfortunate given the low cost and ease of putting up host based SLIP; ...[and a] lack of depth and breadth of expertise in the most modern developments in network services for dialup users
>
> (Aitkinson, 1994, Newsgroup posting)

The technical inadequacies of Nexus became evident to OLA staff during the set-up phase of the project, becoming an issue of conflict between staff at the OLTC and OLA. For example, John Julian write to John Mitchell:

> On reflection, it seems clear to me that one of the glaring problems in [the OLTC's] appreciation of this project is [the] total absence of any understanding that it is the software shell that will define the OLESS. The communications infrastructure will be largely irrelevant to the users as long as it works. The quality of the user interface and its adaptability to the needs of the providers will be the critical technical success factor in OLESS.
>
> (Julian, 1994d)

and

> There is a real failure... to understand the importance of the world of the internet to the clientele of this project... it is clear to me... that all of the educational activity in this area will occur on TCP/IP based networks. The AARNET/Internet is of vital importance and it is not adequate to assume with a hand wave that there will be gateways.
>
> (Julian, 1994e)

The *OLESS student's guide* (Open Learning Electronic Support Service, 1994c) was provided to students participating in the OLESS pilot. Access to Nexus on Windows machines required the use of *Microsoft Terminal* (a terminal emulation program) to connect via modem to the Auspac link at 2400 baud. This in turn connected them to Nexus III where they were required logon via an account name and password. User accounts on Nexus entitled them to a minimum of 50 hours total connection time for the duration of the Study Period. Once connected, users had access to email, bulletin boards for their study-unit, a general OLESS bulletin board, as well as library catalogues from participating university libraries (Curtin, Deakin, Griffith, Monash, UNE and UNISA). Email messages could be sent to other students, and staff on the system, and could be forwarded via a gateway to the wider internet.

THE OLESS FIRST PILOT

The OLESS First Pilot ran from September to November, 1994, coinciding with OLA's Study Period Three for that year. As shown in *Figure 6.1*, the pilot involved 132 students enrolled in one of four OLA subjects: Accounting 11 (ACC11), Australian Studies 13 (AUS13), Child Development 11 (CHI11) and Child Development 12 (CHI12). In total, 92 students were provided with computer equipment suitable for connecting from their homes (IBM Thinkpad notebooks, modems, and in some cases, printers), 4 students used their own equipment and a further 36 students connected via *local access*

Course	Students provided with equipment	Students provided with LAP access	Total students
Accounting 11	46	16	62
Australian Studies 13	29	–	29
Child Development 11	12	10	22
Child Development 12	9	10	19
Total	96	36	132

Note: Four students used their own equipment

Source: Atkinson et al. (1994, p2)

Figure 6.1 Numbers of students in the OLESS First Pilot

points (LAPs) to the network. Students in the pilot were granted free access time to the network, and received technical support via a free-call help desk. Other support materials included operating instructions for the loan equipment, the Student's Guide (an introduction to the OLESS and Nexus) and the Nexus User's Guide (detailed instructions on using Nexus). In terms of their geographic distribution, students were sourced from urban and rural localities from every state in Australia, and typical of OLA students, there was considerable variation in their education levels, socio-economic status and prior experience with computers.

In total nine staff from the two participating universities, two OLTC staff, two OLA staff and an independent consultant were involved in the First Pilot. As discussed earlier, OLA was broadly responsible for educational matters (such as the selection of units, student support and staff training), while the OLTC was responsible for technical and equipment issues (ISP tendering and selection, and equipment acquisition and delivery). Unit providers had various motives for becoming involved (Atkinson et al., 1994). Staff from 'Accounting' sought to automate assessment through file transfer and email feedback to students. 'Australian Studies' staff acted to provide students with more current statistical information and encourage electronic discussion forums on relevant topics. Staff associated with 'Child Development' focussed on providing equity for isolated students. Due to the short lead time for the project, a single induction session was held in Adelaide to familiarise staff with the networking service.

The evaluation of the pilot was overseen by Dr Elaine Atkinson, and conducted by Ian Conboy and Geoff Trebilco from the University of Melbourne. The evaluation methodology was based on telephone interviews of 25 students, supplemented with email communications. Two follow-up interviews were conducted to provide rapid feedback to the organisers of the OLESS so that 'running repairs' could be progressively made. The method also included a study of email and bulletin board usage, access times, and staff interviews (Atkinson et al., 1994).

The evaluation revealed some uncomfortable findings regarding student usage of the OLESS. Most notably, despite free provision of computer

equipment and free access to the service, 38% of participants never logged on, many complaining about lack of time, or inability to assemble and operate the equipment. A further 25% logged on for less than 2 hours in total, suggesting they may have connected only once during the study. Of the students using LAP connections, the usage rate was lower still, the majority failing to logon at all. Most of these students complained about the inconvenience of travelling to the LAP, and the unsuitability of access times and procedures. The report notes: 'It is significant that the heaviest LAP user was only 5 minutes from the LAP' (Atkinson et al., 1994, p16). However, the report did not demonstrate statistically the difference in usage between LAP and non-LAP students. Utilisation of the bulletin boards revealed some 71 messages were posted to the OLESS bulletin board of which 29 (41%) were posted by staff. Of the remainder, 20 (28%) were 'Hi!' messages and 22 (31%) were course related messages posted by students.

In accounting for the low usage of the OLESS in the First Pilot, the evaluators found that many students lacked basic computer skills, including keyboard skills, conceptual familiarity with networking, email and computer interfaces. Interestingly, the evaluators concluded that the Windows graphical user interface was a key barrier: '...many of the students could not use graphically based operating systems and that a simple menu-based system is more appropriate' (Atkinson et al., 1994, p14). To contend with novice users with low levels of computer skills and confidence, the evaluators recommended, 'establishing a network of experienced users which novice users could be referred to for additional help' (Atkinson et al., 1994, p14). They noted that the heaviest users were mature women with family responsibilities. The report found that some students were unconvinced that the educational worth of the system justified the time and effort required to learn how to use it. This was in spite of the fact they received computer equipment, modems, and connection to the network at no cost to themselves. This is confirmed by the high number of students who 'logged on, had a look around and did not follow up with sustained use' (Atkinson et al., 1994, p17).

Despite low student usage, the evaluators concluded results were encouraging and they recommended the continuation of the study into the Second

Pilot. They found, for example, positive feedback of the communicative aspects of the service by remote students: 'it reduces isolation' and 'you can communicate with other people and you are not on your own' (Atkinson et al., 1994, p20). Other endorsement of the OLESS by students included: the speed of reply to questions; the ability to access the system at times convenient to the student; anonymity when asking questions; and access to remote databases.

Overall, the evaluators felt that OLA students were more representative of the Australian population at large than regular university students, especially in terms of their knowledge of computers. This, combined with the fact that the OLESS participants were not self-selecting, explained the variety in usage patterns and high proportion of 'no or low level' users of the network. Furthermore, haste in establishing the First Pilot created 'confusion and misunderstanding'. Insufficient preparation time was felt to be a key reason for its low rate of usage. They found that 'the Nexus system delivered what could be reasonably expected' (Atkinson et al., 1994, p15), despite frustrations with its speed and other limitations. Help Desk staff, they confirmed, were courteous and responsive and unit teachers at the two universities were enthusiastic and saw the future potential of networked learning. The final recommendations of the report suggested better preparation of the OLESS units, financial provision for staff training, the offering of a computer skills unit as a prerequisite for students wishing to use the OLESS, discounted access costs for remote students (in a future user-pays environment), and finally, the continuation of the OLESS into the Second Pilot stage (Atkinson et al., 1994).

THE OLESS SECOND PILOT

The OLESS Second Pilot ran from December 1994 to February 1995 (Study Period Four), involving 126 OLA students from 5 units. During this period a Board of Directors was appointed to overview the transition of the OLESS into a company structure. The Board orchestrated a name change of the initiative to 'Open Net' towards the end of the Second Pilot. As a result, the Second Pilot is sometimes retrospectively referred to as Open Net Pilot Phase Two, although for reasons of clarity and consistency, it will be referred

to herein as the OLESS Second Pilot. The change in name and the appointment of the Board of Directors will be discussed in Chapter Seven.

Figure 6.2 shows the breakdown of student participants by subject and by type of equipment provision in the Second Pilot.

Course	Students provided with equipment	Students using own equipment	Total students
Accounting 11	27	17	44
Australian Studies 13	15	3	18
Child Development 12	14	–	14
Marketing 11	17	14	31
Biology 11	18	1	19
Total	91	35	126

Source: Atkinson et al. (1995, p8)

Figure 6.2 Numbers of students in the OLESS Second Pilot

Like its predecessor, the Second Pilot drew student participants from across Australia. As is common amongst OLA students, the participants reflected a broad cross section of the Australian population in terms of such variables as geographical spread, education level, income, age, occupation and previous computer experience. Once again, students in the Second Pilot were granted free access time to the network, and free support from a computer help desk, print-based operating instructions, the Student Guide, and the Nexus User's Guide. Nexus remained the network service provider for the Second Pilot, and student participant numbers were similar.

However, there were some notable differences between the two pilot projects. First, some students retained the equipment loaned to them in the First Pilot, and continued on to units involved in the Second Pilot. Second, there was less emphasis on LAP provision. Whereas 40 students in the First Pilot connected through LAPs, only 8 students connected by this means in the Second Pilot. Therefore, the vast majority of students connected using either their own equipment, or equipment loaned to them. Third, two new units were introduced (Marketing 11 and Biology 11), and one unit (Child Development 11) was withdrawn, because it was not on offer in that study

period. Fourth, Marketing 11 provided resources on the World Wide Web for students. At that time, this was a new technology, distinguished by its more sophisticated hypertext interface. One drawback was that Nexus, being a text-only service, could not support in-line graphics through its server-side browser, 'Lynx'. Fifth, the evaluation methodology, which in the First Pilot was largely based on telephone interviews and Nexus usage statistics, was extended to include email questionnaires, and a Voice-Tel messaging service in which 20 students and the evaluation team were provided with voice mailboxes. Evaluative information was collected by monitoring communications between members of the group, in part, to determine if there was any preference between keyboard and voice in communication by the students. Despite these differences in character across the two pilot studies, overall the nature of the two studies remained similar and results were fairly consistent.

Category	Focus	First Pilot	Second Pilot
Students	Total number students under study	132	126
	Students provided with loaned equipment	92	91
	Students using own equipment	4	27
	Students using Local Access Points (LAPs)	36	8
Student usage	No usage	38%	24%
	Less than 2 hrs total log-on time	63%	55%
Bulletin boards	Total number of postings	71	138
	Student 'Hi'! messages	28%	24%
	Staff postings	41%	54%
	Student postings with course related content	31%	22%

Source: Adapted from: Atkinson et al (1994) and Atkinson et al (1995)

Figure 6.3 Comparison between the First and Second OLESS Pilots

Evaluative results from the Second Pilot confirmed many of the conclusions drawn from evaluation of the First Pilot study (*Figure 6.3*). Notably, 30 (24%) students failed to log on at all, with 70 (55%) students logging on for a period of less than 2 hours in total for the duration of the study. This was a slightly better result than the First Pilot. There were 138 bulletin board messages posted. Student 'Hi!' messages numbered 33 (24%); 74 (54%) messages were posted by staff; and 31 (22%) were course related messages posted by students.

A correlative study of student usage with demographics would have been useful in light of the importance demographics had in determining the outcome of Open Net (discussed in the next chapter). However, the evaluators did not treat geographic location as an independent variable in their study. Despite this, qualitative data generated from interviews and the email questionnaire can be reassessed in this light and the importance of demographics can be determined (albeit, inconclusively). To do this effectively, a line of argument that the evaluators themselves began to develop in their evaluation of the Second Pilot is appropriate. First, they indicated that student usage was determined by the degree to which students perceived a direct benefit resulting from their use of the network. They state, for example, in their final Recommendation Number Two, 'Evidence from the evaluation studies in both phases of the pilot project shows clearly that students are not prepared to waste time in accessing any [electronic] support service unless they perceive that they will get worthwhile assistance and value' (Atkinson et al., 1995, p21). From this point the evaluators embark, with considerable conviction, on the importance of student assistance and staff support.

Question	Response(s)	Number of responses
How did it help with your studies?	alleviated distance	8
	exposure to technology	7
	not of great use	4
	useful, but time consuming	3
Which services did you find most valuable?	email	9
	review questions	3
	additional information	3
	help desk 1800 number	2
How well were you guided?	plenty of technical help	4
	printed guidance OK	4
	no instructions provided	2
	need more encouragement	1
Would you pay to use this service?	yes	7
	money would be a problem	3
	better with initial instruction	3
	no	2

Source: Adapted from: Atkinson et al (1995)

Figure 6.4 Student perceptions of the value of the OLESS/Open Net, responses from 19 students

Indeed, improving *support, induction* and *training* reads as the major finding of the study, reflected in 6 of the 8 final recommendations (Atkinson et al., 1995).

In this regard, it seems the evaluators may have underplayed the importance of 'value' in the student mind. For, in contrast, the qualitative data they collected from student interviews shows that many were concerned with obtaining value: value for money and especially educational value. Students were asked for their perceptions regarding the value of Open Net (OLESS). Results from these questions have been compiled into *Figure 6.4*. Of most interest here is the high value students attached to benefits of improved communications. For example, when the sample of 19 students were asked *How did these computer services help you with your studies?*, the most common response was 'Excellent, great help in alleviating distance (8 students)'. The most common response to the question: *Which of the computer services did you find most valuable?* was 'Email was great to contact staff and other students' (9 students). In contrast, only 3 students felt more support or encouragement was needed (Atkinson et al., 1995, p16).

Educational value, therefore, we could postulate, is maximised when the advantages of a computer network (as opposed to post, radio and television) are most fully realised. In this regard, it is clear from the study that students valued the following communications aspects of the OLESS most highly, particularly its ability to bridge distance and reduce isolation. Comments from regular and heavy users of the OLESS make this point very clearly:

> I found Nexus services quite valuable in the sense that I could contact other students and lecturers
>
> ...you did not feel as alone. I think this feeling would be greater for those in rural areas
>
> It was terrific to be able to contact other students and staff...
>
> I made it a habit to check my (e)mail every day...
>
> Being so far away from civilisation, it is good to informally correspond with uni staff... the main use I have found for the service is email...
>
> [Nexus] ...alleviated distance and I could contact other students and my tutor

> I think email is a very useful tool and if it is used in courses will help isolated students...
>
> (Atkinson et al., 1995, pp26-30)

These student comments along with the compiled results in *Figure 6.4* reveal some very different conclusions regarding the usage of the OLESS than those suggested in the findings of the Evaluation Report. The evaluators focussed on the low take-up rate of the service with the recommendation that better student support and training was the key. It would seem, however, that the evaluators missed an important point, evident in their own data: success of online educational delivery is predicated foremost on educational value, in other words, the usefulness of the service. This point was not strongly asserted in the findings of the study. Perhaps, this was because students in the study were not self-selecting and therefore represented a continuum beginning with those uninterested in computer networked communications through to those displaying very high interest and high usage. In an alternative scenario, one in which the OLESS students were fee-paying and self-selecting, the responses could have been quite different. For, the lure of improved communications and lessened isolation would be the key drawcards for new subscribers. In the next chapter, these and other lessons from the OLESS pilot will be revealed when the full rollout of Open Net, Australia's first national education network for Australian students is considered.

DISCUSSION

The events described in this chapter confirm the commitment of the Federal Government and the OLI to use computer technology and electronic networking in support of open learning. The years 1994 and 1995 saw substantial changes in electronic delivery in Australia punctuated by the visit to Australia of the chief executive of Microsoft, Bill Gates, and the enthusiastic and frequent use of the term 'information superhighway' by politicians and the media. The OLESS signalled completion of two trials of networked computer assisted learning, which produced equivocal results and revealed some of the excesses of the politicians' expectations (Julian, 1994f). Other government policy initiatives were announced, including an education

network for Australia (EDNA) and government reports were commissioned on technology in learning.

Within OLI, it seemed that the Aitkinson (1995) evaluation was struggling to explain why the majority of students failed to make effective use of the network facilities, given they were offered free of charge. The Report cited the inability of students to use a graphical user interface and the need for more student support and training as explanations. But how could a training program for students in remote locations across Australia be implemented and at what cost? Moreover, equity could never hope to be achieved in a system in which students would first have to buy expensive computer equipment and then make regular payments to access the networking service. The Second Pilot made this clear when the LAPs were largely abandoned in favour of students connecting with their own computer equipment. In hindsight, the LAPs would have been most beneficial in rural areas, where regular telephone services are relatively expensive and where infrastructure is most lacking.

As noted earlier, the report failed to consider demographic characteristics and usage type (ie supplied equipment or own equipment) as independent variables in their study. Had they done so they may have found that rural users were a key market. In retrospect, the Atkinson et al. (1995) *OLESS Report* may have been asking the wrong question: ie 'How do we ensure all students can be encouraged to effectively use the national computer network?'. The question requiring an answer was more like the following: 'How do we determine which students will be likely users of the service and how should we best provide for their needs?' That is to say, they may have better read the market as comprising self selecting, remote and/or computer-oriented students as the main users of the fully realised service.

From OLA's perspective the challenge posed by the OLESS pilots was the creation of 'a service with characteristics that are sufficiently attractive to both students and providers, so that the OLESS will be preferred over other competing services in the marketplace' (Open Learning Electronic Support Service, 1994a, Agenda item 20, p3). Low rates of computer literacy amongst student users and providers however, would be an encumbrance on

its future expansion. It was recognised by the OLESS Board that a national computer literacy program would need to be conducted, heavily focussed on student and staff development. The problem was exacerbated at that time due to low 'ownership of modems in Australia' (Open Learning Electronic Support Service, 1994a, Agenda item 20, p3). It follows local access points could have played a more central role (Mitchell, 2002).

In 1993, 56kbs modems were uncommon; client/server connections were relatively slow and household computers were ill-equipped to interface with dial-up networks. The take-up of desktop and laptop computers was strongest in business, government, research centres and universities. However, network-capable home computers were not prevalent in average Australian homes (Phillips, 1996c). Although secondary schools were beginning to offer comprehensive and mandatory computer literacy courses to their students, many adult OLA students had not yet acquired basic computer literacy (Mitchell, 2002). Thus, the foundation for take-up by OLA students was not assured. Perhaps these circumstances account at least in part for the limited acceptance of this computer-driven initiative, and for the equivocal findings of the evaluators. Furthermore, the OLESS, and later Open Net faced a challenge from established university network services and commercial internet service providers (Julian & Mitchell, 1994). The OLESS Board had identified this problem and pondered how regional competitors could be convinced to transfer their connection services to the OLESS/Open Net (Open Learning Electronic Support Service, 1994a, Agenda item 20).

CONCLUDING COMMENTS

The OLESS represented an important step in the evolution of OLI policy. It was an attempt to engage with the digital economy which itself followed an earlier effort to modernise higher education with television (TVOLP), and subsequently to consolidate and centralise distance education provision within OLA. The original contract for the OLESS was jointly awarded to OLA and the OLTC who received some $1.459m for running two pilots (Open Learning Electronic Support Service, 1994a, Agenda item 4). Later it was set up as a separate company (Open Net) with an executive officer under a joint shareholding arrangement of these two organisations. The two OLESS pilots

in 1994–5 were conducted to trial the viability and effectiveness of online learning. The strategy involved the purchase of some 96 IBM Laptops and modems and the distribution of these to OLA students. The students were not volunteers, but were included as participants by virtue of their enrolment in selected units. At the end of each of the two pilots, the laptops were collected back from the students. Students were fully subsidised. They received the equipment by courier and connected to the Nexus Network via a single generic telephone number from anywhere in Australia (Open Learning Electronic Support Service, 1994a).

The evaluators of the First and Second OLESS Pilots (Atkinson et al., 1995; Atkinson et al., 1994) pointed out a range of shortcomings, such as the low level of computer literacy amongst students, and the difficulties in providing support to remote locations around Australia. Reflecting on the OLESS, the consultant to the trials noted:

> It was before its time. You can't just send out a laptop at that time in history without people having any computer skills. Computers were being sent out to people with no keyboard skills. In one notable case, we got a note back saying the student was in prison. The laptop got to him, but he didn't know what to do with it. That incident epitomised the whole project.
>
> (Mitchell, 2002)

However, the government was eager to progress the OLESS from pilot to full implementation without delay. In fact, the OLESS was incorporated into a company, with shareholders, a Board of Directors and CEO, before the findings of the OLESS pilot were even released. The new company, Open Net (the subject of the next chapter), demonstrated the government's commitment and conviction that online learning would dramatically transform higher education. It also demonstrated the gulf between online technology and the readiness of the student market, and the disparity between abstract policy and the practical realities of educational delivery.

7 | The rise and fall of Open Net

INTRODUCTION

THE Open Learning Electronic Support Service (OLESS) was transformed into and rebadged as Open Net Pty Ltd on 9 December 1994. It was felt that the name Open Net better reflected the company's unfolding role as a low cost internet service provider to students around Australia. Open Net was owned by its joint shareholders, OLA and the OLTC, who were each represented twice on its Board of Directors, along with two other independent Directors and an independent Chair. At an operational level, Open Net's CEO and staff retained a degree of independence in developing business plans and strategic decision making at their Sydney office. However, the Commonwealth Government devised Open Net's structure and primary goals, providing seed funding of $10 million, with an expectation it would be fully self-funding within 3 years. These goals were initially defined in terms of two stages. Stage One, was referred to as the OLESS pilot, trialling electronic student support. Stage Two was a longer-term endeavour to extend student support into a nation-wide computer network service for all Australian students.

Although Open Net was technically a continuation of the OLESS pilot (Stage One), in practice, Open Net soon took on networking (Stage Two) as its primary role. Hence, Open Net and OLESS can be regarded as very distinct activities with their own sets of goals and characteristics. The separation of the two stages was most fully realised by the government's decision to locate Open Net in Sydney, which finalised the break from Stage One (based in Adelaide) and gave it genuine independence from its shareholders (OLA and the OLTC), both of which had a vested interest in holding Open Net in part to its Stage One activities. Indeed, as will be argued later, rather than being characterised merely as an extension of the OLESS pilot, Open

Net should be regarded as a pilot for a much more ambitious government initiative, the Education Network Australia (EDNA).

The operational life of Open Net began following its launch on 19 May 1995. For the purposes of this present dissertation, its fate will be traced through establishment, customer take up of the service, expansion and then dramatic collapse which resulted in mass-resignations from its Board of Directors, its exit from network carriage on 26 July, 1996, and its final takeover by OLA in January, 1997. This chapter will also explore the processes behind the establishment of Open Net, the expectations the key players had of the service, the formulation of its strategic and business plans, the nature of its operations and the factors which led to its demise, including political and financial pressures, personality conflicts and the milieu of the IT scene at that time. More importantly however, the story of Open Net is a case study of an interventionist government attempting to shape new educational technology policy in Australia.

MISSION AND EXPECTATIONS

Following a successful beginning to the OLESS pilot, the government asked OLA and the OLTC to proceed quickly to the full-blown implementation of OLESS Stage Two in August 1994. Fast-tracking the company's setup, the Commonwealth quickly formed a Board of Directors and mobilised them to make the necessary arrangements for a March, 1995 launch of services (which was later delayed to May, 1995).

As can be seen in *Figure 7.1*, the Board of Directors was fully instituted on 31 October 1994. With the exception of Alison Crook who was replaced by John Lovering in November 1995, it was this team, which oversaw Open Net through its establishment, high-profile launch and fall from grace in July, 1996 when it terminated its carriage services. The Board of Directors comprised an independent Chair, two independent Directors and two nominated Directors apiece from the two shareholders, OLA and the OLTC. Mr Brian Johns, Managing Director of the ABC, was appointed founding Chair, and Dr Terrence Cutler (Consultant, Cutler & Cutler and former Telstra executive) and Mr Daniel Petre (Director, Advanced Technology

Name	Occupation	Appointment	Resignation
Anthony Pritchard	CEO, OLA	5 Aug 94	—
Julie Carr	CEO, OLTC	5 Aug 94	3 Jan 97
Brian Johns	Managing Director, ABC	31 Oct 94	22 Oct 96
Terrence Cutler	Consultant, Cutler and Co.	31 Oct 94	24 Oct 96
Daniel Petre	Director, Microsoft	31 Oct 94	23 Oct 96
Peter Spearritt	University Professor	31 Oct 94	—
Alison Crook	CEO, NSW Dept. of State Development	31 Oct 94	18 Sep 95
John Lovering	President, Murray Darling Basin Commission	1 Nov 95	19 Nov 96
David Phillips	Public Servant	7 Nov 96	11 Dec 96
Thomas Karmel	Public Servant	5 Dec 96	6 Jan 97
Richard Tardif	Publisher	5 Dec 96	—
Michael Gallagher	Public Servant	11 Dec 96	9 Jan 97

Source: Open Learning Australia (1997b)

Figure 7.1 Open Net register of Directors as of 1 February, 1997

Group, Microsoft Australia) were appointed as the independent Directors. Brian Johns was chairman of the Australian Broadcasting Agency and chair of the government's IT advisory team, the *Broadband Services Experts Group*. Both Dr Cutler and Mr Petre were highly respected IT industry leaders and provided regular advice to the Prime Minister and Cabinet. Nominated Directors for OLA on the Open Net Board were Professor Peter Spearritt (Monash University) and Anthony Pritchard (CEO, OLA). The OLTC appointments were Julie Carr (CEO, OLTC) and Alison Crook (Chief Executive, NSW Dept. of State Development).

With Microsoft, Telstra and various other public sector interests represented on the Board, the Commonwealth stipulated from the outset that Directors were to abstain from voting when conflicts of interest arose. The relative operational independence of Open Net from its Board was favoured by government as a means of ensuring adherence to government policy. By contrast, the broadly representative Board could be divergent and unpredictable. OLA and the OLTC, for example, in providing contracted services to Open Net, were required to submit their proposals through the CEO of Open Net, rather than directly to the Board for endorsement (Personal correspondence from David Phillips to Brian Johns, 18 October in Open

Learning Electronic Support Service, 1994a). As already mentioned, the OLTC and OLA were the joint shareholders, each of which held a nominal $1 share in the company. However, according to the terms stipulated by the Commonwealth, no dividends would be payable to the shareholders without the prior written consent of the minister. Furthermore, no transference of shares or major acquisitions were admissible without the agreement of both the independent Chair and, in practice, the Commonwealth (Open Learning Australia, 1995b).

The position of CEO of Open Net was advertised and the Board appointed Dr Ron Watts on 12 December 1994 . Watts remained CEO of Open Net until his resignation from the position in early January, 1997. Price Waterhouse was appointed as the auditor to Open Net to comply with Australian Securities Commission requirements (Open Learning Electronic Support Service, 1994a) and Westpac undertook to oversee the company's banking requirements.

Additional staff were appointed by interview from early 1995, as authorised by a meeting of the Board on December 12, 1994 (Open Net Pty Ltd, 1994). Positions were filled by Terry Fogerty (Partnerships Manager), Rita Grawich (Support Manager), Deborah Logan (Product Marketing Manager), Campbell Moody (Network Services Manager), Helen Woollett (Contracts Manager) and later in 1995, Clark Quinn (Multimedia Manager) under special arrangements with OLA (Pritchard, 1995b; Watts, 1995g).

Open Net took residence in its offices at Level 6, 210 Clarence Street, Sydney, NSW, 2000 and rapidly developed a World Wide Web site with the registered domain name of *www.opennet.net.au*.

Officially, responsibility for the OLESS was rolled into Open Net's operations, but because the OLESS was already part way through the last of its two pilots, the two activities remained largely separate activities, and were organised by two distinct groups of people. Responsibility for the OLESS pilots rested with the OLTC and OLA, in Adelaide and Melbourne, respectively, who later (unsuccessfully) billed Open Net for their work in this area. Meanwhile planning and implementation of Open Net's carriage functions were exercised directly out of the Sydney office in consultation

with the Board. As will be argued later, this separation of functions was one of the key reasons why Open Net did not properly heed the lessons from the OLESS pilots.

Government expectations for Open Net were instituted by a document of contractual obligations, *Agreement between the Commonwealth and Open Net* (Creagh, 1995). Clarification of the government's position was sought at times in a series of letters to and from DEET in relation to ambiguities, which arose in the interpretation of that document. Briefly stated, the initial requirements of Open Net were:

> ...to make learning opportunities available throughout Australia... and to provide electronic support services, initially to students registered with OLA
>
> ...to act primarily as a broker of services, using existing services as much as possible
>
> ...to ensure equitable access to the service
>
> ...the service provider shall ensure OLA students and other service users can access network services... at a reasonable cost agreed with the government
>
> [the services must include] ...email, ...internet access, ...electronic transfer of files, ...library catalogues, [and] ...an extended hours help desk.
>
> (Creagh, 1995)

The *Agreement* did not clearly define what was meant by 'learning opportunities' and 'electronic support services'. However, from the perspective of Ron Watts, Open Net CEO, the mandatory contractual obligations 'pointed more specifically towards networking services than to the provision of educational content or courseware' (Watts, 1994). This was an interpretation shared by the Chair and some other members of the Board and later clarified through correspondence with DEET officials. Yet it was never an interpretation agreed to by OLA, and became an ongoing source of disagreement between OLA and Open Net.

One key contractual obligation was for Open Net to be 'up and running' by March 1995 (Open Learning Electronic Support Service, 1994b). The minister made it clear that Open Net's first year budget of $4 million was premised on meeting this launch date. As will be shown later, despite Open Net's valiant efforts to meet this tight schedule, ultimately the launch was

put forward to 19 May, 1995, after a hold up surrounding public scrutiny of the Microsoft's representation on the Board and the announcement of that company's plans to launch *On Australia* later that year. The balance of Commonwealth funds (an additional $6–7 million) was ear-marked for expenditure in following years as 'additional seed funding', with the proviso that Open Net was fully self-funding after the 3 years (Open Net Pty Ltd, 1995a, 1995b).

The other key obligation was that Open Net was to act 'primarily as a broker of services rather than as a supplier of services in its own right', and that it should 'identify the most cost-effective third party suppliers of infrastructure and services' to continuously ensure that it obtains 'the most cost-effective access to such infrastructure and services' (Open Net Pty Ltd, 1994). Open Net was to refrain from acquiring capital equipment so 'the provision of student access to the OLESS infrastructure is to be secured to the maximum extent possible by negotiating with third party suppliers for access to their facilities' (Personal communication from Simon Crean to Julie Carr in: Open Learning Electronic Support Service, 1994a).

Evaluation and review was a Commonwealth Government obligation, but not mandatory in the first instance, so it was not implemented in 1995. In the following year when evaluation was reconsidered, and tenders were called, it was later cancelled because Open Net had 'been subject to significant changes in role and direction', and was planning to phase out carriage and was considering merger with OLA (Open Net Pty Ltd, 1996b). Other, non-compulsory requirements for the service included the provision of administrative software, educational materials and the sale of cheap hardware and software to students, all of which were not implemented due to the short lead time.

Wider government expectations of Open Net became apparent at the PM's *Science Council Meeting*, late in 1994. Notes taken from the meeting (Julian, 1994a), reveal a government with great expectations for the OLI. In partnership with OLA, Open Net was to be a catalyst for technological change in the universities. This was to build on OLA's proven experience in transforming university culture: 'Electronic systems have always been part of the OLA

vision and now with the establishment of OLESS, [these] look set to become mainstream' (Julian, 1994a, p1). The meeting articulated a prevalent government view at that time that 'distance education methodologies may become the norm in all teaching' (Julian, 1994a, p2), and that OLA would be instrumental in expanding opportunities for those students who were 'physically, geographically, culturally, or economically deprived' (Julian, 1994a, p1). Computer networking would be the transforming technology, leading to a 'single best practice solution' for Australian courseware applications in the global education environment (Open Net Pty Ltd, 1994).

Government expectations for Open Net were circulated in two important policy documents: *Networking Australia's future (Broadband Services Expert Group*, 1994a, 1994b, 1994c) and *Creative nation* (Commonwealth of Australia, 1994). These two reports epitomised the Keating Government's commitment to educational networking, the desire for the OLI to provide leadership in educational technology, and networking in particular. *Creative nation* was a policy statement which budgeted some $84 million over a four-year period for expenditure in cultural and technological activities, including: the establishment of Cooperative Multimedia Centres (CMCs); the commissioning of cultural CD-ROMs for use in Australian schools (the Australia on CD program); and specific assistance to film agencies (Commonwealth of Australia, 1994). The CMCs would receive the largest share of the budget ($56.5 million) and were to be administered by the Department of Employment, Education and Training to build on and support the technology arm of the OLI:

> The Centres will assist the education sector... and complement the Government's new Open Learning Electronic Support Service (OLESS) which is currently being developed to provide a national electronic infrastructure for the delivery of educational and training services to students in their homes, workplaces and community based facilities such as public libraries.
>
> (Commonwealth of Australia, 1994, Creative Nation, *Chapter 7: Multi-media*)

Momentum for the creation of a national network carrier for higher education was also being driven by the Broadband Services Expert Group (BSEG), a government 'think tank' composed of leading technology experts from various sectors. In July 1994, the BSEG released their interim reports

(Broadband Services Expert Group, 1994a, 1994c), and later that year, the final report, *Networking Australia's future* (Broadband Services Expert Group, 1994b). They found that convergence of technologies was at the centre of modern developments:

> Broadband services are essentially new ways of using the technological possibility so that we can communicate with each other in a number of modes (visually, aurally, textually and numerically) at the same time if we choose.
>
> (Broadband Services Expert Group, 1994c, p14)

At a meeting in Alice Springs on 4 November 1994, the Ministerial Council on Employment, Education, Training and Youth Affairs (MCEETYA) sat to consider the findings of the BSEG (Open Learning Technology Corporation, 1996). The Council agreed with the BSEG that the expansion of educational networking was an essential prerequisite for engineering the transition to an information society and identified the education community as a significant user of broadband services (Broadband Services Expert Group, 1994c). However, government policy between the states and the Federal Government was not properly coordinated. According to Minister Baldwin's later reflections on the subject, the establishment of carriage services was split between two related services: EDNA and Open Net, the former a proposal of Di Bolton, the OLTC and the States, and the latter, the initiative of Baldwin, DEET and the Federal Government (Baldwin, 1997).

Open Net shareholders brought their own perspectives. The OLTC, for example, was concerned mainly with the technical aspects of delivery. In a letter of 27 October, 1994 to the OLESS/Open Net Board (Open Learning Electronic Support Service, 1994a), Peter McNamara, Contract Services Manager for the OLTC, revealed the OLTC's key objectives. The letter stated that the OLTC envisaged a scalable service, which would expand as demand increased. The OLTC proposed a network comprising many sub-networks, with the OLTC responsible for contracting out new regional nodes, an ongoing expansion of the backbone and coordination of up to 500 LAPs Australia-wide. This type of brokerage model would provide the OLTC with a key coordinating role for:

> the most cost-effective third party suppliers of infrastructure and services, such as computer networks, community based facilities, computer equipment, soft-

> ware, training materials, user documentation... and to continuously ensure... the most cost effective access to such infrastructure and services.
>
> (Open Learning Electronic Support Service, 1994a)

In addition, the OLTC saw a role in providing students with personal computers and modems on a hire-purchase basis, through bulk purchasing from wholesalers and passing on savings to student-buyers. The OLTC acknowledged the problem of providing a uniform pricing structure for networking services. However, they felt that by offering a pricing scheme based on connection time, they could avert the higher costs involved in connecting distant learners. 'Usage related pricing for value added and enhanced services particularly in higher population density areas would to some extent always subsidise provision of basic services at more remote sites' (Open Learning Electronic Support Service, 1994a).

In contrast to the OLTC's emphasis on the technical aspects of Open Net, OLA's prime concern was with the educational usefulness of the service. OLA believed that this was the key to ongoing viability:

> The task is to create a service that has characteristics that are sufficiently attractive to both students and providers so that the OLESS will be preferred over other competing services in the marketplace... the technical matter of delivery... is in response to the educational and informational needs... the key issue at any time in the future will be whether students and staff will find the OLESS attractive, helpful and user friendly.
>
> (Open Learning Australia, 1994c, p3)

OLA's idea was to appeal, first and foremost, to existing OLA clients, rather than to the wider market, ie niche marketing rather than attempting to seize market share. 'In order to succeed in the first year, the OLESS needs to be grounded in where its clients already are' (Open Learning Australia, 1994c, p3). The proposal by the OLA was based on the findings of the OLESS evaluation, which recommended heavy investment in student and staff training, increasing student networking literacy, courseware development and especially in winning over the support of the universities through targeted marketing and promotion (Mitchell, 2002). For OLA, the foray into networked learning was more a strategic than educational objective:

> Many of the experts in the relevant technologies are sceptical of the rhetoric: some call it the *super hype way*... but you told me Mal Logan is keen on it, so how can OLA best make use of the current enthusiasm?
>
> (Julian, 1994h)

The new Board of Directors were under the impression that it was Open Net's role to overtake existing efforts by the universities to cater for the networking needs of distance education students which were at that time being serviced by campus-specific modem banks and local networks. The view that the Directors expressed was that:

> Open Net is the appropriate body to provide the physical telecommunications infrastructure for use by universities and other teaching institutions, and that it was appropriate for those institutions to provide the content of courses to be made available via the Open Net infrastructure
>
> (Open Net Pty Ltd, 1995b, p2)

Hence, they sought to lobby DEET to prevent universities from expanding their networking services, in that 'the cost of each university providing their own infrastructure would be prohibitive', and would result in duplication of effort (Open Net Pty Ltd, 1995b, p2). Ideally, Open Net would develop into a network and content accreditation body, allowing subscribers to make the final decisions over price and quality (Open Net Pty Ltd, 1995b, p2).

SETTING UP SERVICES

On his appointment the new CEO of Open Net, Ron Watts devised a business plan for the company. In December, 1994, Watts distributed a draft position statement to Board members, which was revised and presented to the Board's first meeting early in 1995. In the final document, Open Net's *Strategic Objective* was revealed: 'to be the leading supplier of value-added network services and multimedia content to private and public education in Australia' (Watts, 1995c). Nowhere in the mission statement were the activities of Open Net and OLA regarded as integrated or complimentary. Indeed, only in the *market segments and size* section, was OLA even mentioned, and then only as a relatively inconsequential example of several possible markets for the service (*Figure 7.2*).

Market Segment	Potential Subscribers
Open Learning Australia	9,000
Major open learning institutions	1,800,000
Corporate and professional training	4,000,000
Secondary and primary schools	3,000,000
Preschools and parents	14,000,000

Source: Watts (1995c, *Strategic Objective*, p4)

Figure 7.2 Open Net market segment analysis

It is worth repeating that at the outset, it was the intention that Open Net should be both a carriage and content provider. However, given the short time-frame for commencement of services, the CEO, considered that an emphasis on networking services better satisfied the mandatory contractual obligations of Open Net. This was most likely an important factor in the development of the strategic plan. The short time frame also mitigated against a tailored package of out-sourced services (Open Net Pty Ltd, 1995a). Instead, the Board felt it necessary to sign a one-year agreement with an existing service provider. This would allow Open Net to fast-track commencement of its services while adhering to the brokerage model sought by the government (Open Net Pty Ltd, 1994).

Late in 1994, prospective internet service providers (ISPs) were asked to tender bids to provide the service on Open Net's behalf. A *Request for comment to provide services for an Electronic Support Service for OLESS Pty Ltd* had been earlier developed (Open Learning Technology Corporation & Open Learning Australia, 1994). It stipulated conditions for contracting out services:

> ...clients other than OLA clients must use the service on a full user pays basis.
>
> ...the extension of the client base beyond OLA clients must not have the effect of reducing the quality or availability of services provided to OLA clients.
>
> ...the primary focus must be on education.
>
> (Open Learning Technology Corporation & Open Learning Australia, 1994)

In hindsight it seems that these conditions were not fully taken into account when contractor bidding commenced. Expressions of interest were received from Optus, Connect.com and Pacific Star. Terry Cutler (independent Board Member) was hired to represent Open Net as consultant negotiator. Each bidder was considered according to issues of revenue and cost as well as flexibility, growth and potential working relationship. On each of these counts Pacific Star appeared superior and was eventually approved by the Open Net Board (Julian, 1995b). An important issue during the negotiations was how to get networking discounts from both the ISP (Pacific Star) and the carrier (Telstra) to establish a competitive service. This was made more complicated by the fact that student access to Open Net was to be via a '13' telephone number to ensure that connection to the ISP was available for a flat fee from anywhere in Australia. Furthermore, AARNET discounts were obtainable only by generating a sufficient volume of traffic commensurate with a large client-base. Such critical mass could only be achieved by obtaining institutional support, or by using funding to subsidise services until the volume was sufficient to support carrier discounts (Johns, 1995a). This latter philosophy was adopted but would later set the company on an unsustainable financial course.

Subscriber fees were set at $6/hour ($5/hour for OLA Students) to be paid in 10 hour blocks. This was broadly consistent with the premium rates of other urban ISPs at that time. However, the flat-rate charge for dial-up access made Open Net an attractive proposition for rural subscribers, who had never previously been offered a discounted service. On the other hand, announcement of the rate generated the following response from an urban internet user in Western Australia: 'I feel that you are poorly advised if you think that $6/hour access charge for a standard modem connection is very attractive... please rethink this cost. Current internet users will think it is a joke' (cited by Julian, 1995a). As we will see in a later section of this chapter, actual costs to Open Net were around $2/hour for urban subscribers and ranged from $5/hour to $30/hour for rural subscribers. Based on these rates, it is clear that Open Net would only be profitable if there was sufficient urban take-up of the service to cross-subsidise the rural users.

The conditions of subscription were flexible. First, the subscriber had to be a 'student'. Open Net's interpretation of 'student' was quite broad, for it included those studying part-time or full-time at pre-school, primary school, high school, TAFE, university, continuing adult education, and private education institutes. It also included teaching and non-teaching staff at any of these institutions. If we refer back to Watts's own assessment of market segments (*Figure 7.2*), the potential market for subscribers to Open Net exceeded 14 million Australians, and probably included far more. This was because verification of institutional enrolment was not, nor could not legally, be checked as part of the subscription process (due to privacy legislation). As such, Open Net was genuinely 'open' to any Australian interested in subscribing to the service.

THE LAUNCH

Whilst Open Net staff worked feverishly to meet the March deadline for the launch of services, the government was busy settling public criticism over Daniel Petre's inclusion on the Open Net Board. Some journalists felt that the Keating Government was too close to Microsoft. Julie Robothan and Anne Davies of the *Sydney Morning Herald* (13 May, 1995) (cited in Communication Solutions Australia, 1995b) for example, wrote that the endorsement of *On Australia* (an internet service joint venture between Microsoft and Telstra, later superceded by *NineMSN*) indicated the Government had selected Microsoft as 'principle information highway partner'. The feature article criticised this relationship, citing an Anti-Trust investigation by the US Justice Department and Microsoft's alledged attempt to 'suffocate the burgeoning internet industry in Australia with anti-competitive policies'. The article scrutinised the inclusion of Brian Johns ('Keating cohort') and Daniel Petre ('Gates's Australian lieutenant') on the Open Net Board: 'Both appointments are controversial because of Microsoft's vested interest in CD-ROMs and in on-line networks...' (Julie Robothan & Anne Davies cited in Communication Solutions Australia, 1995b).

In a climate of rising pubic criticism, the government postponed the March launch of Open Net until May, 1995. The government hoped for a settling

of public concern and then to slip-by the watchful eye of the media. As Geoff Ebbs (1995) from *The Australian* observed of Open Net:

> Here is an organisation... that worked its collective guts out to almost make a mid-March launch date, now put on the political back burner while the Government reviews the political sensitivities it has opened up by its relationship with Microsoft through *On Australia*. There was nothing wrong with any of the government's plans – it was just that the government got a bit nervous about the fact that people began to question Microsoft and Telstra's presence on the Board, the universities began to freak about their inevitable loss of independence, the internet vendors railed against DEET's relationship with *On Australia* and *On Australia* worried about too much content being posted on the internet. It was clearly easier to wait.
>
> (Ebbs, 1995)

The official Open Net launch, on 19 May 1995, was held at the ABC Television Studios in Sydney, and included a live satellite link to Perth, where Simon Crean (Minister for Employment, Education and Training) delivered the key address, articulating the government's expectations of Open Net. The speech mirrored that of the OLESS launch, six months earlier, explaining how Open Net would be a catalyst in revolutionising Australian education by a) giving students access to information from across the globe 'regardless of where they live or the extent of their individual wealth' b) enabling workplace and LAP access, thereby forging links between education and industry c) placing the student at the centre of the education process by fundamentally altering the learning process d) and managing the transition to the 'information society' with a sense of social justice, inclusiveness and equality of access to essential social services (the idea here was that internet access is both a social service in its own right, as well as being a means by which other social services can be accessed). The minister announced the $10 million allocation of funds to Open Net, stating that student access would be based on a flat fee, regardless of where they were located in Australia (Crean, 1994c).

The speech located Open Net within the government's broader IT policy: '...Open Net will complement the initiatives arising from the government's Creative Nation statement, announced by the Prime Minister in October last year, including the co-operative multimedia centres program for

which I am responsible'. However, the minister threw a bombshell when he introduced Open Net with the announcement of an entirely new initiative–Education Network Australia (EDNA):

> [EDNA will be] ...a broader national strategy to enable Australia to adopt new information and communications services and technologies–the so-called information superhighway announced by the Prime Minister in April. EDNA will link for the first time all schools, TAFE Colleges, universities and private providers and other education and training providers across Australia as well as internationally through a services network and other technology for interactive communication.
>
> (Crean, 1994c)

The announcement of EDNA was the major statement of the minister's speech. But the conflation of the two initiatives (EDNA and Open Net) created confusion and lead to muddled reporting of the event. One report acknowledged that most of those present were confused by what they had seen and heard. Gareth Powell (cited in Open Net Pty Ltd, 1995f) wrote: 'It was one of those jolly television occasions when longish speeches are made, daftish questions are asked and the scholars are all presented with a stale bun... What astounded me was that three-quarters of the attendees had no idea what it was about'. For Watts and Pritchard, the conflation of Open Net with EDNA was viewed with apprehension. In what manner would EDNA and Open Net co-exist? Would they be partners? Would EDNA assume responsibility for Open Net at a later date? Or, would they be competitors in the same market?

A media release by Open Net accompanied the launch. Included was a statement by Brian Johns, Open Net Chairman, who declared: 'With a local call anywhere in Australia, students in schools, TAFE, universities and business can now access worldwide information sources' (Johns, 1995c, p1). The release claimed Open Net was 'Australia's first national network providing full Internet and World Wide Web access to students... Costs can be as little as $6 per hour for the service which can be accessed by a local phone call' (Communication Solutions Australia, 1995a).

Media coverage of the event was reported in all major Australian newspapers, with 8 radio features, and 5 television stories as observed by Communication

Solutions Australia (1995b; 1995c), a Sydney-based public relations company which coordinated the launch. Press responses to the launch were, however, mixed. The most enthusiastic article was from *The Computer Report*, which called the launch of Open Net 'very good and very important news... marvellous and much to be supported' (Powell, 1995). The *Business Review Weekly* ran a cover story on the growth of the internet which featured Open Net's concern with 'on-line social justice' (Plunkett, 1995). The *Herald Sun* remarked that it was 'a radical new computer service' (Freeman cited by Communication Solutions Australia, 1995b), while, *The Age* proclaimed it as 'eagerly awaited' (Communication Solutions Australia, 1995b).

On the other hand, *The Liverpool Leader* (Kimpton cited by Communication Solutions Australia, 1995b), noted that the launch attracted 'surprisingly little public fanfare'. *The Australian Higher Education Supplement*, explored the problem of state cooperation in implementing EDNA (Richardson cited by Communication Solutions Australia, 1995b). *Computer Daily News* (Kennedy cited by Communication Solutions Australia, 1995b) presented the hype of the launch with a touch of scepticism, posing doubts about the inclusion of Microsoft Director Daniel Petre on the Open Net Board. *PC Week* (Liddle cited by Communication Solutions Australia, 1995b) picked up on Simon Crean's poor understanding of the World Wide Web when fielding questions at the launch, but pointed out, in a tongue-in-cheek manner, 'he certainly knew how it [the internet] could be harnessed'. Ebbs (1995), of *The Australian* warned that EDNA could evolve into 'a national mess', destined to be slow in development and driven by political motivations. He wrote: 'the lunatics are now in full control of the asylum and anything could happen'. *The West Australian* focussed on the revolutionising potential Open Net could have on education, but warned of the 'commercial pitfalls facing it' based on comments from Roger Aitkinson (cited in Huston, 1995). Dr Aitkinson, a distance educator from Murdoch University, had debated the merits of the service on national radio, suggesting Open Net's interventionist practices might contravene the Telecommunications Act (which seeks to protect the free market in the Telecommunications Industry). With much foresight, he also argued that Open Net was destined to be 'non-competitive in the internet access markets in the capital and major regional

centres... thus the question is about commercial viability' (Aitkinson cited in Watts, 1995d). The Open Net Board noted however, that the radio interview had the opposite effect and 'generated a great deal of interest in Open Net and many inquiries' (Open Net Pty Ltd, 1995b).

COMPETING INTERESTS ON THE BOARD

Following the controversial launch of its services, Open Net was soon plunged into a state of crisis. First, there was the threat of competition from EDNA announced in Minister Crean's speech at the launch of Open Net. Subsequently, there was a series of financial, political and personal crises. To make matters worse, members of the Open Net Board were rarely able to agree on strategy, resulting in a number of heated clashes.

One such conflict surrounded the OLTC's involvement on the Open Net Board, while it was actively lobbying for the right to manage EDNA. This placed the OLTC in competition with Open Net for the supply of networking connectivity. As we have seen, educational networking technology had captivated Commonwealth national policy objectives. By April, 1995, a key part of this 'big picture' approach centred on EDNA, announced by Minister Crean. EDNA was to be '...a single space within cyberspace where all products and services of relevance to Australian education can be easily accessed' (Crean, 1995a). EDNA was later given a mandate to put all schools, TAFE institutions and universities on the 'information superhighway'. Open Net, on the other hand, was to be the 'first step in achieving this national network' (Crean, 1995b). This had major repercussions for Open Net's strategic plan. There appeared to be a government preference for developing network services (carriage) rather than educational materials (content) (Pritchard, 1995a). Meanwhile, other government departments were attempting to disengage themselves from carriage. In June 1995, after many months of discussions with Telstra, the AVCC adopted the government's recommendation to *exit* the infrastructure and connectivity market with the sale of AARNET (Australian Academic and Research Network) to Telstra (Cowie, 2000). It is perhaps ironic, that at the same time, the government was attempting to *enter* and intervene in the same market with the rollout of Open Net and EDNA.

Furthermore, with the proposed relationship between EDNA and Open Net still unresolved, it appeared that EDNA was emerging as a direct competitor both in the roles of content and carriage. The fact that the OLTC was appointed as the governing body of EDNA complicated this situation further. For, not only did the OLTC have close connections with State and Federal Government bureaucrats and politicians, it also was represented on the Open Net Board, and had access to Open Net's commercial secrets. If Open Net and EDNA were to be competitors in the educational networking market place, the issues of governance, directorship and the respective roles of the two organisations needed clarification (Carr, 1995b).

Nevertheless, it soon became clear that the Commonwealth had no consistent plan for the relationship between EDNA and Open Net. A series of government statements showed a continually changing perception of their respective roles. For example, Minister Crean's (1995a) 6 April announcement indicated EDNA would be a clearinghouse for educational content. Brian Johns (Open Net Chair) was subsequently advised that Open Net should concentrate its efforts on carriage provision (Johns, 1995b). By 24 April, a statement was released declaring EDNA's proposed educational networking role, in direct contradiction of the earlier announcement. By late July, the Commonwealth had begun to conceive of a relationship between Open Net and EDNA. Watts and Cutler had separate meetings with DEET executive bureaucrats (Wayne Gibbons and Ian Creagh, respectively) who were of the view that EDNA would take on the overarching role of network service provider, while Open Net would be 'pushed out of carriage and more into content' (Watts, 1995f).

Julie Carr confirmed this stance in a briefing to the Open Net Board (26 July, 1995), referring to a recent meeting between DEET and OLTC representatives. It appeared that the future role for Open Net was to move out of carriage and into content, allowing EDNA to become the primary national education network. This suggested complementary roles for the two organisations: EDNA would command carriage while Open Net would gradually phase out its ISP role, and have primary responsibility for educational content (Carr, 1995a). Watts wrote to DEET requesting clarification of this position, particularly the implications these developments might have on

the future structure of Open Net and seeking clarification whether the OLTC would be represented on the Open Net Board. In reply, Derek Volker (DEET Secretary) referred to a nationally-composed State Government education ministers meeting held on 26 May, where it was agreed that:

> ...the OLTC should take on the role of governing body of EDNA. As such it is to be responsible for 'encouraging the development of product and services' for delivery on EDNA, as well as setting guidelines... It is clear that the OLTC's role as the governing body of EDNA is incompatible with a continued shareholding in an organisation involved in content production such as Open Net... I would expect that the minister will agree that the OLTC should divest of its Open Net shareholding.
>
> (Volker, 1995)

With changing government perceptions of the respective roles of the OLTC and EDNA, Watts was unsure how to proceed. By October, 1995, a further development found that EDNA had resolved not to offer network connection services, but reverted to its original position of being a national clearing house for educational activities.

With regard to the OLTC's representation on the Open Net Board, Julie Carr felt there was no conflict of interest because, 'EDNA was not involved in content production at all, but would be managing the framework for how that content would be received' (Carr, 1995b). However, this was questioned by Mr Johns at a Board meeting who maintained the importance of the OLTC divesting itself of its Open Net shares and of the need to develop a plan for 'filling the gap' once this occurred (Open Net Pty Ltd, 1995d). He then went on to lead a discussion on how best Open Net could move into content development, and phase out its carriage role. The CEO's report, in contrast, pointed out the success of Open Net in regard to its carriage operations, and in particular, being nominated for 'preferred' internet service provider by the Law Foundation of NSW.

The Microsoft representative, Daniel Petre, brought a longer-term view to the Board's discussions. He was well informed of developments at Microsoft and Telstra, regarding their intention to begin *On Australia*, an internet service, based on the *On America* model, to be built into the Windows 95 platform. At the 5 April, 1995 Board Meeting (Open Net Pty Ltd, 1995c),

Petre spoke of the likely impact *On Australia* would have on Open Net's future operations. He advised that the Microsoft Network (MSN) would offer highly resourced services to its subscribers at low cost, and that intended to offer education services:

> Mr Petre expressed the view that Open Net needs to think in terms of both long term and short term goals. As a network service provider, its role may become obsolete in 1–2 years which meant Open Net must have other goals if it was to remain relevant.
>
> (Open Net Pty Ltd, 1995c)

In response, the Directors discussed the prospect of refocussing Open Net's business plan away from networking services. Various alternative strategies were discussed: Open Net could become, primarily, an electronic publishing service, to hedge against encroachment both by MSN and EDNA (Carr), it could extend its networking capacity by providing training, consultancy, management facilitation, professional development and content for educational institutions (Spearritt); Open Net could provide follow-up information to OLA television programs and receive advertising on the end credits (Pritchard). However, the Chair, in support of Open Net's CEO, reminded the Board that Open Net had a charter from the government to remain a network provider (Open Net Pty Ltd, 1995c).

The OLA board representatives were also compromised by a conflict of interest, although, the core activities of OLA were generally complementary rather than competitive with Open Net. The OLA representatives (Pritchard and Spearritt) were consistent in their attempts to push Open Net towards providing educational content. They had a vested interest in developing a partnership with Open Net to service their own students and develop expertise in an area of high government concern. As we have seen, Open Net's continued emphasis on carriage proved counter-productive to these designs. OLA students were considered an insignificant part of the overall market. Moreover, the preference Open Net had exhibited for connectivity over educational content had substantially reduced OLA's influence on the Board.

Nevertheless, OLA believed its desire to forge a strong working relationship with Open Net was justified from a number of standpoints. First, the two organisations had shared objectives. Both were considered joint partners of the Commonwealth's OLI. The government had made it clear that the intent of the OLI was for OLA and Open Net to work together in a collaborative fashion, which was a key reason OLA had shareholding in the company and had representation on the Board. Open Net was given a responsibility 'to provide electronic support services to OLA students' and to provide 'educational opportunities'. Furthermore, along with the OLTC, OLA had bid for and won the right to administer the OLESS project, of which Open Net was an heir. OLA wanted to cement an ongoing collaborative relationship with Open Net, not only to share in establishment of the 'information superhighway', but also to make Open Net more responsive to the educational needs of their students. To assist this process, Prof. Peter Spearritt (as OLA representative on the Board) tabled a discussion paper at the Open Net Board. The paper attempted to focus the activities of Open Net more directly on the needs of students and academics. He made the point that 'while there is a world of information on the net, very little of it is of any educational value' (Spearritt, 1995). The key recommendation of the paper was that there should be less emphasis on carriage issues and more on developing Open Net's potential as a credentialed content provider, offering useful educational databases, and reliable course materials (Spearritt, 1995).

OLA made repeated attempts at drawing Open Net into a collaborative relationship. There were, for example, attempts to engage in 'cross-branding'. OLA regularly promoted Open Net in many of its publications and mail-outs in the early part of 1995. In contrast, Open Net did not actively pursue a 'cross branding' strategy. When Watts was interviewed and asked to define Open Learning, he did not mention OLA at all (Internet Australasia, 1995). Open Net media releases and other publications did not acknowledge a relationship with OLA, usually referencing *open learning* in lower case, implying a much broader concept of the term than that used by OLA. These problems were of continuing annoyance to OLA, and persisted despite Pritchard's approaches to Watts and to the Chair (Pritchard, 1995b; Watts, 1995e). In 1995, some of Open Net's services were out-sourced and offered for tender.

The pattern of non-collaboration continued, when Open Net turned down OLA applications for the 'Help Desk and LAP Management' contracts. Another important issue was that of payment to OLA and the OLTC for expenses incurred during the OLESS Pilots. Open Net declined to honour these, despite regular reissue of invoices over an 18-month period (Pritchard, 1995b). Eventually, in an effort to initiate a shift towards content, OLA proposed the appointment of a Multimedia Manager, to facilitate courseware development jointly by both companies. In October 1995, Mr Clark Quinn was appointed to this position. Watts insisted he was to be located at Open Net's Sydney offices, although jointly funded by Open Net and OLA (Pritchard, 1995b; Watts, 1995g). When Open Net eventually began developing courseware in 1996, Open Net did not consider developing any course offered through OLA, instead preferring to work with an alternative institution, Queensland Open Learning Institute of TAFE (Pritchard, 1996e).

Open Net and OLA were unsuccessful at forging a collaborative relationship, and generating a sense of shared purpose. The two organisations failed to build a coherent approach to the wider Initiative, were located in different capital cities, and had poor and infrequent channels of communication. Archival evidence suggests that Watts did not trust OLA motives (Watts, 1995f, 1996e, 1996f). He suspected OLA's insistence on collaboration was a thinly masked strategy for takeover. Moreover, with various conflicting interests represented at the Board, he felt justified in directing Open Net according to his own convictions. After all, the government had appointed him to develop Open Net's networking capacity.

Throughout 1995, Open Net was being pulled in several directions by its Board of Directors, by government pressure and by the rapidly changing internet environment. But there *was* a path of least resistance. This was for Open Net to shift away from carriage operations. Moreover, each member of the Board had a vested interest in Open Net divesting itself of carriage. Petre might have seen Open Net as a competitor to Microsoft's future plans for *On Australia* and there had been Board-level discussions of Open Net offering its services through the Microsoft Network (MSN). Pritchard and Spearritt, representing OLA, felt that Open Net could be better integrated within the OLI. Current carriage operations, which were targeted primarily

at non-OLA students, would draw Open Net further away from OLA operations, and would likely result in a competitive relationship between the two organisations. Carr, of the OLTC, would soon be managing an alternative educational network, EDNA, much larger in concept than Open Net, which might either absorb Open Net's operations (should Open Net be unsuccessful), or to compete with Open Net (should Open Net establish its carriage operations).

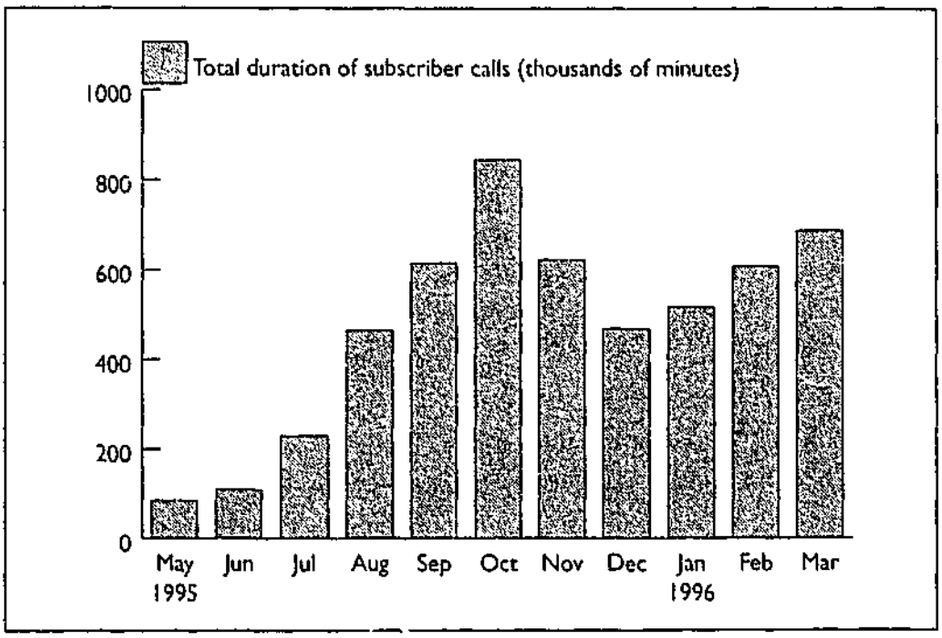
The complexity of Open Net's relationship with its Board is laid bare in a report by John Julian to the OLA Board:

> The dynamics of Open Net as part of EDNA run by the OLTC while being part of On Australia are mind stretching. The government will have a real problem with this. It may be that despite the obvious attempt by Di Bolton and Julie [Carr] to outflank Open Net, it might all be too hard. I can't see DEET coping with all this. The evidence of non-performance can only be ignored for a while in this kind of dynamic environment. I predict a 'restructure' of Open Net and an attempt to establish EDNA that will flounder in a political mess.
>
> (Julian, 1995e)

SUBSCRIBER BACKLASH

Open Net went online in March and started subscriber services on May 19, following the launch. *Figure 7.3* shows the overall pattern of consumer usage of Open Net. It traces monthly call volume from May 1995 to March 1996, based on Telecom statistics. The table records the rapid expansion of customer usage until the end of October 1995, then a rapid falling off in the months of November and December, before a regeneration of a slower growth pattern from January 1996 (Watts, 1995b).

AARNET statistics (Open Net Pty Ltd, 1995e) for the month of July 1995 show that median usage was 4.5 Mbytes / 15 minutes. The bulk of this usage was between 7:30 PM and 11:00 PM and there was a slight preference for usage during weekdays. Turning to *Figure 7.4*, it can seen that the most common calling locality in August 1995 was Sydney, totalling 3696.8 hours. The next biggest locality was Brisbane, with 1334.3 hours. These figures include '13' regional calls routed through to capital centres at state STD rates.



Adapted from Watts (1995b)

Figure 7.3 Telecom monthly trending by call duration

There are no exact figures for the number of subscribers to Open Net. This was because they paid in 10-hour blocks of time, which they used as they saw fit. Some subscribers were sporadic, while others were heavy in their use. When subscribers allowed their subscriptions to lapse, they were not immediately removed from the subscriber database, pending a renewal payment. Hence, there was some inflation in the number of subscribers taken from the database, and a realistic approximation can only be derived, based on Watts's estimate calculation (Watts, 1996a). This reveals that in October 1995 there were approximately 5,000 subscribers to Open Net, falling to 3,600 in February 1996, and rising again to about 4,800 subscribers by the end of March 1996.

Figure 7.4 shows the predicament with Open Net's customer fee structure. The average cost per hour was $9.24, proportionately made up of 2288.4 hours of local calls (32.0%) and 4857.5 hours of long Distance Calls (68.0%). Fully two-thirds of calls made to Open Net were from rural subscribers. These were often calls from remote locations around Australia at high STD rates. On the other hand, urban subscribers represented only one-third of the subscriber-base. With subscriber fees set at a fixed $6/hour ($5/hour for

Answering point	Duration (hours)	Cost ($)	Percent of total duration
Adelaide	460.5	5182.75	6.4%
Brisbane	1334.3	13605.93	18.6%
Canberra	25.7	0.48	0.3%
Melbourne	782.4	9263.41	10.9%
Perth	845.9	10677.96	11.8%
Sydney	3696.8	27302.66	51.7%
Total	7145.9	66033.19	100.0%
Average cost per hour	–	9.24	–
Local calls	2288.4		32.0%
Long Distance Calls	4857.5		68.0%

Source: Watts (1995a)

Figure 7.4 Summary of calls by answering point during August 1995

OLA Students), Open Net was running at an average hourly loss of $4.24 per subscriber (Watts, 1995a).

Faced with significant and ongoing losses, Open Net CEO, Ron Watts set about a review of the subscriber fee structure. The original flat rate of $6.00 per hour was failing to attract new subscribers from urban areas demographically proportionate to Australia's population. The relatively more numerous rural users were overwhelming metropolitan subscribers. Hence, the anticipated urban to rural cross-subsidy of connection costs did not materialise. In some respects, the disproportionate uptake of the service by rural users was caused by Open Net's failure to correctly read the internet subscriber market. Although $6 per hour was at that time an attractive price for many country users, it was clearly uncompetitive in the major cities, where competition amongst ISPs was starting to drive prices down. There were budget-priced ISPs offering monthly access rates, with attractive conditions regarding download volumes and access times. Iinet, an ISP based in Perth, for example, was charging $1 per hour at that time with an additional fee of 1 cent per megabyte. Universities, themselves, had begun offering free connections to their students, with relatively unrestricted services over PPP and Slip lines. Open Net's rates were therefore more attractive to rural customers who were using Open Net's toll free access to ameliorate their isolation.

The high proportion of rural subscribers was explained by Watts in a letter to the Open Net Board, 'News (of the service) spread quickly through the bush... [especially] in areas where such services had not previously been available' (Watts, 1995i). It is worth repeating that the actual cost to Open Net ranged up to $30 per hour, but subscribers were only being charged $5 per hour. Hence, the small base of metropolitan users was insufficient to recover costs from the high proportion of rural subscribers.

In mid-October 1995, Ron Watts recommended new subscriber rates to the Open Net Board. Tariffs were set at $4 per hour for the major urban areas, and $9 per hour for all other (mainly rural) subscribers (Watts, 1995h). The change in tariffs was effective immediately, and was announced to customers by mail and email.

Subscriber complaints about the change in tariff policy were recorded in Open Net's *Complaints File* (Open Net Pty Ltd, 1996d). The file contained some 44 letters and printed email messages, 18 (41%) of which protested about this issue (*Figure 7.5*). One student wrote:

> It was my understanding that Open Net was set up for students outside the metropolitan area... now I am being informed that is not the case... unless this matter is rectified at once I for one will be making a hell of a stink about it. I will be contacting every person I am able to, that will bring pressure on management of Open Net to have this outrageous situation turned around... at $9/hour Open Net has become one of the most expensive servers in Australia.
>
> (Open Net Pty Ltd, 1996d)

Other rural subscriber was just as forceful:

> ...you increased charges by 50%... What sort of idiots do you take us for? You have destroyed the faith that isolated net users have placed in your organisation. You are beneath contempt. I fart in your general direction
>
> (Open Net Pty Ltd, 1996d)

Letters were also received by OLA. One such letter from a remote and disabled OLA student resulted in Rachel Heinrichs (OLA's Equity and Access Officer) commenting that the tariff inequity was one 'which may lead to discrimination against three of the DEET targeted equity groups: low socio-economic status, rural and isolated, as well as, in this case, a student with severe disabilities' (Heinrichs, 1995).

Category of complaint	Letters Received (Number)	Letters Received (%)
New tariffs	18	41
Termination of carriage	4	9
Help line	2	5
Credit Card only payments	12	27
Slowness of service	7	16
Technical problems	2	5
Other	6	14
Total received	44	

Note: Tally does not equal total due to some items being included in more than one category

Source: Calculated from Open Net Pty Ltd (Open Net Pty Ltd, 1996d), *Complaints file*

Figure 7.5 Letters of complaint addressed to Open Net: May 1995–December 1996

Late in 1995, the National Open and Distance Education Student Network (NODES NET) championed this issue. Writing to Simon Crean, they sought to lobby the Federal Government to reverse Open Net's new tariff policy:

> ...NODES NET is very concerned about the recent increases in charges for students subscribing to Open Net... when Open Net was established, it was equitable for all students to access the internet... but with the increases in prices, it is discriminating against those students who do not live in a metropolitan area. It is also interesting to note that Hobart and Darwin are not considered to be metropolitan areas... In the speech you gave at the launch of Open Net, you said '...Students accessing Open Net will pay the same price no matter where they are located in Australia', and you concluded by saying '...I will maintain a close interest in its future progress in the coming years'.
>
> (Open Net Pty Ltd, 1996d)

Rural subscribers quickly discovered the power of email as a tool to lobby the government. They located ministerial email addresses and organised mass-letter strikes. Through its bulletin boards, Open Net had created a ready-made lobby group, armed with email, for which political action could be easily organised and actioned. On the run up to the 1996 Federal election, the new tariffs had become 'political dynamite' as expressed by an officer of the Department of Primary Industries and Energy:

> Minister Crean and Minister Collins are getting large quantities of very hostile correspondence on the subject... We are desperately trying to hold down some of our client groups who want to launch a press campaign against Collins for 'kicking the rural areas in the guts'.
>
> (Crellin, 1995)

Faced with public backlash, the government set out to reverse Open Net's new tariffs. Late in November 1995, Simon Crean wrote to Watts and Johns, expressing his concern and asking Open Net to adopt a reverse-course. In his reply on 13 December, Dr Watts agreed to comply with the minister's request for the reinstatement of a flat rate service fee for post-secondary student subscribers. However, he stipulated that the discounted rate would only apply to those who could provide written proof of their enrolment (Watts, 1995j). Thus, Open Net proposed continuation of the new tariffs with 'discounts' available only to legitimate student-subscribers. As already noted, Open Net's definition of 'student' was loosely interpreted, and it was not legally possible for Open Net to verify a subscriber's student status by investigating DEET records. Under this proposed arrangement, however, Watts was confident that many existing subscribers would simply not apply for the discounted rate, allowing Open Net to operate profitably. Minister Crean accepted the proposal for a revised flat rate tariff structure in which authenticated post-secondary student users would pay a flat $5 per hour regardless of location, while other users would pay $4 and $9 for metropolitan and rural areas respectively (Crean, 1995c). However, the letter reaffirmed an insistence on a 'national flat tariff for student users'. The minister wanted the flat rate publicised as the standard tariff, rather than as a discount.

EXIT FROM CARRIAGE

Network usage had again entered a growth pattern by December 1995 (*Figure 7.3*). Once again, Open Net was faced with the escalating problem of containing losses while meeting government operating requirements. In January, it became apparent that the proposal of student authentication was not slowing down network usage, and was not achieving the goal of quarantining illegitimate users from discounted rates. Open Net was not profitable. The Board therefore decided to petition the Commonwealth for

an additional $370,000 to meet the short-term costs of administering a national flat tariff. The government however, rejected this, forcing Open Net to meet its operational losses from within its existing budget (Crean, 1995c). Open Net was in the untenable situation of being unable to make prudent business decisions.

The unstoppable decline of Open Net's carriage operations was realised by Watts in his *Chief Executive's Report* (Watts, 1996a) in February 1996. Watts was already keenly aware of board-level pressures for Open Net to shift its emphasis from carriage to content. Now, with an anxious minister and the impossibility of developing a viable business plan to achieve profitability, there seemed few options available. Indeed, the only suitable course of action appeared for Open Net to cease its carriage role:

> Given the minister's merger directive, the attitude of DEET, the emergence of EDNA, and constraints on Open Net's marketing, it is imperative that the Board decides on a strategy to exit from direct involvement in carriage.
>
> (Watts, 1996c)

At the 23 February Open Net Board Meeting an unanimous decision was reached for Open Net to exit from carriage. The date for this to occur was eventually set for 26 July 1996, coinciding with the termination of the contract with Pacific Star (Open Net Pty Ltd, 1996a). During the intervening period, carriage services were gradually dismantled. The key concerns were how to limit the number of new subscribers, while finding an alternative ISP to takeover Open Net's existing client base. Selected ISPs were later contacted, including *On Australia*, *Access One*, *Connect.com*, *Pacific Star* and *Austel Services* as potential buyers (Cutler, 1996b).

* * *

The future of Open Net remained an unresolved issue, due in part to an approaching Federal election and unwanted controversey surrounding the cessation of carriage. In its place, the Commonwealth promoted EDNA, now to assume both content and carriage functions. So, what remaining role could Open Net hope to fulfil?

The answer to this question involves revisiting Open Net's earlier position as an arm of the OLI, conceived to provide electronic services to OLA students (OLESS). The change in policy which saw the government favour Open Net developing a more general carriage role occurred sometime in late 1994. This change suggests competing aspirations for Open Net within the government bureaucracy. Indeed evidence suggests at least two factions within DEET were pulling Open Net in different directions. On one side were those committed to developing the OLI as a major educational initiative, while on the other side, there were those committed to developing a national student network, of which the OLTC and EDNA were representative instances. Open Net was caught in the middle, represented on its Board in each instance by OLA on one side and the OLTC on the other. A third interest group also had sway in Open Net's fortunes. This was the powerful BSEG (Broadband Services Experts Group), which in 1994 had become the key government advisory group on issues relating to the 'information superhighway'. Brian Johns was the chair of the BSEG and also Chair of Open Net. The BSEG had as its charter the rollout of network infrastructure, paying particular attention to issues of equity and justice. 'On-ramps' and 'buses' were metaphors commonly used at the time regarding these issues. Open Net may have been a vehicle for simultaneously meeting the concerns of each of these three interest groups.

However, with the failure of Open Net to successfully deliver on its carriage role, and with the imminent arrival of EDNA to champion the interests of the OLTC and the BSEG, it would seem that Open Net's continued relevance lay in a return to its OLI origins. In the final months of 1995, the Commonwealth mapped out such a plan. Open Net's destiny now lay in a merger with OLA. This plan was developed and revealed in correspondence between the government and the other concerned parties. On 30 November 1995 a letter was sent to Mal Logan (Chairman of the OLA Board of Directors and Vice-Chancellor of Monash) by David Phillips (DEET, Higher Education Division). The letter indicates a measure of OLA persuasion in the new government policy:

> I am writing to inform you of Mr Crean's decision to approve a merger of the Open Learning Agency of Australia [OLA] and Open Net Pty Ltd... a merger

> of the two organisations has been raised by the management of OLA... given the increasing convergence of the content and related service roles of OLA and Open Net, and the development of Education Network Australia... The proposed merger does not mean that Open Net will be taken over by OLA. The merger will require a restructure of OLA and of Open Net.
>
> (Phillips, 1995)

Policy had retreated someway towards the original mandate of the OLESS project. The focus would once again be to service OLA students, rather than an expanded service targeting the whole post-secondary student market (Lucas, 1996). The government's media release of 19 December 1995, announced that the merger would not be a takeover and that it should be completed early in 1996. In a later document, *Proposed OLA-Open Net merger* (Creagh, 1996b), the government indicated its principal motivations behind the merger decision lay in the poor relations between the two arms of the OLI, and in particular, the manner in which Open Net seemed to be working at odds with other initiatives (Open Learning and EDNA):

> The Commonwealth's view is that the new company should be guided by the original objectives of the Open Learning Initiative, namely to increase flexibility and innovation in the provision of quality tertiary education... to widen and facilitate access to tertiary education... and to seek to coordinate its activities with those of other Commonwealth initiatives (for example EDNA) and to desist from undertaking activities which conflict with or duplicate such initiatives.
>
> (Creagh, 1996b)

The key features of the merger were revealed in a sequence of government statements, letters and reports. First, the merger would require the OLTC to transfer its share in Open Net to OLA. This would allow the OLTC to concentrate principally on managing of EDNA. It would also formally separate Open Net from carriage and bring it more directly into the folds of the OLI. Formal agreement from all parties occurred on 15 April, 1996, when OLA accepted the OLTC's share in Open Net (Pritchard, 1996f).

Second, the merger of the two organisations would be implemented as part of OLA's own restructuring. Monash University had agreed to dilute its shareholding in OLA, and to offer its own shares at a nominal cost to other universities. Minister Crean had also decided that Mal Logan, with

his forthcoming retirement from his position as Vice-Chancellor of Monash University, would then serve as independent Chair of the new OLA (Logan, 1996). Thus, the government had the opportunity of forming a new organisation which both merged OLA and Open Net and also included additional shareholders to make OLA more representative of higher education as a whole (Cutler, 1996a).

Third, there was a reconceptualisation of OLI objectives:

> The strategic environment within which the Initiative [OLI] is operating has changed significantly since it was originally conceived. Most notably, it has become more widely understood that the convergence of information and communications technologies has important implications for access to and the availability of information resources, for the way in which education providers organise and administer their operations and for the way in which tertiary education is accessed by their clients...
>
> (Creagh, 1996b)

Fourth, the proposal suggested a new mix of educational media to be used within Open Learning:

> The Commonwealth wishes the new merged organisation to act as a trailblazer for the tertiary system at large in demonstrating how the challenges of the emerging tertiary education market can be met... The Commonwealth expects that a decreasing proportion of the new organisation's investment in developmental activities will be devoted to broadcast television and an increasing proportion will be directed to online products and services
>
> (Creagh, 1996b)

Fifth, the government recommended a removal of focus from network access provision, and in its place, an extension of existing OLA activities into the online environment, something more akin to what was attempted in the OLESS pilots. Some of the proposed online activities included web-based library resources, subject-specific documentation, tutorial support, information for prospective students, academic support services and online staff development. In the new merged organisation, with its wider shareholding, there was an expectation that OLA and Open Net would collaborate in the performance of these services (Creagh, 1996c).

THE SLIDE INTO CHAOS

In 1996, an article appearing in the *Campus Review* suggested the OLI 'slid from confusion into chaos' (Donaghy, 1996). This observation was born out by three developments: policy inaction due to a change of government, an attempt by Open Net staff to steer the company towards an independent future of courseware delivery, and a deteriorating rift between Open Net and OLA. These developments directly led to a stalemate on the Open Net Board, which in turn, resulted in the dramatic resignation of all three independent Directors amidst much media confusion and speculation.

The dispute between OLA and Open Net which had began early in 1995 intensified during the following year. The dispute peaked in February 1996 however, when strained relations between OLA and Open Net management were dramatically unveiled during the 'credit card payments' episode. The dispute started when Pritchard received a phone call from a 'disgruntled student' who was angry that Open Net was no longer accepting subscriber payments by cheque (Pritchard, 1996c). Pritchard found out that Open Net staff were directing complaints regarding this policy to members of the Open Net Board. Students were told that the Board was responsible for this decision and that they should raise their concerns with them (Pritchard, 1996d). *Figure 6.5* indicates that 27% of student complaints concerned this issue. Pritchard was annoyed that the Board's name had been used to divert attention away from decisions which were supposedly not ratified by the Board (Pritchard, 1996a; Watts, 1996d). The 'credit card payments' episode resulted in a degree of friction on the Open Net Board, which required the careful intervention of the Chair, Mr Cutler (Pritchard, 1996e, 1996b).

As argued earlier, Open Net's broad objectives early in 1995 were to provide educational services to the post-secondary sector. This began with provision of network access, but there were plans for Open Net to enter the courseware market as early as February 1995. Despite pleas by OLA for Open Net to offer Open Learning units online, this option was not seriously considered. By 2 February, 1995, John Julian (OLA) uncovered Open Net's plan to deliver courses in competition with OLA during a meeting with an Open Net staff member. Notes from this meeting reveal Open Net being

'very tight lipped when asked if Open Net will compete directly with OLA as a distance education provider' (Julian, 1995c). More substantial evidence surfaced in March 1995 when Open Net declared it would deliver courses independently of OLA (Julian, 1995d). This action signalled to OLA that Open Net planned to become an educational broker, and offer courses in competition with OLA offerings.

Open Net vigorously sought an educational institution suitable for a collaborative project to develop and deliver educational courseware. Without carriage as its main role, Ron Watts believed Open Net had to rapidly establish its credentials as a 'content broker'. In a report to the Board, Watts (1996b) listed some of the partnerships that Open Net was exploring: the British National Health Service, CSIRO, Tourism Training Australia, Harrow Multimedia, and Computer Way, each of which had expressed interest in developing online courseware with Open Net. However, Watts noted the various problems in developing partnerships. There were financial pressures in the university sector, shifts in strategy by partners, the problem of developing commercial software, and 'the lack of coordination between government efforts' (Watts, 1996b).

Nevertheless, Watts was successful in negotiating with the Queensland Open Learning Institute of TAFE to develop online course materials (at a cost to Open Net of $480,000) for their *Advanced Diploma of Business Management*. Furthermore, Open Net won a government tender to deliver electronic support for the government's indigenous education program (Watts, 1996j). The former of these two actions incensed Mr Pritchard. He argued that the Business Management course would directly compete with OLA's existing management program through the Barton College of TAFE. In later correspondence, Pritchard reminded Watts that the government's expected role of Open Net was 'to avoid unnecessary duplication of infrastructure which has already been established, often with Commonwealth funding'. The letter concluded with '...it is of concern to us that [Open Net] may be replicating OLA product unnecessarily when a co-operative approach may have resulted in more effective use of Commonwealth funds' (Pritchard, 1996g). For Pritchard, Open Net's plans were a direct and competitive threat to OLA's brokerage position. Watts however, remained resolute that the

Business Studies course was not in competition with that offered by OLA to the extent that the Open Net course would address an internet-based market. He went on to suggest that the two organisations '...are differently constituted and have divergent objectives... if cooperation is out of the question we should become healthy competitors'. Regarding the contract between Open Net and the Commonwealth, Watts was resolute: 'I believe you misread these clauses in the contract: they refer to Open Net's former role as ISP, and the network infrastructure necessary for this role' (Watts, 1996e).

On 5 July, 1996, Creagh (DEETYA) wrote to Pritchard asking for his views on Open Net's proposal to run with courses independently of OLA. He expressed concern that the terms of the agreement between Open Net and the Commonwealth 'were always premised on OLA and Open Net working cooperatively' (Creagh, 1996a). Pritchard's reply expressed his concern that Barton College of TAFE (an OLA provider) had not been approached or been given the opportunity to bid by Open Net and that according to an established pattern of trust, once a provider had successfully tendered for a course through OLA, their offering could not be duplicated by any other provider (Pritchard, 1996i). With tensions high between Open Net and OLA, the government attempted to broker a settlement. On 4 August 1996, David Phillips (DEETYA) advised that the Commonwealth had approved Open Net's proposal to develop online course materials for the Advanced Diploma of Business Management, provided they were made available to institutions offering studies through OLA (Phillips, 1996a). Furthermore, approval of expenditure of this magnitude also required authority from the Open Net Board of Directors, of which OLA had two representatives.

In August, 1996, in the run up to a Board of Directors Meeting, the dispute outlined above reached a peak when it became apparent that the OLA representatives on the Open Net Board would block Watts's plans for the $480,000 expenditure on the Business Management course. Watts argued that the OLA representatives had a conflict of interest and should therefore abstain from voting. He decided that relevant documents should be withheld from OLA (Watts, 1996f). This was initially supported by the Chair, Terry Cutler (1996d). However, legal advice revealed that the circulation of

documents to shareholders and Board members could not thus be restricted. On the 29 August 1996, Cutler circulated a memo advising that the issue had become 'redundant' following discussions amongst Board members (Cutler, 1996f) and that an alternative plan had been developed by the Board to force government intervention in this awkward situation.

The Board had become an ineffectual mechanism for dealing with the challenges facing Open Net. The OLTC retained an interest in Open Net as a shareholder despite its conflict of interest as the coordinator of EDNA. OLA also had a conflict of interest in that Open Net's decision to compete with OLA in courseware meant that it could not support voting on this issue. In frustration, Brian Johns had earlier resigned as Chair of Open Net, but had been persuaded by Minister Crean to stay on as an independent Director. Terry Cutler had taken his place as the Chair (Johns, 1996). However, the biggest problem was that a federal election had intervened in the proposed restructuring of the OLI. Whereas the former Labor government had recommended a merger of the two organisations, the Coalition government, fresh in office, felt it was not in a position to advance this process. Instead, despite efforts by the Board to force a decision, the government remained silent.

Watts had lobbied the government to support a sale of the OLTC share in Open Net to a consortium made up of Starlet CMC, IDP Education Australia and PAGE. On the other hand, Pritchard wrote to Senator Vanstone, the new Minister of Education, advising her that it was the previous minister's intension 'that a merger of the two companies (OLA and Open Net) should occur' (Pritchard, 1996h). Pritchard also wrote to John Nation (adviser to Minister Vanstone) concerned that the transfer of OLTC's share in Open Net may be awarded to an organisation other than OLA, such as that proposed by Watts (Pritchard, 1996j). However, despite these pleas, the government took no action and replies to their letters were not forthcoming. Terry Cutler remarked that the merger and the decision over shareholding was being delayed due to 'the settling in of the new government' and the difficulty of scheduling a meeting with the minister (Cutler, 1996c).

At the Open Net Board Meeting held 13 September 1996, members were unable to approve expenditure of $480,000 for the courseware development due to a clear conflict of interest for OLA representatives sitting on the Board. 'On the other hand, the Board felt unable to delegate a decision on expenditure of this magnitude to a Board subcommittee which excluded OLA nominees' (Open Net Pty Ltd, *1996c*). Cutler wrote to Vanstone informing her of this untenable situation, and strongly requested her to decide on the future ownership of Open Net. 'The Board is now at an impasse: it can neither approve decisions which would allow Open Net to proceed with its contracted role, nor can it countenance a situation where it merely stands still, consuming scarce Federal funds to no good effect' (Cutler, 1996e).

After a protracted period of government inaction, the independent Directors on the Board decided to resign *en masse*. Brian Johns resigned first on 22 October, 1996, citing as his reason: 'I was persuaded late last year that the shareholding issue would be resolved soon... I have remained a Director as a result of arguments that the presence of three independent Directors was critical... but we are now no closer to settlement... [the decision] now pivots on the minister' (Johns, 1996). Daniel Petre resigned on 23 October 1996 (Woollett, *1996*). He wrote: 'irregardless of multiple approaches... made to the department and the minister, they, collectively, are unable to provide the direction required in terms of the future role of Open Net' (Petre, 1996). Finally on 24 October 1996, Terry Cutler resigned as the Chair of Open Net. In his resignation letter to Vanstone, he stated his reason as 'the Board had reached a complete impasse and had become effectively inoperable' (Cutler, 1996g).

Within a period of three days, the three independent Directors of Open Net, including the Chair had resigned in the hope of forcing the government to decide on a future for the company. This dramatic event was widely reported by a puzzled media. Yet, it would seem public scrutiny may have helped to drive the government into action. Following the resignations, Open Net would become effectively inoperable without a Board, and so Pritchard recommended to Senator Vanstone that as an interim measure she should appoint senior government officials to the Board such as Gallagher

and Phillips 'who have extensive knowledge in this area and would be of great assistance in charting future directions' (Pritchard, 1996k). (This advice was later accepted and David Phillips became the Chair of Open Net on 11 December, 1996, with Michael Gallagher and Thomas Karmel as the other independent Directors: see *Figure 6.1*). The government's hand was now forced into decisive action regarding Open Net, and the future of the OLI.

OPEN NET CLOSES

Prior to the resignations of the independent Board of Directors, the Coalition government had already signalled its intention regarding national policy on education networks. On 3 October 1996, DEETYA communicated its decision to significantly down-size the EDNA initiative by withdrawing its right to offer national carriage. Instead, EDNA was given the lesser task of becoming a coordinating body for a range of existing state and national services in the education sector (Gibbons, 1996).

Senator Vanstone's decision regarding Open Net came on 7 November 1996. In separate letters to Watts and Logan, she advised of the Government's decision to approve an OLA takeover of Open Net. The minister was not convinced that any of Open Net's preferred options (Starlet CMC, IDP Education Australia or PAGE) would preserve the original OLI policy objectives and 'avoid damaging conflict and duplication of functions between the two elements of OLI [OLA and Open Net]' (Vanstone, 1996b). The conditions of takeover were stipulated in a communication to Logan, requiring that a) resources from Open Net be earmarked for online educational technology development; b) OLA broaden its shareholding within first 6 months of 1997 and c) existing employment contracts were to be honoured to retain the skills of its staff (Vanstone, 1996a). On 2 December 1996, the minister's adviser, John Nation advised Logan that the remaining $2.4 million owing to Open Net by the Commonwealth would be available once the share transfer from the OLTC to OLA was complete (Nation, 1996).

Senator Vanstone's decision instigated a flurry of activity to prepare for Open Net's closure, and a new structure for the merged organisation. On 15

November 1996, a document internal to OLA recommended sole use of the OLA brand name. It was felt that there was no need to promote and position two brands when their missions were so similar (Davies, 1996). Open Net was destined to become an electronic learning wing of OLA.

On 10 January 1997, OLTC's share in Open Net was transferred to OLA. Pritchard was appointed Open Net Chair at a meeting of the Board of Directors (Pritchard, 1997a). Watts resigned as CEO of Open Net and Spearritt (OLA representative) was appointed part time (interim) Managing Director of the company. The Sydney office was closed in the months which followed, and the company's records transferred to the OLA offices at 30 Collins Street, Melbourne.

DISCUSSION

Open Net fell well short of achieving the status of 'learning organisation'. It was not capable of maturing, and changing flexibly in response to internal or external pressures. Rather, it was a narrowly focussed start-up company which stubbornly refused to accept market realities. In this sense, it foreshadowed the 'dot com busts' of later years. Explaining this failure is complex, and draws out some of the wider issues facing higher education as it attempts to commercialise.

First, Open Net was saddled with unrealistic government expectations. Born in a climate of great excitement and hype over the virtues of the information superhighway (Jevons, 1994), and of the need for *digital justice*, by providing equitable access to the new internet technology. In the terminology of the day, Open Net was lauded as an *on-ramp* to the superhighway, aimed at protecting Australians from encroaching global media networks. As such, it diverged from its educational origins, providing subsidised telecommunications services to Australia's disadvantaged and loosing sight of the core student constituency of the OLI.

Second, Open Net operated a subsidised service in a commercial and competitive market. The slow up-take by urban subscribers demonstrates that without such subsidies, the venture was otherwise financially unsound. It exemplifies a case of government intervention in the market, where deregu-

lation may have led to cheaper services. As Bates (2001) points out, although online education is dependent on technological infrastructure, establishing a quasi-internet service provider (ISP) through direct government intervention can only be justified when the private sector neglects to invest. In the Australian instance, this was not the case. Rather, Open Net was obliged to compete against a growing number of ISPs. Ausnet, for example, saw Open Net's subsidies as a threat, and competed by offering discounted rates to schools.

Third, the government tended uncritically to accept the new technology as 'a public good', and assumed uptake by OLI students would be strong. Various government objectives were premised on national rather than educational concerns. For example, the use of technology to modernise higher education, to use education as a conduit for rolling-out ICT infrastructure and more broadly to engineer the transition to an information society. Computer networking technologies may also have been seen as a way of bypassing the DECs, and therefore facilitating widespread acceptance of (government preferred) Open Learning programs.

Fourth, Open Net was hampered by a lack of shared vision and was progressively undermined by competing interests represented on its Board of Directors. One shareholder, the OLTC, was an emerging competitor, with its management of EDNA. The other shareholder, OLA, had a vested interest in shifting the focus of Open Net away from carriage, to directly support OLA with educational content. The Microsoft representative, Daniel Petre, represented a company which was planning to roll out its own networking infrastructure, *On Australia*. As such Open Net was not responding to a paradigm shift emerging from new technologies, or new markets, as much as it was responding to conflicting objectives of its Board members and CEO. As such, the paradigm shift which the Federal Government was trying to impose did not become internalised into the organisation's vision. It remained a rhetorical part of the mission statement and of press releases issued by the government. Further, the collaborative relationship between the arms of the OLI did not materialise. When 'educational supply' took over from carriage in 1996, both OLA and Open Net tended to see themselves as direct competitors, rather than partners within the Initiative.

Fifth, Open Net suffered from a poorly conceived business plan, which did not clearly define the company's objectives, strategy, and revenue. Even the core business was not clearly defined – vacillating between content and connectivity. In access provision, Open Net was forced to compete with ISPs with massive capitalisation, and in the content area, where it should have been in a position to build trust with institutions, it was largely seen as a competitor to the universities which had existing network and content capacity. Many universities had developed an ISP capacity, and some had extended this with additional content and connectivity services. In 1994, the following universities were identified as 'regional competitors': Deakin; Monash (Netface); SCU (Nornet); ECU (Virtual Campus); CQU; Sydney (UniLinc); Murdoch (AARNET links to regional providers); ANU (desktop videoconferencing network) (Open Learning Electronic Support Service, 1994a, Agenda item 20).

Sixth, the company did not appreciate the student market. At the outset, lessons from the OLESS pilot project were not absorbed into the planning of Open Net. The pilot had earlier revealed very low levels of expertise among typical Open Learning students and showed the majority of OLI staff did not have the skills to create and deliver content, or connect to the network. To ameliorate this issue, Open Net management did not involve end users or staff at the provider universities (such as technical support staff, DEC staff, administrative staff), in the implementation phase (Julian, 1995e).

Furthermore, the perceived educational value of Open Net by students was low; as it did not offer a service beyond the offerings of a regular ISP. The rapid uptake of the service by rural customers was evidence of its toll free access, rather than its educational value. This lead Open Net to introduce a higher rate for rural subscribers – a prudent financial decision, but a public relations disaster. On the lead up to the 1996 Federal election, the new tariffs had become 'political dynamite' and the government asked Open Net to reverse their new policy. But the damage had already been done, and eventual exit from carriage remained the only option.

CONCLUDING COMMENTS

The rise and fall of Open Net presents an interesting case study of failed government intervention and unrealised plans to revolutionise Australian education. It exposes some of the weakness of the OLI policy and the high expectations of the Federal Government. Open Net was charged with the ambiguous aim to establish the foundations for an 'electronic university', to deliver education into people's homes via modem, and to service Open Learning students by adding a new 'high-tech' component to the OLI. The key feature of the network was the uniform cost for students anywhere in Australia. It underscored a government belief in a technological solution to problem of ensuring student access. OLI policy was also influenced by the reports, *Networking Australia's future* (Broadband Services Expert Group, 1994a, 1994b, 1994c) and *Creative nation* (Commonwealth of Australia, 1994), both of which argued for the establishment of an educational network. It was felt the Open Net was the appropriate body to provide the physical telecommunications infrastructure for use by institutions and students (Open Net Pty Ltd, 1995b, p2), although the announcement of EDNA in the same year created considerable market confusion, in that their objectives were closely mirrored. Furthermore, Australian universities had long since developed their own network capacity (AARNET), which was the backbone for the entire Australian component of the internet. It is not without a sense of irony, that government policy sought to simultaneously establish Open Net as a public enterprise, while wrestling AARNET from the hands of the universities, by its sale to Telstra. The rationale was that universities did not have the technical expertise, nor the capital required to operate a national network.

For some, Open Net was ahead of its time, providing a glimpse of an educational future of online learning. Like OLA, it was to act 'primarily as a broker of services rather than as a supplier of services in its own right' (Open Net Pty Ltd, 1994). Unlike OLA, however, it failed to establish the necessary business relationships with the DECs and other distance education providers, which may have generated a market in educational content. In part, Open Net did not to heed the warnings of the OLESS pilot, and its business model displayed a poor understanding of the online student market. It was

unsuccessful in its key objectives; was neither financially viable, nor did it succeed in making available new learning opportunities for disadvantaged students, as was its claim. The failure of Open Net was, however, primarily a consequence of government intervention, driven by a narrow conception of access, detached from OLI's broader educational objectives. In this sense, Open Net's failings were seen as the failings of the OLI. As one anonymous informant notes:

> It was all based on very thin ground, and was not educationally-based... the wheels were falling off early-on. That epitomised the OLI: it was technology driven by the policy makers who didn't want to know the reality about students, about the fact they weren't ready for the technology, and the staff weren't either.
>
> (Anonymous informant)

The collapse of Open Net, helped seal the fate of the wider Initiative. In January 1997, Open Net became a fully owned subsidiary of the OLA and was fully merged with the OLA in late 1997 (Department of Education Science and Training, 2002c). The new Howard Government took office advocating the virtues of the market and liberal economic policies. The interventionist approach of the former Keating Government and the use of technology as a tool of education and social policy were reviewed. As a result, government policy placed less emphasis on the establishment of a national education networking infrastructure, and more on providing content related services. The failure of Open Net however, did not stop universities from pursuing online learning independently. Rather, university leaders were inspired to try where the OLI had failed, anticipating some of the difficulties encountered in later years as institutions and consortia attempted to establish electronic delivery, and virtual campuses.

8 Conclusion

INTRODUCTION

THIS thesis has investigated the establishment and growth of the Open Learning Initiative (OLI) from 1990 to 1997. In Chapter One, the OLI was defined as a government venture, supported by a consortium of Australian universities with the objectives of consolidating distance education provision and improving student access through an open approach to admissions and substantial investment in new technologies for educational delivery. Chapter Two explored the policy background from which the Initiative emerged, noting earlier government efforts to coordinate the provision of distance education. Chapter Three developed a composite theoretical model germane to the organisational approach of the study. In subsequent chapters, each key component of the OLI was documented and analysed from its historical roots, inception, structure and development. In each case, various conclusions were drawn which highlight the complex and sometimes contradictory nature of the Initiative. In this the final chapter, the aim is to synthetise these findings by returning in summary to the mission, policies and practices adopted by government and by leadership within the several organisations of the OLI. Historical and organisational outcomes of policies and decisions involving, technology, student markets, and organisational structures will be reconsidered.

THE MISSION REVISITED

In formulating the OLI, the Federal Government was heavily influenced by the arguments of 'human capital' theorists (Baldwin, 1997) which had established a strong link between public investment in education and national economic development. Investment in education was not simply a matter of individual need, but an issue of national survival as Australia embarked on large-scale restructuring of labour and industry, involving a shift from prima-

ry production and extractive industries towards manufacturing, knowledge and information based industries. By increasing participation rates in higher education, the government also expected to address rising unemployment statistics by taking school leavers out of the job market, and equipping them with the skills necessary to help build a 'clever country' and a 'working nation'. At the same time, policy makers had become aware of an international trend in adult education based on principles of lifelong learning:

> The concept of 'lifelong education' as a means to a variety of economic and non-economic ends has to be taken seriously. Indeed, I see education and training as playing an important role in breaking down what have in the past been seen as highly prescriptive phases in people's lives, with the bulk of education and training concentrated in the youthful years, and more or less compulsory retirement at some arbitrary age engendering a widespread view that provision of education and training opportunities for older Australians should be a low priority... our central equity concern as we consider education and training policies should be to maximise people's 'freedom to achieve', their ability to conceptualise and effectively pursue a rich variety of options and projects in their working and non-working lives.
>
> (Baldwin, 1997)

The Labor government was, therefore, keen to increase participation rates especially among adult Australians. This necessitated lifting admission restrictions and finding a more cost-effective means of delivering education to students' homes, recognising that many mature students were working and unable to attend campus. A radical approach was required. In 1990, the universities and the DECs were still adjusting to structural changes brought on by the Dawkins reforms, and were voicing their resistance to further change. A parallel system of education delivery was deemed necessary—an Open Learning Initiative.

The OLI was a collection of somewhat ad hoc policies essentially aimed at coordinating and opening access to higher education, perhaps with a long-term view of developing an Open University of Australia. Over the period 1990–7, the Initiative spawned a series of inter-related companies and projects which stemmed from these policies. Hence, the term OLI was used by the key actors to refer to a set of inter-related organisations, comprising: the TVOLP, OLA, the OLTC, the OLESS and Open Net.

The government mission, objectives, aims and strategies of the components of the OLI examined in this thesis are summarised in *Figure 8.1*. All were generated from government policy and a government vision for the future of higher education. Patterns in policy can be discerned, although decisions tended to be 'short term, responsive and pragmatic' in nature (King, 1993, p13).

Over the period of study, 1990–7, government policy instituted four related projects. The *Television Open Learning Pilot* (which ran May 1991–January 1993) trialled educational television. With its success, the *Open Learning Agency of Australia Pty. Ltd* (OLA) was established in 1993, combining established distance education practices, while consolidating and centralising a national brokerage. In 1994, the OLI took a new direction into online learning. The *OLESS* emerged to trial networked learning, and, in the following year, this was expanded into *Open Net*, a national open learning network. The Initiative also included various other components, notably the *OLTC*, a small company with a brief to coordinate open learning technologies nationally in all sectors of education.

From 1992, the OLI quickly evolved into a large, multifaceted venture, a cluster of sub-organisations, each with multiple objectives. If coherence was to be found in the rhetoric of government mission statements, coordination was less apparent. There was no super-structure to the OLI, and it therefore lacked the resolve that a Central Executive or Board of Management might have provided. Indeed, each sub-organisation operated independently of the others. That is to say, each of the three companies (OLA, the OLTC and Open Net) were run by separate boards of directors. The two pilot projects (the TVOLP and the OLESS) were established by government grants, awarded to existing providers, and managed through committee decision-making. Government ministries, particularly the Department of Employment Education and Training (DEET), assumed coordinating roles mainly through policy and contractual agreements with the participants, through the instrument of funding and to a lesser extent through the Commonwealth advisory body, the National Open Learning Policy Unit. The OLI was subjected to a succession of plans and policies, but the deployment and implementation of its component organisations lacked subsuming authority. Each of the

four sub-organisations (the TVOLP, OLA, the OLESS and Open Net) were established to engender more open access to higher education, enhanced equity of provision and more flexible delivery. But each incorporated specific, separate and sometimes conflicting organisational aims (*Figure 8.1*). Each initiative had the individual stamp of a separate government undertaking. In retrospect, there was no single Initiative, but a series of related Initiatives.

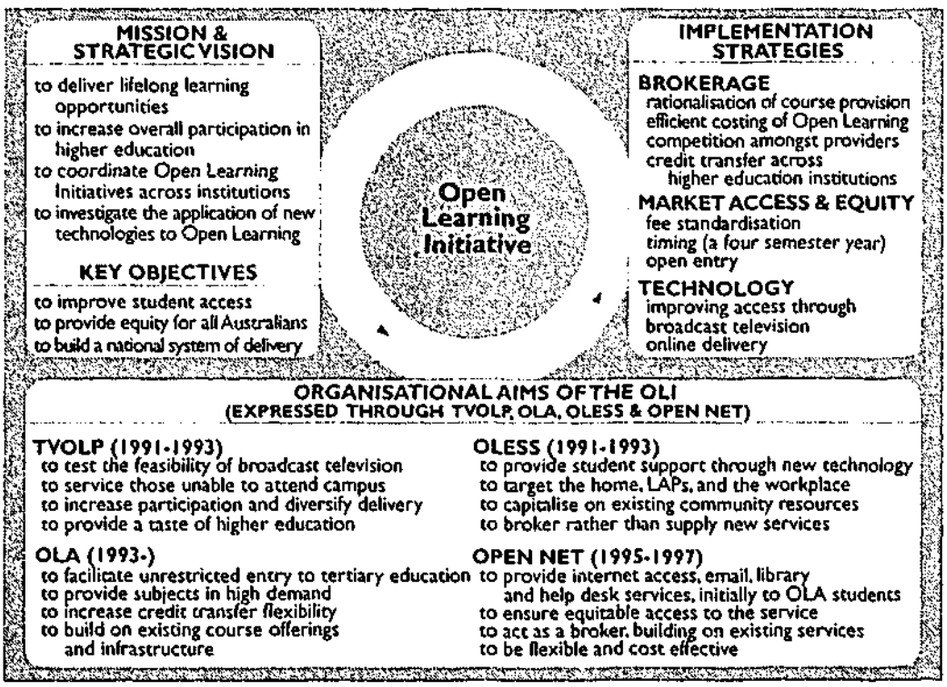


Figure 8.1 Summary of government policy initiatives: a reassessment

Government policy was developed by DEET, by various ministers (particularly John Dawkins, Peter Baldwin, Kim Beazley and Simon Crean), their advisors (especially Richard Johnson, Dean Ashenden, Peter Reeves and Di Bolton) and advisory bodies (particularly NBEET and NOLPU). Policy was formulated by the staff of the Department of Employment Education and Training and received considerable support from the Labor Party cabinet. The first of these ministers, John Dawkins, provided impetus for founding the TVOLP. Peter Baldwin, Kim Beazley, and later Simon Crean carried forward the reform agenda. Of these ministers, Baldwin had more influence on the development of policy, and led the expansion of the TVOLP into the full Initiative, comprising OLA, the OLTC, the OLESS and Open Net. The

evolving sub-organisations were firmly bound to these government plans by signed agreements, and by progressive conditional funding.

The common ground for these organisational components was the OLI mission which combined a shared understanding of openness, articulated by the terms access, equity, and delivery. The term *access* derived from the government's desire to promote national admission to education without prerequisites, and to facilitate pathways within and among educational sectors. *Equity* was approached through government intervention to fix student fees artificially on 'a one price fits all' basis. In the case of OLA, marginal costs were barely covered by student fees which were fixed to the level of HECS and not complemented by additional EFTSU-based funding, as in the case of regular university students. Government funding was limited to the fixed costs of establishment. Many of the participating universities argued they were indeed subsidising the Initiative. In the case of Open Net, subscriber fees were fixed nationally well below market prices for rural Australians. The term *delivery* was added to the lexicon to summarise the government's approach to new technologies – 'flexible delivery' rather than 'interactivity', 'connectivity' rather than 'content'.

Under government leadership, access, equity and the establishment of a national delivery mechanism were applied authoritatively, sometimes at odds with student needs, institutional politics, and ultimately organisational survival. In pursuing the OLI mission, the fundamental relationship between innovation and educational purpose became obscure, the focus on equity overshadowed individual needs, delivery neglected pedagogy, and access overlooked the cost of provision. Thus, innovations became goals in themselves, as the reformers lost sight of the educational purposes of change (Fullan, 1982).

Taken together, these organisational components of the OLI became a significant Federal Government initiative, imposed on the university sector and subsequently on other sectors of post-secondary education, to enhance access and equity in education for Australians. Government policy defined the OLI's mission, provided seeding funds and stipulated broad organisational structure, goals and ends. Implementation strategy was defined by

government and then ostensibly left to the talents of individuals and organisational leaders to make operational decisions. It was a complex undertaking, not only involving the establishment of a number of core organisations, but also the participation of the majority of Australian universities. The OLI was driven by the vision, entrepreneurship and the energy of individuals involved in the implementation, but was impeded by political and technological difficulties. The Initiative failed to establish an open market in distance education and in online learning. The brokerage arrangements which were intended to produce internal competition and quality, instead found collusion and discontent (Joy & O'Neill, 1998). Furthermore, the OLI experienced significant external competition from the universities and TAFE which had developed their own ODE and flexible delivery programs. In the end, the government dream of transforming higher education was partially realised, but not through the OLI. By 1997, the tide had turned against centralisation of these practices within the confines of the Initiative. Arguably, the OLI had not failed, but had became a less dominant force as more institutions adopted the philosophy of ODE and flexible delivery.

THE INFLUENCE OF GOVERNMENT POLICY

Government policy emerges in this thesis as the driver of organisational change. The government conceived the Initiative, provided generous seeding funds, and stipulated the formal and contractual relationships between participants. Government policy initiatives impacted on the OLI organisations in several ways.

First, the organisational structure was regulated in formal agreements of association and in contractual obligations. The organisation's infrastructure and inter-institutional relationships were prescribed in agreements between the Federal Government and the Project Managers, and between the Project Managers and the participating universities; and between the incorporated companies and the government. These relationships were also evidenced in committee and advisory structures, and in the informal relationships between stakeholders. Relationships were dynamic. They were at times genuinely collaborative and sometimes self-seeking, as participants forged new relationships, jostled for advantage, and cultivated their shared position

within the organisational structure. In many ways, the research reveals that collaboration and competition are two sides of the same coin.

Government policy, while emphasising collaboration, in fact, recognised the importance of strong leadership and the benefits of firm (and uncontested) decision making. Therefore, during the formative period of the OLI, Monash University was granted full ownership of OLA. Later, Open Net was established with considerable independence from OLA, with its own board of directors. Moreover, government policy had a pivotal influence on the educational objectives of the OLI, particularly by opening access to higher education, by improving flexible learning opportunities and by modernising university practice through the use of technologies with national scope. As noted earlier however, participants sometimes lost sight of educational objectives where securing government funding became a priority. This was particularly evident in the high technology projects associated with Open Net (Chapter 7) and OLA (Chapter 5).

Government objectives were periodically revised. Ministerial changes brought new initiatives, resulting in confusion and eventually a decline in momentum and focus. During the period under investigation, three distinct phases of government policy were evident. In the first phase (1990–2), government policy focused on improving access through the use of national television broadcasts. In the second phase (1993–4), the establishment of OLA announced a government commitment to the brokerage system. This called for an inclusive managerial approach to maximise the willing participation of Australia's universities and other post-secondary institutions. Leadership remained important, but this was tempered by cooperative decision-making structures and principled rules of conduct. Formalised relationships helped ease competitive tendencies among the participants. The third phase (1994–6) evidenced a government-led drive to fuse new educational technologies into the project.

New government objectives spawned successive OLI enterprises. Each new sub-organisation lead a new wave of change, an approach that hindered the transfer of experience between projects. Project personnel were often uninformed of the outcomes of other projects within the Initiative. A case

in point is that of Open Net, which expanded from the OLESS pilot even before the evaluation was released. Similarly, whilst educational television (TVOLP, Chapter Four) was a most celebrated aspect of the OLI, subsequent initiatives did not build on this success. Instead, the focus shifted away from television, towards conventional print-based media, later exploring online student support, before this was abandoned in favour of online delivery and network connectivity. These changes in policy and the spawning of sub-organisations did not facilitate coherence across the Initiative, nor did it help create an organisation which benefited from experience.

Government policy promoted new ways of conducting the business of Open Learning. Outsourcing and teamwork were fundamental to operations, necessitated by the small size of the component organisations, and the wide range of administrative tasks they were required to perform. These included financial management, marketing, operational management, product development, project management and scheduling, maintenance of student and customer databases and sales. Teamwork was undoubtedly a factor of success. Project teams were often set up on a short-term basis, utilising the talents of members, sometimes including members from different OLI organisations. They provided considerable flexibility, in the style envisaged in the post-Fordist literature–small work teams responsible for defined stages of the production process harnessed their collective experience, imagination and skills to tackle the task in better ways. Courseware production, for example, was covered by flexible teams comprising multi-skilled members (from provider universities and augmented in the case of television production, from the ABC). They took pride in their work and in many cases produced work of very high standard.

Outsourcing was another distinctive feature of the OLI. Marketing and public relations consultancies, technology infrastructure and connectivity, as well as expert advice were largely handled by private consultancies. Many companies contributed, notably Microsoft and Telstra on Open Net's Board of Directors. Auspac, Nexus and Pacific Star acted as network service providers both for the OLESS and Open Net. Synergy Communications and Communications Solutions Australia both made notable contributions in public relations. Some services were internally contracted, including: advice

to prospective students, customer relations, library services, database services and courseware development. The Australian Broadcasting Corporation (ABC), and participating universities, particularly Monash University, provided support for the Initiative beyond their contractual obligations. Outsourcing was used for two important reasons: services were relatively neutral and averted competitive rivalries among participants, and externally sourced suppliers and consultants were interchangeable allowing a high degree of budgetary and tactical flexibility.

Government policy resulted in a distinctive profile of the OLI (*Figure 8.1*), elements of which may be summarised as follows:

a) to establish and coordinate Open Learning through brokerage and rationalisation of services;

b) to develop open market relationships between students, agencies and institutions, ensuring access and equity objectives were being met;

c) to advance the use of communications technologies (broadcast television and online delivery) to improve access to and delivery of education services.

Each of the three elements became an organisational feature of the OLI, adding distinctiveness to it within the higher education sector. In the following sections, each will be considered in turn, with particular reference to the findings of the research.

THE BROKERAGE SYSTEM

A unique feature of the OLI was the brokerage system, whereby selected universities contracted to deliver services. Overall, the brokerage concept aimed:

> to prevent 'unnecessary duplication' of services by utilising existing resources and encouraging synergy among institutions in an effort to improve economies of scale.
>
> (Department of Employment Education and Training, 1993c)

Brokerage arrangements alleviated government concern that effort would be wasted on developing new resources, new content, new infrastructure, or the duplication of existing educational services. The aim was simply

to sustain, repackage and deliver existing services under new structural arrangements. The principle of brokerage was established through contractual obligations with the government. The OLESS, for example, was required to 'capitalise on existing arrangements for electronic access' (Department of Employment Education and Training, 1993c); Open Net was expected to coordinate 'the most cost-effective third party suppliers of infrastructure and services' (Open Learning Electronic Support Service, 1994a); while OLA's agreement with the government was 'to build on the experience, expertise, range of course offerings and infrastructure of distance education' (Commonwealth of Australia, 1993). Each of OLA, the OLESS and Open Net was required to act as a broker rather than as a direct supplier of services. They were visualised as hubs for the coordination of their respective activities, responsible for organising, contracting and selecting service providers, the latter relegated to the periphery of the organisation. Each hub was made responsible for marketing, quality control, accounting, revenue collection and the dispersal of development funds.

The structural arrangements described above are analogous to lean production (Chapter Three). In this concept derived from industry, the bulk of production is out-sourced to provider organisations, while the central hub engages in coordinating roles, final assembly, product design and business development. OLA operated as a lean producer. The central office of the OLA was a coordinating hub, in effect, a purchaser of study units 'made to order' and 'delivered' to students by the provider universities. The agency put courses to tender, and prospective suppliers competed for the opportunity to offer a particular study unit. A successful tenderer would then enter into a contractural relationship with the central agency. Academic study materials were rebranded with the Open Learning logo, and conformed to style guide specifications. Providers were also required to adhere to quality standards and a minimum level of open provision. This included the acceptance of all students enrolled by the OLA office. Just-in-time production was an observable feature of these relationships. Providers were informed of student numbers at the last minute, ideally a week before the semester began, but often at much shorter notice. This required an acceptance of uncertainty, the willingness to absorb losses derived from

under-capacity, high levels of staffing flexibility, and trust relationships between the agency and the suppliers. With four teaching periods per year, there was no off-peak season. As a result, work was not only 'lean', but also 'non-stop'.

The brokerage arrangements stipulated by the government kept teaching and learning activities very separate from the administrative and strategic concerns of the central offices. Interaction between the central office and the providers occurred only in a restricted range of instances. For example, when units were put up for tender, when decisions on selections and curriculum were made by the Academic Board of OLA, when student enrolment and completion data were communicated between the central administration and the providers, and when either the broker or the provider were thought to have infringed their contractual obligations. Providers retained considerable academic independence, with full responsibility for teaching and learning, student assessment, and academic support. Thus, the business and the teaching aspects of Open Learning were structurally and strategically divergent.

Brokerage introduced some additional complexities. Tensions were evident in competitive tendering, power relations between buyer and supplier, and the counter tendency for the development of alliances and factions and participatory decision making. Competitive tendering was a direct outcome of the brokerage system already evident in the bidding for the TVOLP, OLA, the OLESS and Open Net, and in particular, the tendering for contracts to supply units of study through OLA. Tendering served three important government objectives, consistent with the findings of the Industry Commission (1996). First, it introduced direct competition between service providers so that service delivery could benefit from selection of suppliers with the best credentials, and with the highest quality of service. Second, it overcame claims of bias, by introducing a rigorous committee-based selection process. Third, it assisted in the rationalisation of service provision by ensuring that in many cases only one provider would be contracted to supply a particular service.

Competitive tendering imposed a competitive discipline on institutions and introduced an element of genuine rivalry between universities. It was not a neutral process. On occasion, collusion occurred between bidders submitting to the Academic Board of OLA. Government policy was based on a sense of public good, but also on what Baldwin (1997) later called the 'pot of gold principle', to encourage competitive tendering amongst the participants. From the writer's perspective, however, this translated into a 'gold rush' mentality with universities attempting to compete on the basis of advantage, credentials or proximity to government, and not only on educational merit. In the case of television production (involving comparatively large budget allocations), contracts were commonly shared among consortium members and across States. Another finding of the present study was that tendering assisted the government in concealing its own bias and ministerial preference. This was evident both in the TVOLP and OLA bidding processes. Generally, however, tendering was effective, if imperfect. It exemplified the cooperative and competitive spirit of the Initiative.

OLA was structured on a consortium of Australian universities led by Monash University. Monash retained majority control over OLA's Board of Directors, appointed its Registrar as the CEO of the new company, populated OLA staff with Monash employees, many of whom took senior management positions. The Chair of OLA was the Vice-Chancellor of Monash, Prof. Mal Logan. As a result, Monash was given the opportunity to lead from a position of dominance within the regulatory framework, which set stringent terms for product selection and fulfilment, pricing, and market segmentation. Again, this is akin to lean production, which aggregates producers around a dominant leader to integrate production. The system excluded external partners of OLA from decision making. Offsetting this were democratic management structures which allowed full members of the consortium entry and representation on key decision making committees. Thus, the brokerage model instituted a distinctive power structure. The large part of operational decision making and marketing were vested in the Board of Directors, the Open Learning Australia, Academic Programs Board (OLA APB) and in the central office of OLA, while educational activities of teaching and learning were separate and distributed among providers.

Given the context of hierarchy and power relations amongst constituent members, the greatest critics of the OLI consortium were often its own members. An important source of conflict within the OLI was simply the large number of stakeholders of differing views and interests. The present study concurs with Lentell's (2000, p1) contention that collaboration entails a degree of conflict, and with her delineation of a 'gap between the rhetoric of partnership and collaboration and the real world of delivering distance education programs'. What was at stake was the future and nature of distance education in Australia. For some stakeholders, the OLI threatened participating universities' existing distance education programs. Moreover, consortium members were collectively building a new entity, which was also their direct competitor with potential to absorb other post-secondary distance education programs. Despite the perceived threat, participants saw involvement as an opportunity to influence the development of the Initiative, to keep abreast of developments, or perhaps to be party to privileged intelligence. It was not so much that participation was directly beneficial, but rather, non-participation gave a bad signal to the Federal Government, an unwillingness to contribute to the 'national need'.

It could be argued that OLA foreshadowed the later emergence of inter-institutional alliances, consortia and partnerships designed to reduce competition, and share new venture start-up costs. The brokerage model was not a consortium in this sense. It was an institutional aggregation driven by competitive forces, a means of rationalising educational services. Momentum and growth were achieved through a mix of strong leadership and partisan control. The contradictory forces of collaboration and competition within the OLI were always a disrupting influence on this tenuous arrangement. In the year of the 1996 election, successive Labor and Liberal governments reviewed the brokerage structure. The strong leadership provided by Monash was acknowledged as a great contributor to the growth and success of both the TVOLP and OLA. Internally, however, pressure for consensus was exercised to ameliorate the diverse and competing interests of the participants. Ultimately, the reformed post-1997 organisation saw the merger of OLA and Open Net, full committee control and diversification of OLA shareholding amongst the participants. The incoming Howard

Government also saw fit to deregulate the operations of OLA, providing annual public funding of $0.2 million over 1997–2002 (Jackson, 2001), and allowing OLA providers to set their own fee levels – independent of HECS charges (Department of Education Science and Training, 2002a; Industry Commission, 1997).

MARKET ACCESS AND EQUITY

To ensure access and equity principles were being achieved, the government stipulated the level, types, availability and charges of services provided by the OLI. Units of study were available without entry restrictions, and at fees consistent with HECS levels. In 1993, Open Learning fees were set at $300 per unit, rising each subsequent year according to inflation. This fee was proportionally allocated to: the central agency ($100), the provider institution ($180), and the library service ($20). Credit transfer arrangements required consortium members to accept credit for Open Learning units, and to provide pathways for students to enrol in a degree course at their universities. By 1995, 18 degree pathways had been developed by the OLA consortium, and four universities (Charles Sturt, UNISA, Monash and Griffith) had established general awards specifically for Open Learning students. The 18 January agreement (Commonwealth of Australia, 1993) also stipulated that units were to be offered frequently through the year, be made available nationally, regardless of geographic location, and be targeted at subject areas of high demand. In addition, there was a requirement that provision be rapidly expanded, beginning with 15 units in March 1993, growing to a minimum level of 150 units by 1995.

These stipulations underscored a fundamental government belief that neither market forces nor university administrators alone could be relied on to advance the reform agenda and deliver open provision (Baldwin, 1997). The government perception was that competitive behaviour amongst universities was not producing specialist university profiles. Rather, universities including the DECs, were mirroring the successful activities of others resulting in a herd mentality and a duplication of effort. Coordination was therefore perceived to be a necessary counter-force, a means of generating institutional specialisation and diversity. Competitive behaviour was evident only

in the tendering of units, and even then, institutional interests, collusion and non-competitive behaviour were equally evident. Price competition was discouraged. The government fixed unit fees, and allowed unit providers to gain a monopoly position in the academic area in which they successfully bid. These issues do not suggest the OLI was principally market driven, but involved a highly regulated environment both for the student and for the institutions involved. The new Open Learning market produced a number of organisational outcomes, explored below.

Each element of the Initiative had difficulty accessing the target market. Many of Open Net's subscribers, for example, were not Open Learning students at all, but isolated computer enthusiasts looking for cheap internet access. The equity principle obliged the OLA to provide for Australians disadvantaged by isolation, gender, ethnicity and Aboriginality. However, as Atkinson (1996b) showed, the majority of students completing OLA units were not disadvantaged, and generally held tertiary entry qualifications. Part of the reason for this was that student support, a significant cost of ODE provision, was not factored into costing estimates. Experienced students with good study skills tended to perform better. Attrition eliminated the more costly students, namely those with greater support needs and otherwise more disadvantaged. The Initiative was only moderately successful in providing new learning opportunities, instead, mirroring and duplicating existing distance education provision.

The OLI market was born out of the conflicting aims of the era, including the realisation of the Labor Government's belief that efficiency could be derived from economies of scale and from the consolidation of small-scale provision, while carrying forward the social objectives of access and equity. However, 'doing more with less' was premised on a government belief that distance education was cheaper than regular on-campus teaching because it appeared unburdened by overcrowding, the need for new buildings and declining funding. This was contested by King (1992b), who argued that the costs for on-campus and off-campus delivery were roughly equivalent. Alistair Inglis (1999a, p225) extended this by challenging the widespread belief 'that the costs of online delivery are in total less than the costs of print-based distance education'. In his study of the OLA unit, *VIS15: Photography:*

an introduction, Inglis (1999a, p232) found that even in a 'no frills' form of delivery, online learning was the more expensive option, justifiable in pedagogic and strategic terms, but certainly not in terms of cost saving for the provider or indeed for the student.

Nevertheless, the government expected considerable economies of scale from the Initiative, and built this assumption into the financial arrangements. Government funding was not apportioned to the variable costs of student load. Provider revenue was based solely on student fees, a large percentage of which was allocated to administrative rather than direct academic costs (Atkinson et al., 1996b). The user-pays principle put strain on distance education markets. Some educators were concerned about the viability of the DECs. If the lower levels of funding instituted by OLA were proven sustainable, then the funding of regular distance education programs (and even on-campus programs) would be under threat. Others protested that losses incurred through their involvement in the OLI were being absorbed by the DECs and by the provider faculties (King, 1993).

The OLI tended to reinforce the market position of universities and their status within the higher education system. OLA provider universities included almost all of what Chipman (2001) has called the 'tier two' institutions, which showed their willingness to address equity and access issues and engage in non-traditional methods of delivery. In contrast, long established Australian universities did not become involved in the Initiative, preferring to preserve their privileged market position regarding student access.

It was the government's belief that Open Learning would increase institutional competition (Baldwin, 1997). However, this was not necessarily the case. The internal market of the OLI included non-competitive behaviour. This was because the tendering process ensured no two providers offered the same unit at the same time to students. Credit transfer arrangements further reduced competition by creating an overlap between the university brand and the brand of OLA. Competition was a feature of the tendering process, but less of unit provision and delivery. Although providers were shielded from competition within the Open Learning

Initiative, external competition increased across the UNS and TAFE systems. Many Australian universities, as well as TAFE institutions, expanded into the flexible and open learning market, and effectively out-competed OLA for students. Conventional off-campus university enrolments increased each year over the period of study. From the perspective of OLA, unmet demand appeared to be shrinking, when in fact, the demand was being directly absorbed by the universities.

Serious concerns were raised about the financial viability of Open Learning (Senate Employment Education and Training Reference Committee, 1994). From the students' perspective, OLA was no cheaper than regular universities. For the provider university, revenue from an OLA student was one-quarter that of a regular university student. Almost all providers operated on a marginal cost recovery basis, on a break-even basis, or at a loss. To some extent, OLA's success was its ability to push the burden of subsidy onto the provider universities. In the final period of this study (1995–7), increasing pressure was brought on the OLA to find additional sources of income to replace government start-up grants, which were becoming exhausted. The company shifted its business development effort from universal education to the more lucrative practice of industry training for corporate customers. According to Joy & O'Neill (1998, p37), this new phase was criticised by open learning idealists as a 'selling out' of the OLA's original purpose as commercial pressures eclipsed equity concerns. Open Net's equity objectives were similarly compromised by market demands, when it instituted a variable pricing policy that discriminated against rural customers. This leads to the conclusion that the access and equity goals of Open Learning were interpreted on one hand by those who believed in the value of a social welfare system, and on the other by those who saw its ideals operating within a market-driven education system (Jakupec & Nicoll, 1994; Marginson, 1993a).

In summary, the consumer market for Open Learning was more a construct of the government than a practical reality. It became a compromise between providing a 'public good' and producing 'market goods' (Graves, 2001, p56). Of the key objectives, student access was more easily achieved. For Open Net, potential universal access was achieved at the expense of profitability.

The OLA was unable to rapidly expand its enrolment base because the mass-market in open learning, which had been anticipated by the government, did not materialise. Consequently, OLA did not benefit substantially from economies of scale in unit enrolments, and was susceptible to market competition from the universities and TAFE which were quickly expanding into the open and flexible learning.

> The market forces threatening the exponential growth of higher education are beyond the control of universities. The task for them is therefore to increase their overall market share and at the same time to remain sufficiently flexible to shift resources between clients' needs, demands and values, and competitors' behaviour in changing market conditions.
>
> (Jakupec & Yoon, 2000)

Student access was an easier undertaking than the more complex, expensive and restrictive objective of equity. Access required the removal of entry restrictions and provision of services at a minimal delivery cost. Maintaining student equity, however, created a lowest common denominator effect on services, on curriculum and on the types of technology employed. ICT-based technologies for example were not at that time ubiquitous, and therefore hard to reconcile with equity considerations, a prime factor in limiting innovation, flexibility and change. Like many Fordist organisations, the OLI was geared towards growth and mass-market provision, leaving it exposed in the face of declining mass-markets and increasing competition.

TECHNOLOGICAL INNOVATION

Technology policy for the OLI was driven by government concerns over student access to educational services. Three communication technologies were employed by the OLI: broadcast television, computer-based courseware, and educational networking. Broadcast television proved to be the most functional of these technologies. From the beginning, it helped to publicise the Initiative, to recruit students, and service a much larger audience than its registered students. However, as King (1992b) and Daniel (1996) point out, broadcast media are poorly suited to ODE provision, despite their popularity and accessibility. Primarily focussed on transmission and fixed into broadcast timeslots, broadcast media do not encourage viewing flexibil-

ity or interactivity. Indeed, many OLA students recorded television programs to videotape (Atkinson et al., 1996b; Cunningham et al., 1997).

In 1994, the focus of technology policy shifted to networked learning. Initially, this was driven by educational concerns: to create virtual communities of teachers, students and administrators; to facilitate educational delivery; to ameliorate student isolation; and to fill the communication gap experienced by isolated students. OLA offered *Innovative and Quality Enhancement Grants* to unit providers to assist in developing innovative courseware. The OLESS was expected to build on this momentum to help realise the educational objectives of OLA. Some university providers rose to the challenge, recognising that no single technology is superior in all situations. The concept of the 'media-mix' emerged as an effective means of maximising student access to resources, by utilising a variety of educational technologies to adjust to market and customer characteristics (Jakupec & Yoon, 2000). Beginning in late 1994 however, the issue of universal access began to occupy the thoughts of policy makers, a response in part to community concerns over a digital divide forming in Australia between the information rich and the information poor. It also developed from what Carvin (2000) and Gourova et al. (2001) view as a government tendency to see the digital divide as an issue of the availability and accessibility of the networking infrastructure – a desire to close the gap by providing universal access.

Providing universal service was not a complete solution to closing the access gap. The OLESS and Open Net case studies (Chapters Six and Seven) show that the student side of the equation was of equal importance, such as the purchase of computers and modems, training in the use of the technology, and determining the level of demand for such services. Paradoxically, the establishment of carriage services conflicted with the OLI's other key objectives, access and equity. Put differently, the government inadvertently contributed to the problem it was trying to resolve. For example, computer ownership and network connection were not mandatory for students, and therefore in units where electronic resources were made available, concerns were raised about student access to such resources and social justice implications for those students deprived of the finances or the skills to engage in online learning. This stifled the development of online learning

materials and exposed an inconsistency in OLI objectives. It also explains the disappointing level of innovation achieved. Five additional obstacles to technological innovation within the OLI were also evident, a lack of attention to educational objectives, stakeholder conflict, resistance from academic staff, failure to understand the market, and technological limitations. These limitations are discussed below.

Government policy trumpeted the capacity of new technology to rapidly transmit information. As Sumner (2000) and Evans and Nation (2001) remind us however, a focus on one-way communication, does not fundamentally address educational issues, and rarely extends beyond the existing capabilities of print and post. Rather, strategic and educational goals are needed to drive the introduction of appropriate technologies, particularly those employing two-way communications (Glick & Kupiec, 2001). The broadcast model adopted prohibited the OLI from reforming educational practice. Much effort (and money) was directed at establishing student connectivity, rather than the development of content and learning materials in interactive format. Thus the Initiative was primarily technology-driven, rather than student-led. It followed the mistakes of other projects, by 'assuming that if information is available, students will learn' (Farrington & Yoshida, 2000, p17).

In the absence of a shared technological vision, stakeholder conflict was a feature of implementation of technology policy and of the allocation of technology resources. As Wilkinson (1983) points out, the introduction of new technology opens up opportunities for power-holders to make strategic choices during implementation. These choices are thought to be the subject of negotiation amongst organisational decision makers. In the case of Open Net, this culminated in heated inter-personal conflict which further eroded prospects for successful implementation.

Technological innovation was also hampered by resistance from staff. Many academics were committed to print, rather than the emerging technologies, and did not have the skills to implement computer mediated learning, even fewer for networked learning. For others, new educational technologies were vehicles for the industrialisation of education, the packaging of

courseware, the alienation of the teacher from the teaching process and a change in the locus of power (King, 2001). Overall, the government was not selling its vision to the converted (Mitchell, 2002). Whilst staff within various parts of the organisation recognised the future importance of new technologies, many declined to innovate due to the resistance of colleagues, the perceived and real lack of market readiness, and the personal and career costs of failure.

There was an observable gap between the government's expectations for the use of educational technology and the readiness of the market. The majority of OLI students ere mature age students, most of whom did not have the requisite computer skills for online learning.

> It was a cargo cult approach. We have this new technology, so everyone will want it, they'll like it and they'll use it. The continuing issue remains one of demand—do students really want it? Certainly back then, there was no evidence that students really wanted online education.
>
> (Anonymous informant)

Freeman (1982) reminds us that we must not forget the significant influence the market has on innovation. In a 'market pull' setting, innovation and change stimulate the organisation to stay competitive. By contrast, in a 'market push' scenario the organisation attempts to exploit the capabilities of emergent technologies by matching them to an expectant marketplace. In the case of Open Net, there was no such matching between technological capabilities and market requirements. Rather, the risky technological approach adopted was to explore the potential rather than to exploit the opportunities.

There were practical reasons why the 'new technologies' were not demanded by the market. The networking technologies of the time were expensive to purchase, difficult to setup and complicated to use. Modem and home internet usage was very much in its infancy, and personal computers tended to be enabled for CD-ROM applications rather than for online services. For those who had acquired suitable hardware, little was available in terms of software, and online resources. Furthermore, the small number of users spread across many study units meant that critical mass could not be

achieved for computer mediated communications applications. In short, opportunities for discussion, debate, and collaboration were restricted by the technology and by the user-base. Effective distributed learning remained an unrealised goal of the OLI.

Overall, Federal Government policy was premised on a desire to bring educational reform to higher education. Technology was, in part, a vehicle for the government to achieve educational change. This desire was subsumed by a Government tendency to view technology as means to simultaneously widen access, improve the quality of teaching and available courseware, and improve the cost-effectiveness of education (Bates, 1997), while upholding their responsibility to appeal to their constituencies (Ryan, 2001). It was also a means for systemic reform, by reinforcing the brokerage system established by OLA, by averting funding duplication, and by attempting to change power relations. Susan Strange (1988, p123) however, notes that:

> technological changes do not necessarily change power structures. They do so only if accompanied by changes in the basic belief systems which underpin or support political and economic arrangements
>
> (Strange, 1988, p123)

Government policy makers were concerned less about the details of implementation as they were about achieving structural change which could be described as genuine reform. Technology was viewed as an agent of reform, as though simply by 'plugging in' to the new paradigm, learning would flow like 'fuel from the pump' (Campion, 2001, p71). Decisions regarding the appropriateness of any particular technology require a careful appreciation of student needs, market segments and learning objectives (Bates, 2000b). As Evans and Nation (2000, p169) point out, it is not the technology itself which produces the desired paradigm shift, rather it 'is about the human and social application of tools for educational purposes'. Thus, genuine reform in the use of new technology by students and staff and the production of innovative learning materials had to wait for a change in environmental conditions, post 1997.

CONCLUDING COMMENT

In 1995 Herrmann (1995, p128) saw the OLI 'not merely as a distance education delivery mechanism, but rather as a test bed/alternative implementation pathway of government policy'. At the launch of the TVOLP in 1992, Minister Baldwin envisaged the Initiative as a grand scheme to change the profile of higher education in Australia. His stated objectives at the launch were to extend access to higher education, increase participation in higher education, examine the potential of communication technologies for education, and increase public awareness of higher education (Synergy Communications, 1992c). Yet, what did the 'implementation pathway' achieve? Did the OLI change the profile of higher education in Australia? An assessment can be made by taking Minister Baldwin's statement of aims from the launch of the TVOLP, and comparing these in brief with the findings of the research (*Figure 8.2*):

The shortcomings of the OLI became obvious on examination of its implementation strategies (Chapters 4–7). Arguably, the component organisations of the OLI attempted revolutionary change rather than evolutionary development. Policy development outpaced organisational change, and policies tended to be instrumentalist, founded on the regulation of key inputs and outputs, namely fees, admissions and standardised subject offerings. Furthermore, the Initiative did not attempt to build on Australia's history and experience in dual mode delivery, which might have encouraged greater support from the distance education community. According to Calvert (2001), the government strategy was to use distance education as a wedge to drive technology into the universities, while at the same time promoting greater access to educational services. The student market, however, was more concerned with flexibility and educational value. Rather than transforming the higher education sector, the OLI was itself transformed, becoming less entrepreneurial, and more commercial in focus.

During its development from 1990–7, there was an observable gulf between policy objectives and the needs of the student market. Whereas the market valued educational flexibility and student-centredness, the organisation as a whole focussed on restricted interpretations of access, equity and the

harnessing of new technologies to these ambitions: more access to more students at lower cost. The OLI was therefore only marginally post-Fordist, motivated more by a perceived need for mass-provision and exercising an undifferentiated awareness of student needs. Its unique brokerage structure and farsighted concept of electronic delivery did not bring substantial innovation and educational change, rather a return to well-established practices, exacerbated by an emphasis on course delivery over flexibility. Brokerage was a workable, but relatively ineffective mechanism for achieving heightened competition in the delivery of higher education. Efforts by providers to offer additional student support and flexible learning options received only limited financial support. Many university providers were left grappling with a conflict between student needs and OLA organisational priorities, the latter enjoying higher levels of financial support. These tensions were most apparent in the technology arm of the Initiative, Open Net, when in the transition from pilot project to full service, the educational focus was lost. Open Net offered a subsidised internet service to rural students, but did not provide adequate educational resources, and was therefore neither financially nor educationally viable.

The OLI intruded on the monopoly of the DECs, and forced a restructuring of distance education (Jakupec, 1996). It was not however, an abandonment of the underlying principles of the DEC system, but a shift in emphasis involving important refinements. Where the DEC system limited the number of institutions, which benefited from distance education, the OLI encouraged all universities to participate through competitive tendering. Where the DEC system attempted to consolidate distance education activities on a state-by-state basis, the OLI promised consolidation on a national basis. In addition, where the DECs were essentially self-managed through NDEC, the OLI was conceived as a commercial venture, centrally managed outside the university system, and driven by government policy.

The pattern of systemic diversity within the UNS was not substantially influenced by the OLI. This was partially the result of the dissolution of the binary divide, which Maling & Keepes (1998) argue, led to a convergence within the higher education system, whereby the definitions and expectations of universities were developed with reference to the older, more elite

	Achievements	Shortcomings
Access and equity	Improved levels of access	Student support for disadvantaged students inadequate
Participation	Attracted some 20,000 unit enrolments per year	Growth in student numbers was not subsequently sustained (1997–2002)
Communication technologies	Use of broadcast TV: a first in Australia Encouraged the use of advanced technologies in universities	Other technologies such as online learning and electronic student support were not as successful
Public awareness	Brought OLI and OLA to public attention through TV, advertising and the employment of high profile leaders	OLI under performed, i.e. too many claims made for it that were not realised.

Figure 8.2 The OLI: a balance sheet

institutions. Marginson (1998) concurs with this finding, suggesting that institutions remained in tiers of status, based on their former position within the binary divide. Established universities occupied positions of higher status, subject to less competitive pressure and unwilling to relax credit and entry standards. Meanwhile, the newer universities were under greater competitive pressure, more responsive to the coercion of government funding, and inclined towards non-traditional, niche and 'knowledge' markets. When the OLI was established, it therefore found its greatest support amongst existing distance education providers, comprising the newer Australian universities (King, 1992b).

That is to say, the OLI could not claim to be a paradigm shift in higher education, but it did achieve a new level of collaboration amongst Australian universities. Just-in-time practices promoted high levels of inter-institutional integration between OLA and service providers. Naturally, the tendering process created a degree of competitiveness amongst providers, but this generally did not translate into high levels of product differentiation and customer flexibility. Further, the brokerage system was often little more than a strategic alliance between the participating universities and OLA, a hedge against future Federal Government policy, which threatened to further regulate and rationalise distance education provision.

The OLI was devised and led by the ambitions of policy makers whose approach was focussed on provision at the national level. It developed from a genuine concern for the public good, but was poorly informed of student needs and educational realities, and for some, blinded by the pervasive rhetoric of the 'information society'. The large injection of public funds assured the OLI's development and growth. Its long-term survival, however, was less certain when these funds were expended and its market diminished:

> Dreams holy grails and myths drove the OLI. It was full of it. It was like a balloon full of hot air, which eventually got pricked... [We] were seduced by the government, in the same way that, people were seduced by the dot com period five years later.
>
> (Interview with John Mitchell, 2002)

The 'dream' of policy makers was to transform the higher education sector, to make it more accountable to national priorities – cheaper and more accessible. The OLI was to be a catalyst in the transformation, a new system, based on lifelong learning principles, in which students could enter and exit at will, transfer between institutions and sectors, no matter their geographic, social or financial position. The 'holy grail' was the belief in the power of technology to ameliorate problems of distance. The prevailing government view was if students could be provided access, then isolation and inadequate communications could be overcome. Technology policy decisions failed to take full account of educational issues and pushed the cost of participation (hardware purchase and connection) onto the student. The 'myth' was that there was strong student demand, at the same student price as similar offerings by universities and sustainable at one-quarter of the institutional revenue. The course offerings of OLA were therefore cheaper for the government to provide, but were the same cost for students enrolling in other Australian universities, making it difficult to market both to students and to potential provider institutions.

Hence, throughout its development, the OLI aimed more at achieving government goals, than accommodating to the needs of students and educational providers. Documentation in previous chapters, suggests that it was not strongly innovative, educationally or technologically. It did

however, boast some significant achievements. The OLI brought the majority of Australia's universities together, for the first time into a collaborative arrangement. It successfully promoted and achieved a level of credit transfer across the higher education sector. The Initiative was a boon to the practice of distance education, bringing ODE into the limelight, and legitimising and promoting ODE activities. University administrators, governments and the general public recognised the benefits of open learning, even if its full potential was not realised by the OLI. Furthermore, despite its limited success in implementing new interactive technologies, the OLI became a trigger for universities to take online learning more seriously.

Early in 1997, OLA faced significant restructuring of the Initiative and of its component organisations. In January 1997, after the OLA took control of Open Net, consortium members were invited to become shareholders of the reconstituted OLA (Department of Education Science and Training, 2002c). The OLTC was later taken over by Education.au (the Registrar for the Edu.au namespace) (Education.Au, 1998), leaving the OLA as the remaining major component of the Initiative. As part of this reformation, the former CEO of the PAGE consortium, Adjunct Professor Beck was appointed CEO of OLA in August 1998. Subsequently negotiations took place between OLA and PAGE and in July 1999 the companies were merged, consolidating the two ventures (Open Learning Australia, 2000).

OLA survived this period of uncertainty, evolving into a vibrant organisation and providing educational opportunities to thousands of Australians. Seven universities, including a number of the former DECs, now jointly own the OLA, and some 32 Australian universities and other educational institutions contribute more than 700 units which are offered at all post-secondary levels (Open Learning Australia, 2002).

The reformed OLA has been successful in rebuilding its enrolments to earlier levels. In 2001, for example, 7942 students enrolled in OLA units,[23] marginally down from 8267 students in 1997. Annual EFTSU levels show a similar trend, declining in the late 1990s, but recovering to the 1997 level in 2001 (2,420 EFTSU) (Department of Education Science and Training, 2002a;

[23] Calculated over four consecutive Study Periods, rather than over a calendar year.

Department of Employment Education Training and Youth Affairs, 1997; Department of Employment Training and Youth Affairs, 2002). Today, OLA provides a leadership role in establishing a coordinated approach to open content and data exchange standards and offers open entry opportunities, alternative degree pathways and student centred approaches to learning (Beck, 2002; Beck et al., 2002). It continues to defend the principles of openness and equity that guided its establishment 10 years ago, but within a framework of commercial viability.

The OLI in its formative years was in many ways ahead of its time, attempting to harness new technologies before they had matured and before the Australian public was ready to benefit from them. From an ambitious start, it quickly captivated public imagination, and successfully compelled universities to reassess conventional practice. It inspired a new enthusiasm for reform, but the course of its development was interrupted by a change in government, and a reassessment of its progress. This revealed the shortcomings of earlier policy, over ambitious and inadequately grounded in the student market. Virtual universities and borderless education came later, but the OLI with all its 'dreams holy grails and myths' was a project inspired by vision. It should continue to be remembered as a remarkable experiment in Australian educational history, one that has engaged the energy of some of Australia's most talented leaders and educators. The challenge, which the OLI faced, was one that continues to plague government and university administrators alike, namely, to successfully combine education policies, new organisational structures and new technologies to ensure access and equity for all higher education students.

In 1990, Richard Johnson described open learning as 'an *approach* rather than a system or technique' (Johnson, 1990, p4, italics added). During the period covered by this thesis however, the Federal Government created an open learning *system*, a complex of organisations that re-shaped distance delivery across Australia. Substantial funding was offered to ensure that particular policies and practices would result in an Open Learning Initiative for all Australians. There can be no doubt that the OLI, through its component organisations, achieved a perceptible shift in Australia's distance education profile. Yet, despite strong government support, the OLI failed to

consolidate distance education provision, and did not overcome perceived inefficiencies and duplication of distance education services. Instead, the OLI persuaded universities to establish their own flexible learning initiatives, stimulated by burgeoning adult markets and new technologies. By proxy, the OLA helped refurbish a new appreciation of integrated distance education within the universities. This shift, evident in the university sector, was mirrored, even stimulated by OLA.

By 1996, perceptions of Open Learning were changing to accommodate societal, technological and market changes. The threat of rationalisation which had earlier driven the DECs to join the OLI as consortium members evaporated. In January 1997, seven of the consortium members became joint shareholders of OLA and assumed direct control over the venture. This also signified a diminished government role in funding, regulation and leadership, and precipitated a crisis in funding in the face of inter-institutional competition.

The OLI had come full circle. It began its organisational existence promoting the social equity goals of access and universal education. By the end of the period of this research however, the OLA (the remaining significant component of the OLI) had begun to recognise the need to commercialise its activities and to target the lucrative professional training market. That is to say, the principles of openness, universality and democratic provision had been necessarily compromised as the OLA recognised financial imperatives, the need to tap new sources of income in specialised markets with fee-paying students, but paralleled by an increasing acknowledgement of the importance of a student-centred approach to open learning. In short, this was a shift from a Fordist organisational strategy to a form of post-Fordism within the Open Learning Initiative, a shift from open markets of mass production to the segmented markets of flexible production, a shift in open learning towards more flexible learning.

Appendix A: Archival sources

The following table summarises the archival sources which were consulted. Three organisations gave permission to access, and make reference to their archives: Monash University, Open Learning Agency of Australia Pty Ltd (OLA) and Open Net Pty Ltd.

In cases where source documents were numbered in the archive, these are indicated as folio numbers in the reference list. In some cases, the + mark is added to the folio number to indicate a document which was unnumbered, but part of a series. For example, 'folio 3+' would refer to an unnumbered document which was archived between folios 3 and 4.

Many archival sources did not have pagination. Citations for such references may therefore appear without a page reference.

Name of Archive	Name of File	Code used in list of references
1991 Archives (Monash)	0104	MU91-0104
	0792	MU91-0792
	1159	MU91-1159
	1604	MU91-1604
1992 Archives (Monash)	0034	MU92-0034
	0221	MU92-0221
	0303	MU92-0303
	0538	MU92-0538
	0769A	MU92-0769A
	0769B	MU92-0769B
	0920	MU92-0920
	1150	MU92-1150
	1243	MU92-1243
	1574	MU92-1574
1993 Archives (Monash)	0393	MU93-0393
	1236	MU93-1236
	1784	MU93-1784
1994 Archives (Monash)	1304	MU94-1304

Table continued overleaf

Name of Archive	Name of File	Code used in list of references
Open Learning Australia	Correspondence	OLA-CORRESPONDENCE
	Forms	OLA-FORMS
	General Management	OLA-GM
	OLESS	OLA-OLESS
Open Net (Held by OLA)	Unfiled	OLA-ON
	Board Of Directors	OLA-ON-BOARD
	(Press) Clippings	OLA-ON-CLIPPINGS
	Correspondence	OLA-ON-CORRESPONDENCE
	Courses	OLA-ON-COURSES
	General	OLA-ON-GENERAL
	Secretarial File	OLA-ON-SECRETARIALFILE
Open Net (Held by Open Net)	Unfiled	ON
	Brochures	ON-BROCHURES
	Correspondence	ON-CORRESPONDENCE
	Mailout	ON-MAILOUT
	Reports	ON-REPORTS
	Strategic Plans	ON-STRATEGICPLANS

Appendix B: Relevant Commonwealth Ministries

50. *Ministry of Robert Hawke (Prime Minister, Labor Party)*
13.12.1984–24.7.1987

Selected Senior Ministers	*Selected Junior Ministers*
Susan Ryan (Minister for Education)	John Dawkins (Minister Assisting the Prime Minister for Youth Affairs)
Ralph Willis (Minister for Employment and Industrial Relations)	

51. *Ministry of Robert Hawke (Prime Minister, Labor Party)*
24.7.1987–4.4.1990

NB: A 'super-portfolio' of Employment, Education and Training was created

Selected Senior Ministers	*Selected Junior Ministers*
John Dawkins (Minister for Employment, Education and Training)	Clyde Holding (to 19.1.88) (Minister for Employment Services and Youth Affairs)
	Peter Duncan (from 19.1.88) (Minister for Employment and Education Services)

52. *Ministry of Robert Hawke (Prime Minister, Labor Party)*
4.4.1990–20.12.1991

NB: From May 1990–March 1993 a junior ministry for higher education was held by Peter Baldwin

Selected Senior Ministers	*Selected Junior Ministers*
John Dawkins (Minister for Employment, Education and Training)	Peter Baldwin (to 7.5.90) (Minister for Employment and Education Services)
	Peter Baldwin (from 7.5.90) (Minister for Higher Education and Employment Services)

53. *Ministry of Paul Keating (Prime Minister, Labor Party)*
20.12.1991–27.12.1991

NB: Paul Keating became Prime Minister following a successful leadership challenge.

Selected Senior Ministers	*Selected Junior Ministers*
John Dawkins (Minister for Employment, Education and Training)	Peter Baldwin (Minister for Higher Education and Employment Services)

54. *Ministry of Paul Keating (Prime Minister, Labor Party)*
27.12.1991–24.3.1993

Selected Senior Ministers	*Selected Junior Ministers*
Kim Beazley (Minister for Employment, Education and Training)	Peter Baldwin (Minister for Higher Education and Employment Services)

Table continued overleaf

55. *Ministry of Paul Keating (Prime Minister, Labor Party)*
24.3.1993–11.3.1996

NB: The junior ministry for higher education previously held by Baldwin was dropped

Selected Senior Ministers	*Selected Junior Ministers*
Kim Beazley (to 23.12.93) (Minister for Employment, Education and Training)	Ross Free (Minister for Schools, Vocational Education and Training)
Simon Crean (from 23.12.93) (Minister for Employment, Education and Training)	
Peter Baldwin (Minister for Social Security)	

56. *Ministry of John Howard (Prime Minister, Liberal National Coalition)*
11.3.1996–21.10.1998

NB: The new Liberal/National Government began its term with budget cuts to Education

Selected Senior Ministers	*Selected Junior Ministers*
Amanda Vanstone (to 9.10.97) (Minister for Employment, Education, Training and Youth Affairs)	David Kemp (to 9.10.97) (Minister for Schools, Vocational Education and Training)
David Kemp (from 9.10.97) (Minister for Employment, Education, Training and Youth Affairs)	Chris Ellison (from 9.10.97) (Minister for Schools, Vocational Education and Training)

Source: Parliament of Australia (2001) and Carr (2002)

References

Adenso-Diaz, B., & A. F. Canteli. (2001). Business process reengineering and university organisation. *Journal of Higher Education Policy and Management*, 23 (1), pp. 63–73.

Aitkinson, R. (1994). *Untitled. Catalogue reference: 1638.* Newsgroup posting: link@wombat.anu.edu.au. 22 November (Archive reference: OLA-OLESS).

Anwyl, J., M. Powles, & K. Patrick. (1987). *Who uses external studies? Who should?* Melbourne: Commonwealth Tertiary Education Commission Evaluations and Investigations Program, Centre for the Study of Higher Education, University of Melbourne.

Apple, M., & S. Jungck. (1990). You don't have to be a teacher to teach this unit: teaching, technology, and gender in the classroom. *American educational research journal*, 27 (2), pp. 227–251.

Argyris, C., & D. Schon. (1978). *Organizational learning: a theory of action perspective.* Reading, Mass: Addison Wesley.

Asheim, B. T. (2000). *The learning firm in the learning region: workers participation as social capital.* Paper presented at the DRUID's Summer 2000 Conference, June 15–17, Denmark.

Ashenden, D., & R. Costello. (1984). *Can further investigation of 'open' educational provision be justified?* Canberra: Department of Education and Youth Affairs.

Atkinson, E., J. Atkinson, & I. Conboy. (1996a). *Evaluation of the Open Learning Initiative: Tertiary access through a national brokerage agency: Technical report A.* Melbourne: Centre for the Study of Higher Education, The University of Melbourne.

Atkinson, E., J. Atkinson, I. Conboy, A. Dodds, & C. McInnis. (1996b). *Evaluation of the Open Learning Initiative: tertiary access through a national brokerage agency: final report: January 1996.* Melbourne: Centre for the Study of Higher Education, The University of Melbourne.

Atkinson, E., B. Clarke, I. Conboy, & G. Trebilco. (1995). *Evaluation of the Open Net pilot project–phase two. Final report: OL study period 4: December 1994–February 1995.* Melbourne: Centre for the Study of Higher Education, The University of Melbourne.

Atkinson, E., G. Trebilco, & I. Conboy. (1994). *Evaluation of the OLESS Pilot Project–Phase 1: SP3: Mid-phase report.* Melbourne: Centre for the Study of Higher Education, The University of Melbourne.

Australian Broadcasting Corporation. (1979). *The role of ABC educational broadcasting: a report of a sub-committee of the ABC Federal Education Broadcasts Advisory Committee.* Australian Broadcasting Corporation.

Australian Broadcasting Corporation. (1995). *ABC submission to the evaluation of the Open Learning Initiative.* Unpublished report sent as a Request for Information to the Evaluation of the Open Learning Initiative. Australian Broadcasting Commission. (Archive reference: OLA-CORRESPONDENCE).

Australian Bureau of Statistics. (2001). *Australia now: a statistical profile.* Retrieved 10 December, 2001, from *http://www.abs.gov.au/ausstats/abs@.nsf/w2.6.1?OpenView* (electronic document).

Australian Council of Libraries. (1992). *ACLIS / ALIA TVOL Recommendations.* Unpublished report. 7 July (Archive reference: MU92-0769A FOLIO 28a).

Australian Council of Trade Unions. (1987). *Australia reconstructed: A report by the mission members to the Australian Council of Trade Unions and the Trade Development Council mission to Western Europe.* Canberra: AGPS.

Australian Education Council. (1991). *Feasibility study for a National Body to facilitate/coordinate national communications and related Open Learning techniques: terms of reference for consultancies 1–6.* Adelaide: Australian Education Council Working Party on a National Education Communications Framework.

Australian Universities Teaching Commission. (2002). *AUTC background.* Retrieved 12 August, 2002, from *http://www.autc.gov.au/ba/ba_hi.htm* (electronic document).

Australian Vice-Chancellors' Committee. (1993). *Credit transfer principles and guidelines on recognition of prior learning.* Canberra: AVCC.

Australian Vice-Chancellors' Committee. (1994). *AVCC takes issue with former minister's views on higher education funding principles.* Media release. 6 May (Archive reference: MU93-1784 FOLIO 51).

Australian Vice-Chancellors' Committee. (1996). *Survey of applicants for undergraduate higher education courses.* Canberra: AVCC.

Badham, R., & J. Mathews. (1989). The new production systems debate. *Labour and Industry,* 2 (2), pp. 194–246.

Baldwin, P. (1990). *Budget continues: higher education expansion – new places and buildings in 1993.* Media release. 21 August (Archive reference: MU91-0104 FOLIO 2).

Baldwin, P. (1991a). *Television Open Learning Project.* Media Release B6/92. Issued on the day of the Launch of the Television Open Learning Project. The Office of the Minister for Higher Education and Employment Services. 13 May (Archive reference: MU92-0034 FOLIO 36).

Baldwin, P. (1991b). *Television Open Learning Project expands with $1 million funding boost.* Media Release B24/91. The Office of the Minister for Higher Education and Employment Services. 13 May (Archive reference: MU91-0104 FOLIO 23).

Baldwin, P. (1991c). *Untitled. Catalogue reference: 740.* Personal communication to Mal Logan. 20 March (Archive reference: MU91-0104 FOLIO 101–j).

Baldwin, P. (1991d). *Higher education: quality and diversity in the 1990s: policy statement by the Hon. Peter Baldwin, MP, Minister for Higher Education and Employment Services.* Canberra: AGPS.

Baldwin, P. (1992a). *Speech: Higher Education Funding Amendment Bill (No. 2) 1992: Second Reading, p2625: Minister for Higher Education and Employment Services. 4 November.*, from *http://www.aph.gov.au/hansard/hansreps.htm* (electronic document).

Baldwin, P. (1992b). *Untitled. Catalogue reference: 1269.* Personal communication to Mal Logan. 15 September (Archive reference: MU92-1150 FOLIO 3).

Baldwin, P. (1993). *Untitled. Catalogue reference: 1290.* Media release: new opportunities for university study. 18 January (Archive reference: MU92-1574 FOLIO 9).

Baldwin, P. (1997). *The lighthouse: towards a Labor vision for the learning society.* Retrieved 11 July, 1997, from *http://www.labor.net.au/campaigns/education/* (electronic document).

Basgen, B., & A. Blunden. (2002). Fordism. Entry in the *Encyclopaedia of Marxism.* Retrieved 1 March, 2002, from *www.marxists.org* (electronic document).

Bates, T. (1995). *Technology, open learning and distance education.* London: Routledge.

Bates, T. (1997). *Restructuring the university for technological change,* Accessed 11 March, 2002., from *http://bates.cstudies.ubc.ca/carnegie.html* (electronic document).

Bates, T. (2000a). *Managing technological change: strategies for college and university leaders.* San Francisco: Jossey-Bass.

Bates, T. (2000b). Teaching, learning and the impact of multimedia technologies. *EDUCAUSE Review,* September/October, pp. 39–43.

Bates, T. (2001). The continuing evolution of ICT capacity: the implications for education. In G. Farrell (Ed.), *The changing faces of virtual education.* Vancouver: The Commonwealth of Learning.

Beazley, K. (1993). *Electronic open learning network report.* Media release. 23 June (Archive reference: MU93-0393 FOLIO 41c).

Beck, J. (2002). *Submission to the Higher Education Review Consultation Process: response to discussion papers: submission 132.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Beck, J., J. Baker, A. Radford, & J. Costigan. (2002). *The business of Open Learning.* Paper presented at the Global Summit 2002, The Global Summit of Online Knowledge Networks, Adelaide Convention Centre, 4–5 March 2002.

Bell, D. (1973). *The coming of post-industrial society.* New York: Basic Books.

Bennett, T. (1991a). *Untitled. Catalogue reference: 751.* Personal communication to Anthony Pritchard. 4 June (Archive reference: MU91-0792 FOLIO 4).

Bennett, T. (1991b). *Untitled. Catalogue reference: 857.* Personal communication to Anthony Pritchard. 19 November (Archive reference: MU91-1604 FOLIO 9b).

Bennett, T. (1992a). *TV Open Learning: possible futures*. Unpublished report. Griffith University. 4 February (Archive reference: MU92-0303 FOLIO 13).

Bennett, T. (1992b). *Untitled. Catalogue reference: 1031*. Personal communication to Anthony Pritchard. Includes untitled report (attached). 20 May (Archive reference: MU92-0538 FOLIO 14).

Birnbaum, R. (2000). The life cycle of academic management fads. *The Journal of Higher Education*, 71 (1), pp. 1–16.

Bishop, R. (1992a). *Final report on the corporate support consultancy*. Unpublished report. 20 February (Archive reference: MU92-0221 FOLIO 3).

Bishop, R. (1992b). *TV Open Learning launch*. Brochure to prospective corporate sponsors. 23 January (Archive reference: MU92-0221 FOLIO 3).

Bishop, R. (1992c). *Untitled. Catalogue reference: 921*. Personal communication to Anthony Pritchard. 16 January (Archive reference: MU92-0034 FOLIO 19).

Black, L. (1991a). *Untitled. Catalogue reference: 882*. Personal communication to Anthony Pritchard. 6 December (Archive reference: MU91-1604 FOLIO 28c).

Black, L. (1991b). *Untitled. Catalogue reference: 884*. Personal communication to Gavin Moodie & Anthony Pritchard. 9 December (Archive reference: MU91-1604 FOLIO 29).

Black, L. (1992a). *Media report*. (Collected newspaper articles by Synergy Communications). Unpublished report. 9 March (Archive reference: MU92-0221 FOLIO 19).

Black, L. (1992b). *Untitled. Catalogue reference: 946*. Media report (Collected newspaper articles). 18 February (Archive reference: MU92-0034 FOLIO 37).

Black, L. (1992c). *Untitled. Catalogue reference: 970*. Media report (Collected newspaper articles). 5 March (Archive reference: MU92-0221 FOLIO 14).

Blake, C. (1992a). *Untitled. Catalogue reference: 1187*. (VC, Southern Cross University) Personal communication to Anthony Pritchard. 21 July (Archive reference: MU92-0769A FOLIO 50a).

Blake, C. (1992b). *Untitled. Catalogue reference: 1201*. Personal communication to Mal Logan. 23 July (Archive reference: MU92-0769B FOLIO 59).

Brian Sweeney and Associates. (1991). *Evaluating the potential of an OU: a market research proposal*. Unpublished report. 24 June (Archive reference: MU91-0792 FOLIO 11).

Broadband Services Expert Group. (1994a). *Demand for broadband services: consultancy reports prepared for the Broadband Services Expert Group. Canberra:* Broadband Services Expert Group.

Broadband Services Expert Group. (1994b). *Networking Australia's future: the final report of the Broadband Services Expert Group*. Canberra: AGPS.

Broadband Services Expert Group. (1994c). *Networking Australia's future: the interim report of the Broadband Services Expert Group: July, 1994*. Canberra: AGPS.

Brown, M. (1993). *Issues for the Open Learning network*. 25 April (Archive reference: OLA-OLESS).

Brown, P. (1992a). Fears over Open Learning standards. *The Australian*, 22 July, p. 61.

Brown, T. (1992b). *Untitled. Catalogue reference: 1116*. Chair, Social Work, Monash University. Personal communication to Mal Logan. 29 June (Archive reference: MU92-0769A FOLIO 5b+).

Bryman, A. (1989). *Research methods and organizational studies*. London: Routledge.

Bucknell, C. (1992). Education pitches for UHF 31. *Broadcast Engineering News*, pp. 1–3.

Caladine, R. (1993). *Overseas experience in non-traditional modes of delivery in higher education using state-of-the-art technologies: a literature review*. Canberra: AGPS.

Calvert, J. (2001). Deakin University: going online at a dual mode university. *International Review of Research in Open and Distance Learning*, 1 (2).

Campion, M. (1993). Post-Fordism: neither panacea nor placebo. *Open Learning*, 8 (2), pp. 59–60.

Campion, M. (1996a). *Contemporary debates about bureaucracy: implications for dual mode universities*. Paper presented at the HERDSA 1996 Conference. Perth, Western Australia, 8-12 July.

Campion, M. (1996b). Open learning, closing minds. In T. Evans & D. Nation (Eds.), *Opening education: policies and practices from open and distance education*. London: Routledge, pp. 147–161.

Campion, M. (2001). Preliminary groundwork for the new great debate. *Open Learning*, 16 (1), pp. 69–83.

Campion, M., & P. Guiton. (1991). Economic intrumentalism and integration in Australian external studies. *Open Learning*, 6 (2), pp. 12–20.

Campion, M., & M. Kelly. (1988). Integration of external studies and campus based education in Australian higher education. *Distance Education*, 9 (2), pp. 171–201.

Campion, M., & W. Renner. (1992). The supposed demise of Fordism: implications for distance education and higher education. *Distance Education*, 13 (1), pp. 7–28.

Campion, M., & W. Renner. (1995). Goal setting, domestication and academia: the beginnings of an analysis. In J. Smyth (Ed.), *Academic work: the changing labour process in higher education*. Buckingham: Open University Press, pp. 74–83.

Carr, A. (2002). *Ministries: 1901–2002*. Retrieved January, 2003, from *http://psephos.adam-carr.net/au/index4-2-7-4.html* (electronic document).

Carr, J. (1993). *Untitled. Catalogue reference: 1634*. Personal correspondence to Tony Pritchard. 4 December (Archive reference: OLA-OLESS).

Carr, J. (1995a). *Amendments to board meeting minutes*. Circular communication to Open Net Board of Directors. 26 July (Archive reference: OLA-ON-CORRESPONDENCE).

Carr, J. (1995b). *Establishment of Education Network Australia (EDNA).* Personal communication to Mal Logan. 4 September (Archive reference: MU94-1304 FOLIO 4).

Carvin, A. (2000). More than just access: fitting literacy and content into the digital divide equation. *EDUCAUSE Review,* November/December, pp. 38–47.

Cas, R. (1992). *Untitled. Catalogue reference: 1015.* Personal communication to Mal Logan. 1 May (Archive reference: MU92-0538 FOLIO 3).

Chick, J. (1991). *Untitled. Catalogue reference: 749.* Personal communication to Anthony Pritchard. 31 May (Archive reference: MU91-0792 FOLIO 2).

Chipman, L. (1991). *Untitled. Catalogue reference: 773.* Personal communication to Anthony Pritchard. 20 July (Archive reference: MU91-0792 FOLIO 27).

Chipman, L. (2001). Concept of a university in the 21st century. In DETYA (Ed.), *Online learning in a borderless market: proceedings of a conference held 15-16 February, 2001 at Griffith University, Gold Coast Campus.* Canberra: Department of Education, Training and Youth Affairs, Evaluations and Investigations Program, Higher Education Division.

Clegg, S. (1990). *Modern organizations: organization studies in the postmodern world.* London: Sage.

Cochrane, T., H. Ellis, & S. Johnston. (1993). *Computer based education in Australian higher education: a case study at the Queensland University of Technology.* Canberra: Department of Employment, Education and Training, Higher Education Division, Evaluations and Investigations Program, AGPS.

Collis-George, N. (1991a). *Evaluation of the TV Open Learning Project.* Personal communication to Anthony Pritchard. 21 November (Archive reference: MU91-1604 FOLIO 14f).

Collis-George, N. (1991b). *Untitled. Catalogue reference: 906.* Personal communication from ABC TV to Anthony Pritchard. 30 December (Archive reference: MU91-1604 FOLIO 43).

Commonwealth of Australia. (1993). *Agreement between Commonwealth of Australia and Open Learning Agency of Australia Pty. Limited in relation to an Open Learning Initiative* Canberra. 18 January (Archive reference: OLA-GM).

Commonwealth of Australia. (1994). *Creative Nation: Commonwealth Cultural Policy, October 1994.* Retrieved 12 August, 1999, from *http://www.nla.gov.au/creative.nation/contents.html* (electronic document).

Commonwealth of Learning. (2000). *An introduction to open and distance learning.* Retrieved 24 October, 2001, from *http://www.col.org/odlintro/ODL%20Intro.pdf* (electronic document).

Commonwealth Tertiary Education Commission. (1986). *Review of efficiency and effectiveness in higher education.* Canberra: Canberra.

Commonwealth Tertiary Education Commission. (1987). *Report on 1988–90 triennium.* Canberra: CTEC.

Communication Solutions Australia. (1995a). *Internet education service starts.* Media release Sydney. 9 May (Archive reference: OLA-ON-CORRESPONDENCE).

Communication Solutions Australia. (1995b). *Media coverage of the official Open Net launch on 19th May 1995: Press clippings.* Communication Solutions Australia North Sydney. June 5 (Archive reference: ON-REPORTS).

Communication Solutions Australia. (1995c). *Open Net Pty Ltd: media coverage of the official Open Net launch on 19th May 1995.* Communication Solutions Australia North Sydney. June 12 (Archive reference: ON-REPORTS).

Cowie, A. (2000). *An introduction to the services and structure of AARNET.* Sydney: NSWRNO.

Creagh, I. (1994a). *Meeting of Assessment Panel with the OLESS Consortium.* Personal communication to Tony Pritchard. 10 May (Archive reference: OLA-OLESS).

Creagh, I. (1994b). *Meeting of the assessment panel with the OLESS consortium.* Minutes prepared by Department of Employment Education and Training: Innovations, Access and Equity Section. 10 May (Archive reference: OLA-OLESS).

Creagh, I. (1995). *Agreement between the Commonwealth and Open Net.* Personal communication to Brian Johns. 3 March (Archive reference: OLA-ON-CORRESPONDENCE).

Creagh, I. (1996a). *Diploma in business management.* Personal communication to Anthony Pritchard. 5 July (Archive reference: OLA-ON-CORRESPONDENCE).

Creagh, I. (1996b). *Proposed OLA-Open Net merger: guidelines for preparation of proposal outline.* Briefing paper for Mal Logan, Peter Spearritt and Terrence Cutler. 11 March (Archive reference: OLA-ON-CORRESPONDENCE).

Creagh, I. (1996c). *Untitled. Catalogue reference: 623.* Personal communication to Ronald Watts. Official letter from DEET. 22 February (Archive reference: OLA-ON-BOARD).

Crean, S. (1994a). *Education superhighway under construction.* Media release. DEET. 14 September (Archive reference: OLA-ON-GENERAL).

Crean, S. (1994b). *Electronic support service creates nation-wide campus.* Media release by the Minister for Employment, Education and Training. C13/94. 19 April (Archive reference: OLA-ON).

Crean, S. (1994c). *Launching the services of Open Net.* Retrieved 10 January 1998, from *http://www.opennet.net.au/speech/crean.html* (electronic document).

Crean, S. (1994d). *Speech by the Hon Simon Crean, MP at the launch of the Open Learning Electronic Support Service.* Delivered at the Regency Institute of Vocational Educational Education and Training. 14 September (Archive reference: OLA-ON-GENERAL).

Crean, S. (1994e). *Untitled. Catalogue reference: 1636.* Personal communication to Tony Pritchard and Julie Carr. 19 April (Archive reference: OLA-OLESS).

Crean, S. (1995a). *Media release.* DEET, Canberra. 6 April (Archive reference: OLA-ON-CORRESPONDENCE).

Crean, S. (1995b). *Media release: Electronic services go national.* DEET, Canberra. (Archive reference: OLA-ON-CORRESPONDENCE).

Crean, S. (1995c). *Untitled. Catalogue reference: 650.* Personal communication to Terrence Cutler. 14 December (Archive reference: OLA-ON-CORRESPONDENCE).

Crellin, I. (1995). *Problems at Open Net.* Personal communication to Julie Carr. 3 November (Archive reference: OLA-ON-CORRESPONDENCE).

Cressey, P., & M. Kelleher. (1999). *Advances and paradoxes of corporate learning practices.* Paper presented at the FORUM workshop, Learning in Learning Organisations, European Consortium for the Learning Organisation, 25–28 November, Universidad de Evora.

Cressey, P., & M. Kelleher. (2002). *Social partnership and human resource development.* Paper presented at the The ECLO 9th annual conference, 16–18 May, Amsterdam, Netherlands.

Cribb, J. (1992). Open Leaning just the beginning: Baldwin. *The Weekend Australian,* July 11–12, p. 42.

Cruse, I. (1998). *New Labour and modernisation: using change as a resource.* Retrieved July, 2002, from *http://www.psa.ac.uk/cps/1998/cruse.pdf* (electronic document).

Cunningham, S., S. Tapsall, Y. Ryan, L. Stedman, K. Bagdon, & T. Flew. (1997). *New media and borderless education: a review of the convergence between global media networks and higher education.* Canberra: Department of Employment, Education, Training and Youth Affairs.

Cunningham, S., S. Tapsall, Y. Ryan, L. Stedman, K. Bagdon, T. Flew, et al. (2000). *The business of borderless education.* Canberra: Department of Education, Training and Youth Affairs.

Cutler, T. (1996a). *Merger talks.* Personal communication to Mal Logan. 26 February (Archive reference: OLA-ON-CORRESPONDENCE).

Cutler, T. (1996b). *Termination of carriage.* Circular communication to Open Net Board of Directors. 12 April (Archive reference: OLA-ON-CORRESPONDENCE).

Cutler, T. (1996c). *Chairman's report.* Unpublished report. 19 July (Archive reference: OLA-ON-BOARD).

Cutler, T. (1996d). *Selective circulation of documents.* Circular communication to Open Net Board of Directors. 7 August (Archive reference: OLA-ON-CORRESPONDENCE).

Cutler, T. (1996e). *Open Net Pty Ltd.* Personal communication to Amanda Vanstone. 23 September (Archive reference: OLA-ON-CORRESPONDENCE).

Cutler, T. (1996f). *Resolving the stalemate.* Circular communication to Open Net Board of Directors. 23 September (Archive reference: OLA-ON-CORRESPONDENCE).

Cutler, T. (1996g). *Resignation from Board.* Personal communication to Amanda Vanstone. 24 October (Archive reference: OLA-ON-CORRESPONDENCE).

Daniel, J. (1996). *New kids on the box: distance education enters its third generation.* Paper presented at the Third International Interactive Multimedia Symposium, 1-9. Perth, Western Australia, 21-25 January. Promaco Conventions.

Daniel, J. (1997). *The mega-universities and the knowledge media.* London: Kogan Page.

Daniels, W. L. (1991). *Untitled. Catalogue reference: 1331.* Personal communication to Mal Logan. Includes attachments. 20 May (Archive reference: MU91-0104 FOLIO 23).

Dassbach, C. (1994). Where is North American automobile production headed? low-wage lean production. *Electronic Journal of Sociology,* 1 (1).

Davies, S. (1996). *Positioning of Open Net and OLA brand names.* Personal communication to Anthony Pritchard. 15 November (Archive reference: OLA-ON-CORRESPONDENCE).

Dawkins, J. S. (1987). *Higher education: a policy discussion paper* [Green Paper]. Canberra: AGPS.

Dawkins, J. S. (1988). *Higher education: a policy statement* [White Paper]. Canberra: AGPS.

Dawkins, J. S. (1992). *Budget speech: appropriation bill (no 1) 1992–93: Second reading.* Canberra: Speech by The Hon J.S. Dawkins (Fremantle, Treasurer, Australian Labor Party, Government). Page 54. House Hansard, House of Representatives, Parliament of Australia.

Deakin University. (1993). *Electronic facilities network to enhance tertiary open learning services.* Canberra: Department of Employment, Education and Training, Higher Education Division, Occasional Papers Series. Authored in collaboration with Strategic Technology Management Pty Ltd.

Deakin University. (2002). *Education at a distance.* Retrieved 8 October, 2002, from *http://www.research.deakin.edu.au/research_stories/research_story.php?s=12* (electronic document).

Department of Education Science and Training. (2002a). *Higher education report for the 2002–2004 triennium: student fees, contributions and loans,* from *http://www.dest.gov.au/highered/he_report/2002_2004/html/2_2.htm#t2_10* (electronic document).

Department of Education Science and Training. (2002b). *Higher education review: at the crossroads: a review of Australian higher education.* Retrieved 18 November, 2002, from *http://www.dest.gov.au/crossroads/* (electronic document).

Department of Education Science and Training. (2002c). *Open Learning Initiative.* Retrieved 6 November, 2002, from *http://www.dest.gov.au/highered/programmes/oli.htm* (electronic document).

Department of Employment Education and Training. (1990). *A fair chance for all: higher education that's within everyone's reach.* Canberra: AGPS.

Department of Employment Education and Training. (1991). *Open learning project.* Personal communication to Mal Logan. 19 February (Archive reference: MU91-0104 FOLIO 10).

Department of Employment Education and Training. (1993a). *Meeting with the OLAA*. Minutes of meeting between OLA and Bill Mutton. 23 June (Archive reference: MU93-0393 FOLIO 50).

Department of Employment Education and Training. (1993b). *National report on Australia's higher education sector*. Canberra: Australian Government Publishing Service.

Department of Employment Education and Training. (1993c). *OLI: The establishment of an electronic network to provide student support services for OL*. Official letter to Higher Education Institutions. Includes attachment: 'Request for initial proposals (RFIP)'. 20 July (Archive reference: MU93-0393 FOLIO 47).

Department of Employment Education and Training. (1994). *Report of the Joint DEET/HEC Working Group: resource allocation in higher education – report on submissions and consultations*. Canberra: Department of Employment, Education and Training, Higher Education Council.

Department of Employment Education and Training. (1995a). *Commonwealth submission to the evaluation of the Open Learning Initiative*. Unpublished report sent as a Request for Information to the Evaluation of the Open Learning Initiative (Circulated to Pritchard). (Archive reference: OLA-CORRESPONDENCE).

Department of Employment Education and Training. (1995b). *Higher education participation rates in Australia*. Canberra: AGPS.

Department of Employment Education Training and Youth Affairs. (1997). *Selected higher education student statistics, 1997: Appendix 1*, from *http://www.dest.gov.au/highered/statistics/students/student1997.pdf* (electronic document).

Department of Employment Training and Youth Affairs. (2001a). *Higher education students time series tables, 2000: selected higher education statistics*, from *http://www.dest.gov.au/highered/statpubs.htm* (electronic document).

Department of Employment Training and Youth Affairs. (2001b). *Online learning in a borderless market: proceedings of a conference held 15–16 February 2001 at Griffith University Gold Coast Campus*. Canberra: Department of Education, Training and Youth Affairs, Evaluations and Investigations Program.

Department of Employment Training and Youth Affairs. (2002). *Students 2001: selected higher education statistics: appendix 1*, from *http://www.dest.gov.au/highered/statistics/students/01/tables/appendix.xls* (electronic document).

Dhanarajan, G. (1998). *International and inter-institutional collaboration in distance education*. Paper presented at the International conference: Learning together – collaboration in distance education, 20–22 April, Curtin University of Technology: Perth.

Dhanarajan, G. (2001). *Reflections on ten years of The Commonwealth of Learning*. Vancouver: The Commonwealth of Learning.

Dirr, P. (1999). Distance and virtual learning in the United States. In *The development of virtual education: a global perspective*. Vancouver: The Commonwealth of Learning.

Dirr, P. (2001). The development of new organisational arrangements in virtual learning. In G. Farrell (Ed.), *The changing faces of virtual education*. Vancouver: The Commonwealth of Learning.

Dobson, I. R., R. Sharma, & A. Haydon. (1998). Undergraduate intakes in Australia: before and after. *Higher Education Management*, 10 (1), pp. 43–54.

Dohse, K., U. Jürgens, & T. Malsch. (1985). From Fordism to Toyotism: The social organization of the labor process in the Japanese automobile industry. *Politics and Society*, 14, pp. 115–146.

Donaghy, B. (1996). Open learning and new tech slide into chaos. *Campus Review*, p. 5.

Dosi, G. (1988). The nature of the innovative process. In G. Dosi (Ed.), *Technical change and economic theory*. London: Pinter Publishers, pp. 221–238.

Drucker, P. (1981). Behind Japan's success. *Harvard Business Review*, 59, pp. 83–90.

Ebbs, G. (1995). *What we sow in anti-MSN, we reap in poverty*. Excerpts from The Australian, liftout p4. 30 May (Archive reference: OLA-ON-BOARD).

Elam, M. (1990). Puzzling out the post-Fordist debate: technology, markets and institutions. *Economic and Industrial Democracy*, 11 (1), pp. 9–37.

European Association of Distance Teaching Universities. (1995). Volume 4 – Australia: distance education applications and programs. In A. Forster & J. Mitchell (Eds.), *Survey of Telematics for Education and Training: United States, Canada & Australia: A report for the DGXIII of the European Commission*: European Association of Distance Teaching Universities.

Evans, D. (1992a). *Untitled. Catalogue reference: 1240*. Personal communication to Mal Logan. 16 August (Archive reference: MU92-0920 FOLIO 15).

Evans, D. (1992b). *Untitled. Catalogue reference: 1281*. Personal communication to Leo West. 3 December (Archive reference: MU92-1243 FOLIO 35bb).

Evans, T. (1999). From dual mode to flexible delivery: paradoxical transitions in Australian open and distance education. *Performance Improvement Quarterly*, 12 (2), pp. 84–95.

Evans, T., & D. Nation. (1999). Distance education, educational technology and open learning: converging futures and closer integration with conventional education. In T. Nunan (Ed.), *Distance education futures: selected papers from the 11th Biennial Forum of the Australian and South Pacific External Studies Association, 21-23 July 1999*. Adelaide: University of South Australia, pp. 16–35.

Evans, T., & D. Nation. (2000). Understanding changes to university teaching. In T. Evans & D. Nation (Eds.), *Changing university teaching*. London: Kogan Page.

Evans, T., & D. Nation. (2001). Serving the system: a critique. *Open Learning*, 16 (1), pp. 91–94.

Evans, T. D., & P. J. Smith. (1999). *Research on flexible learning / delivery: understanding terms*. Paper presented at the AVETRA Conference, Research Institute

for Professional and Vocational Education andTraining (RIPVET) Deakin University and Gordon Institute of TAFE, pp. 1–6.

Farrell, G. (2001). Issues and choices. In G. Farrell (Ed.), *The changing faces of virtual education*. Vancouver: The Commonwealth of Learning.

Farrington, G., & R. Yoshida. (2000). Darwin goes to college in the dot-com world. *EDUCAUSE Review*, November/December, pp. 12–17.

Fölster, S. (1991). *The art of encouraging invention: a new approach to government innovation policy*. Stockholm: The Industrial Institute for Economic and Social Research.

Forster, A., L. Hewson, C. Hughes, K. Johnston, P. Nightingale, C. Page-Hanify, et al. (1997). *Managing the introduction of technology in the delivery and administration of higher education*. Canberra: AGPS.

Fray, P. (1991). Degrees via TV to start next year. *The Age*. 12 May, p. 1.

Freeman, C. (1982). *The economics of industrial innovation* (2nd ed.). London: Pinter Publishers.

Fritz, R. (1989). *The path of least resistance*. New York: Fawcett-Columbine.

Fullan, M. (1982). *The meaning of educational change*. New York and London: Teachers College Press (Columbia University).

Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Josset-Bass.

Gallagher, M. (1992a). *Commonwealth of Australia: call for OLI expressions of interest*. Public release. 2 July (Archive reference: MU92-0769A FOLIO 20).

Gallagher, M. (1992b). *Open learning Initiative: report of an informal meeting*. Notes by R. Johnson. 31 August (Archive reference: MU92-0920 FOLIO 32a).

Gallagher, M. (1992c). *Untitled. Catalogue reference: 1278*. Personal communication to Mal Logan. 24 November (Archive reference: MU92-1243 FOLIO 31b).

Gallagher, M. (1992d). *Untitled. Catalogue reference: 1323*. Personal communication to M. Logan. 4 December (Archive reference: MU92-1243 FOLIO 36).

Gallagher, M. (1992e). *Untitled. Catalogue reference: 1287*. Personal communication to Mal Logan. 16 December (Archive reference: MU92-1243 FOLIO 39+).

Gallagher, M. (1993a). *National report on Australia's higher education sector*. Canberra: Higher Education Division, DEET, AGPS.

Gallagher, M. (1993b). *Untitled. Catalogue reference: 1425*. Personal communication to Anthony Pritchard. 16 June (Archive reference: MU93-0393 FOLIO 41a).

Gallagher, M. (2000). *Corporate universities, higher education and the future: emerging policy issues*. Paper presented at the conference: Corporate University Week 2000, 14 June, Sydney.

Gallagher, M. (2001). *Modern university governance—a national perspective*. Paper presented at the conference: The idea of a university: enterprise or academy? Organised by The Australia Institute and Manning Clark House, 26 July 2001, The Australian National University, Canberra.

Gamage, D. (2002). *International practices and perspectives in student-centred and flexible learning.* Retrieved 10 August, 2002, from *http://www.newcastle.edu.au/oldsite/services/iesd/publications/eunexus/articles/teachingreview/gamage.htm* (electronic document).

Gambino, F. (1996). A critique of the Fordism of the regulation school. (translated by Ed Emery) *Common Sense,* 19 (June), pp. 42–63.

Gawthorne. (1992). *Untitled. Catalogue reference: 1055.* Personal communication to Hickey. 29 May (Archive reference: MU92-0538 FOLIO 301).

Gibbons, W. (1996). *Tenders for EDNA cancelled.* Personal communication to Ronald Watts. 3 October (Archive reference: OLA-ON-CORRESPONDENCE).

Giddens, A. (1984). *The constitution of society: outline of the theory of structuration.* Berkeley: University of California Press.

Gilmore, A. (1992). *Untitled. Catalogue reference: 1212.* Personal communication to members of the Television Open Learning Consortium. 30 July (Archive reference: MU92-0769B FOLIO 64).

Glick, M., & J. Kupiec. (2001). The answer is still technology–strategic technology. *EDUCAUSE Review,* November/December, pp. 32–44.

Gourova, E., C. Hermann, J. Leijten, & B. Clements. (2001). *The digital divide a research perspective: a report to the G8 Opportunities Task Force:* European Commission Joint Research Centre, Institute for Prospective Technological Studies (Report EUR 19913 EN).

Graves, W. (2001). Virtual operations: challenges for traditional higher education. *EDUCAUSE Review,* March/April, pp. 47–56.

Green, R., & S. Le Queux. (2001). *High performance work systems: international trends, practices and policy implications.* Retrieved December, 2001, from *http://www.isr.gov.au/industry/innovation/framework8.pdf* (electronic document).

Green, S. D. (1991). *The dark side of lean production: exploitation and ideology.* Paper presented at the IGLC-7, 26–28 July, Berkeley, CA, USA.

Greenwood, I., & M. Stuart. (2002). *Restructuring, partnership and the learning agenda: a review.* Leeds: Leeds University Business School.

Grint, K. (1991). *The sociology of work: an introduction.* Cambridge: Polity Press.

Grint, K. (Ed.). (2000). *Work and society: a reader.* Malden, MA: Polity Press.

Guiton, P. (1991). TV Open Learning. *The Australian Higher Education Supplement,* Wednesday 27 March, p. 16.

Guiton, P. (1993). Murdoch University: Interlocking the learning modes. In I. Mugridge (Ed.), *Distance education in single and dual mode universities.* Vancouver: The Commonwealth of Learning.

Guiton, P. (1997). *The dual mode university and globalisation: a Western Australian perspective.* Paper presented at the ICDE 97, International Council for Distance Education, Pennsylvania State University, Pennsylvania, USA, 2-6, June.

Harris, D. (1987). *Openness and closure in distance education.* Lewes: Falmer Press.

Hart, A., & E. Knoors. (1998). *Distance learning in higher education in the United Kingdom*. Retrieved 22 September, 2002, from *http://www.soton.ac.uk/~mec/MECWEB/DLsurvey.pdf* (electronic document).

Hay, J. (1992). *Untitled. Catalogue reference: 1211*. Personal communication to Mal Logan. 31 July (Archive reference: MU92-0769B FOLIO 63).

Hayden, M., & G. Speedy. (1995). *Evaluation of the 1993 National Teaching Development Grants*. Canberra: Committee for the Advancement of University Teaching.

Hayford, J. (1995). *A case study of academic and administrative change: the impact of the Open Learning Initiative on the University of South Australia*. Adelaide: M.Ed. Thesis, University of South Australia.

Hayford, J. (1996). The Open Learning Initiative: a successful marketing strategy or a devaluation of the Australian system of higher education? *Distance education*, 17 (1), pp. 159–180.

Heinrichs, R. (1995). *Disgruntled student*. (Equity and Access Officer, OLA) Personal communication to Anthony Pritchard. 7 December (Archive reference: OLA-ON-CORRESPONDENCE).

Herrmann, A. (1995). *Open Learning Australia: Melbourne (Cup) winner or Trojan horse?*, from *http://cea.curtin.edu.au/tlf/tlf1995/herrmann.html* (electronic document).

Herrmann, A. (2000). *An idiosyncratic perspective on distance and open learning in Australia*. Retrieved 29 January, 2000, from *http://cea.curtin.edu.au/staff/allan/documents/idiosync.pdf* (electronic document).

Higher Education Council. (1990). *Higher education: the challenges ahead*. Canberra: AGPS.

Hill, R. (1992). *Untitled. Catalogue reference: 1184*. Personal communication to Mal Logan. 20 July (Archive reference: MU92-0769B FOLIO 49a).

Hirst, P., & J. Zeitlin. (1991). Flexible specialization versus post-Fordism: theory, evidence, and policy implications. *Economy and Society*, 20 (1), pp. 1–56.

Hodkinson, P. (1997). Neo-Fordism and teacher professionalism. *Teacher Development*, Vol. 1 (No. 1), pp. 69–82.

Holmberg, B. (1986). *Growth and structure of distance education*. London: Croom Helm.

Howse, W. (1991a). *Open Learning Project*. Personal correspondence to Jocelyn Calbert. 8 April (Archive reference: MU91-0104 FOLIO 12b).

Howse, W. (1991b). *Untitled. Catalogue reference: 753*. Personal communication to Mal Logan. 10 June (Archive reference: MU91-0792 FOLIO 6).

Howse, W. (1992). *Untitled. Catalogue reference: 1199*. Personal communication to Mal Logan. 23 July (Archive reference: MU92-0769B FOLIO 57).

Hudson, H. (1986). *Review of efficiency and effectiveness in higher education* [The Hudson Report], *September*. Canberra: AGPS.

Huston, G. (1995). *Launch of Open Net.* Email communication to Roger Aitkinson. 25 May (Archive reference: OLA-ON-CORRESPONDENCE).

Industry Commission. (1996). *Competitive tendering and contracting by public sector agencies: report no. 48.* Melbourne: Australian Government Publishing Service.

Industry Commission. (1997). *Industry Commission submission to the review of higher education financing and policy.* Canberra.

Inglis, A. (1996). Theories of learning in educational development: relocating the paradigmatic divide. *Open Learning,* 11 (2), pp. 28–37.

Inglis, A. (1999a). Is online delivery less costly than print and is it meaningful to ask? *Distance Education,* 20 (2), pp. 220–238.

Inglis, A. (1999b). Looking back, looking forward: celebrating a quarter century of serving distance education 'down under'. *Distance Education,* 20 (1), pp. 7–30.

Institute for Information Technologies in Education. (2000). *Analytical survey: distance education for the information society: policies, pedagogy and professional development.* Moscow: UNESCO IITE.

International Labour Organization. (2000). *The social and labour impact of globalization in the manufacture of transport equipment: report for discussion at the tripartite meeting on the social and labour impact of globalization in the manufacture of transport equipment.* Geneva: International Labour Organization.

Internet Australasia. (1995). Interview: Dr Ron Watts of Open Learning. *Internet Australasia,* pp. 72–73.

Issroff, K., & E. Scanlon. (2002). Educational technology: the influence of theory. *Journal of Interactive Media in Education,* 6, from *http://www-jime.open.ac.uk/2002/6* (electronic document).

Jackson, K. (2001). *Higher education funding policy: e-brief.* Retrieved 20 July, 2002, from *http://www.aph.gov.au/library/INTGUIDE/SP/HEfunding.htm* (electronic document).

Jaffee, D. (2001). *Organisation theory: tension and change.* London: McGraw Hill.

Jakupec, V. (1996). Reforming distance education through economic rationalism. In T. Evans & D. Nation (Eds.), *Opening education: policies and practices from open and distance education.* London: Routledge, pp. 77–89.

Jakupec, V., & K. Nicoll. (1994). Open learning: politics or pedagogy? *Distance Education,* 15 (2), pp. 217–233.

Jakupec, V., & H. Yoon. (2000). *The theory of the 'big bang' and open and distance education: surviving the 'big crunch' in global markets.* Paper presented at the conference: Distance education: an open question?, 11-13 September, University of South Australia.

James, D. (1991). *Untitled. Catalogue reference: 752.* Acting VC, Deakin University. Personal communication to Mal Logan. 7 June (Archive reference: MU91-0792 FOLIO 5).

Jefferson, R. (1973). *Planning and the innovation process.* Oxford: Pergamon Press.

Jevons, F. (1984). Distance education in mixed mode institutions: working towards parity. *Distance education*, 5 (1), pp. 24–37.

Jevons, F. (1987). Distance education and campus-based education: parity of esteem: Chapter one. In P. Smith & M. Kelly (Eds.), *Distance education and the mainstream: convergence in education*. London: Croom Helm, pp. 12–23.

Jevons, F. (1994). *The information superhighway*. Personal communication to Anthony Pritchard. 22 October (Archive reference: OLA-GM).

Johns, B. (1995a). *Untitled. Catalogue reference: 1621*. Personal communication to Tony Protchard. 20 February (Archive reference: ON).

Johns, B. (1995b). *Communications between OLA and ON*. Personal communication to Anthony Pritchard. 20 April (Archive reference: OLA-ON-CORRESPONDENCE).

Johns, B. (1995c). *Open Net is launched*. Media release by Communications Solutions. Sydney. 9 May (Archive reference: OLA-ON-CORRESPONDENCE).

Johns, B. (1996). *Resignation from Board*. Personal communication to Terrence Cutler. 22 October (Archive reference: OLA-ON-CORRESPONDENCE).

Johnson, R. (1983). *The provision of external studies in Australian higher education*. Canberra: CTEC, AGPS.

Johnson, R. (1989). *Report on the joint Department of Employment, Education and Training/ Higher Education Council assessment team on the designation of Distance Education Centres for Australia*. Canberra: AGPS.

Johnson, R. (1990). *Open learning: commissioned report number 4*. Canberra: AGPS.

Johnson, R. (1991). The reorganisation of Australian distance education: some comments. *Open Learning*, 6 (3), pp. 52–53.

Johnson, R. (1996). To wish or to will: reflections on policy formation and implementation in Australian distance education. In T. Evans & D. Nation (Eds.), *Opening education: policies and practices from open and distance education*. London: Routledge, pp. 90–101.

Jones, F. G. (1990a). A highway to open learning in Australia: a distance education network typology. *IREE Monitor*, March, pp. 14-16.

Jones, G. (1990b). Delivering open learning through a technological network. *Australian Journal of Educational Technology*, 6 (1), pp. 56–65.

Joy, S., & A. O'Neill. (1998). Holy cow! Its Open Learning!! *Journal of Higher Education*, 20 (1), pp. 31–39.

Joyce. (1993). *Untitled. Catalogue reference: 1311*. Author's initial unknown. Draft agreement for OLA to use Powerhouse (Gippsland DEC). 23 November (Archive reference: MU93-1784 FOLIO 4).

Julian, J. (1994a). *Report on the Science Council meeting*. Personal communication to Tony Pritchard. (Archive reference: OLA-OLESS).

Julian, J. (1994b). *Untitled. Catalogue reference: 1637*. Personal communication to Ian Lucas. June 23 (Archive reference: OLA-OLESS).

Julian, J. (1994c). *Strategy for dealing with the OLESS project.* Unpublished report. 24 June (Archive reference: OLA-ON-CORRESPONDENCE).

Julian, J. (1994d). *Memo.* Personal communication to John Mitchell. 28 June (Archive reference: OLA-OLESS).

Julian, J. (1994e). *Memo on OLESS.* Personal communication to John Mitchell. 1 July (Archive reference: OLA-OLESS).

Julian, J. (1994f). *Dot points for Brian Johns.* Personal communication to Tony Pritchard. 12 September (Archive reference: OLA-OLESS).

Julian, J. (1994g). *Briefing notes on OLESS project.* Personal communication to Tony Pritchard. 19 October (Archive reference: OLA-OLESS).

Julian, J. (1994h). *Untitled. Catalogue reference: 1392.* Personal communication to Ron Watts. 18 December (Archive reference: OLA-OLESS).

Julian, J. (1995a). *Reaction to ON.* Personal communication to Tony Pritchard. Undated (Archive reference: OLA-ON).

Julian, J. (1995b). *Report on developments.* Unpublished report. January (Archive reference: OLA-ON).

Julian, J. (1995c). *Aseem Prakash meeting.* Personal communication to Peter Spearritt. 2 February (Archive reference: OLA-ON-BOARD).

Julian, J. (1995d). *Comments on Open Net and OLA relationship.* Unpublished report. 24 March (Archive reference: OLA-ON-CORRESPONDENCE).

Julian, J. (1995e). *Report to the Board of Directors of OLA regarding Open Net.* Open Learning Agency of Australia Pty. Ltd., Melbourne. 30 May (Archive reference: OLA-ON-CORRESPONDENCE).

Julian, J., & J. Mitchell. (1994). *Discussion paper on OLESS: prepared for visit of Mr Brian Johns, Chairman of the OLESS Board.* Unpublished report. 19 September (Archive reference: OLA-OLESS).

Jurgens, U. (2002). *Characteristics of the European automotive system: is there a distinctive European approach?* Paper presented at the Dixième Rencontre Internationale Du Gerpisa, 6–8 June, Palais du Luxembourg, 15, rue Vaugirard, 75006 Paris, France.

Kahn, P. H., & B. Friedman. (1993). *Control and power in educational computing.* Paper presented at the Annual Meeting of the American Educational Research Association, April 12–16, Atlanta, GA.

Karmel, P. (1974). *Open tertiary education in Australia. Report of the Committee on Open University to the Australian University Commission.* Canberra: AGPS.

Karmel, P. (1975). *Open tertiary education in Australia. Final report, Committee on Open University to the Universities Commission.* Canberra: AGPS.

Karmel, T. (1998). *Financing higher education in Australia: a case study prepared for the International Conference 'Redefining tertiary education', 29 June–1 July, 1998, Berlin, DETYA No. 6357.* Canberra: Department of Education, Training and Youth Affairs.

Kato, T. (2001). *Japanese regulation and governance in restructuring: ten years after the post-Fordist Japan debate.* Paper presented at the conference: East Asian Modes of Development and Their Crises: Regulationist Approaches, April 19–20, Taichung, Taiwan.

Keegan, D. (1983). Theories of distance education: introduction. In D. Sewart & e. al (Eds.), *Distance education: international perspectives.* London: Croom Helm, pp. 63–67.

Keegan, D. (1990). *Foundations of distance education* (2nd ed.). London: Routledge.

Keegan, D. (1994). The competitive advantages of distance teaching universities. *Open Learning,* 9 (2), pp. 36–39.

Keepes, B., K. Sinclair, & S. Ball. (1992). *TV Open Learning: preliminary evaluation report.* University of Sydney. Unpublished report. 27 March (Archive reference: MU92-0303 FOLIO 7b).

Keepes, B., K. Sinclair, S. Ball, K. Harman, & J. Kearns. (1993). *Report: the TVOL Project in Australia: TVOL and OLAA in 1992 and 1993. Final report of the independent evaluation.* University of Sydney. 11 October (Archive reference: MU93-1236 FOLIO 31).

Kember, D. (1995). *Open learning courses for adults.* Englewood Cliffs, NJ: Educational Technology Publications.

Kemp, D. A. (1993). *Speech: higher education funding amendment bill (No. 2) 1992: second reading, 10 November, p3021,* from *http://www.aph.gov.au/hansard/* (electronic document).

Kemp, S. (2002). *The management of change in Australian higher education.* Paper presented at the International Federation of Scholarly Associations, 2002 Conference, 10–13 July, Conrad Jupiters, Gold Coast, Queensland.

Kenney, M., & R. Florida. (1988). Beyond mass production: production and the labor process in Japan. *Politics and Society,* 16, pp. 121–168.

Kenney, M., & R. Florida. (1993). *Beyond mass production: the Japanese system and its transfer to the U.S.* New York: Oxford University Press.

Kenworthy, B. (1989). Educational broadcasting–just for kids? *Australian Journal of Educational Technology,* 5 (1), pp. 47–55.

Kerr, D. (1992a). *Untitled. Catalogue reference: 1129.* Personal communication to Anthony Pritchard. 3 July (Archive reference: MU92-0769A FOLIO 18).

Kerr, D. (1992b). *Application for registration of business name 'TV Open Learning'.* Personal communication to Pritchard. 6 July (Archive reference: MU92-0769A FOLIO 23).

Kerr, D. (1992c). *Positioning Monash for the OL initiative.* Personal communication to Anthony Pritchard. 15 July (Archive reference: MU92-0769B FOLIO 37).

Kerr, D. (1992d). *Untitled. Catalogue reference: 1190.* Personal communication to Anthony Pritchard. 22 July (Archive reference: MU92-0769B FOLIO 53).

Kerr, D. (1992e). *Untitled. Catalogue reference: 1236.* Personal communication to Anthony Pritchard. 13 August (Archive reference: MU92-0920 FOLIO 13a).

King, B. (1992a). The Open Learning Initiative (OLI): new directions for higher education. *ASPESA Papers*, No 12, pp. 7–15.

King, B. (1992b). The open learning initiative: new directions for higher education. *Australian Journal of Educational Technology*, 8 (2), pp. 85–98.

King, B. (1993). Open Learning in Australia: government intervention and institutional response. *Open Learning*, 8 (3), pp. 13–25.

King, B. (1994). Point and partnerships in contemporary education. In J. Steele & J. G. Hedberg (Eds.), *Learning environment technology: selected papers from LETA 94*. Canberra: AJET Publications, pp. 146–150.

King, B. (2001). Managing the changing nature of Distance and Open education at institutional level. *Open Learning*, 16 (1), pp. 47–60.

Kirk, J. (1990). *Rural and remote learning centres: the point of convergence for the provision of further education by alternative delivery systems*. Paper presented at the conference: Converging Technologies: EdTech'90, AJET Publications, Canberra, pp. 97–107.

Kline, S., & N. Rosenberg. (1986). An overview of innovation. In R. Landau & N. Rosenberg (Eds.), *Positive sum strategy: harnessing technology for economic growth*. Washington, DC: National Academy Press, pp. 275–306.

Kuhn, T. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago: The University of Chicago Press.

Lakomski, G. (2001). Organizational change, leadership and learning: culture as cognitive process. *The International Journal of Educational Management*, 15 (2), pp. 68–77.

Latchem, C., & D. Hanna. (2001). *Leadership for 21st century learning: global perspectives from educational innovators*. London: Kogan Page.

Laurillard, D. (1993). *Rethinking university teaching: a framework for the effective use of educational technology*. London: Routledge.

Lentell, H. (2000). *The conflict within the collaboration: distance education partnership reality*. Paper presented at the conference: Distance Education: An Open Question?, 11–13 September, University of South Australia.

Lenzner, R., & S. S. Johnson. (1997). Seeing things as they really are. *Forbes*, 159 (5), pp. 122–128.

Lewis, R., & D. Spencer. (1986). *What is open learning? An introduction to the series: open learning guide 4*. London: Council for Educational Technology.

Lim, E. (1991). *Untitled. Catalogue reference: 755*. Monash University Librarian. Personal communication to Anthony Pritchard. 17 June (Archive reference: MU91-0792 FOLIO 8).

Lincoln, J. R., & A. L. Kalleberg. (1985). Work organization and workforce commitment: a study of plants and employees in the U.S. and Japan. *American Sociological Review*, 50, pp. 738–760.

Logan, M. (1991a). *Untitled. Catalogue reference: 754.* Personal communication to W. L. Daniels. Various attachments, including 'Report on Issues raised by the Commonwealth'. 13 June (Archive reference: MU91-0792 FOLIO 7).

Logan, M. (1991b). *Untitled. Catalogue reference: 846.* Personal communication to Bob Hawke (Prime Minister). 12 November (Archive reference: MU91-1604 FOLIO 4b).

Logan, M. (1991c). *Untitled. Catalogue reference: 902.* Personal communication to Peter Baldwin. 18 December (Archive reference: MU91-1604 FOLIO 39).

Logan, M. (1991d). *Untitled. Catalogue reference: 903.* Personal communication to Peter Dawkins. 18 December (Archive reference: MU91-1604 FOLIO 40).

Logan, M. (1992a). *Untitled. Catalogue reference: 1017.* Personal communication to Kim Beazley (Minister for Employment, Education and Training). 6 May (Archive reference: MU92-0538 FOLIO 4+).

Logan, M. (1992b). *Possible expansion of the Television Open Learning Project.* Personal communication to all Vice-Chancellors. Including attachment of Campus Review article. 18 June (Archive reference: MU92-0538 FOLIO 54).

Logan, M. (1992c). *Untitled. Catalogue reference: 1148.* Personal communication to John Hay (VC, Deakin). 9 July (Archive reference: MU92-0769B FOLIO 29b+).

Logan, M. (1992d). *Untitled. Catalogue reference: 1149.* Personal communication to Smith (UNE). 9 July (Archive reference: MU92-0769B FOLIO 29b+).

Logan, M. (1992e). *Untitled. Catalogue reference: 1150.* Personal communication to David Robinson (VC, UNISA). 9 July (Archive reference: MU92-0769B FOLIO 29b+).

Logan, M. (1992f). *Untitled. Catalogue reference: 1151.* Personal communication to Roy Webb (VC, Griffith). 9 July (Archive reference: MU92-0769B FOLIO 29b+).

Logan, M. (1992g). *Untitled. Catalogue reference: 1162.* Personal communication to David Hill (ABC). 9 July (Archive reference: MU92-0769B FOLIO 35c).

Logan, M. (1992h). *Untitled. Catalogue reference: 1164.* Personal communication to Wilson. 10 July (Archive reference: MU92-0769B FOLIO 34+).

Logan, M. (1992i). *Untitled. Catalogue reference: 1158.* Personal communication to VCs of DECs (draft). 13 July (Archive reference: MU92-0769B FOLIO 34+).

Logan, M. (1992j). *Untitled. Catalogue reference: 1194.* Personal communication to Roy Webb. Includes attachment: The Australian 22 July, 1992 'Fears over open learning standards'. 22 July (Archive reference: MU92-0769B FOLIO 53d).

Logan, M. (1992k). *Untitled. Catalogue reference: 1275.* Personal communication to Peter Baldwin. 17 November (Archive reference: MU92-1243 FOLIO 30a).

Logan, M. (1992l). *Laying the foundations of an electronic university.* Unpublished report sent to Michael Gallagher. 14 December (Archive reference: MU92-1243 FOLIO 37f).

Logan, M. (1992m). *Untitled. Catalogue reference: 1285.* Personal communication to Bruce Donald (Australian TV International, ABC TV). 14 December (Archive reference: MU92-1243 FOLIO 37j).

Logan, M. (1993). *OLESS*. Personal communication to Michael Gallagher. 16 December (Archive reference: MU93-1784 FOLIO 9a).

Logan, M. (1996). *Proposed OLA/Open Net merger*. Personal communication to Ian Creagh. 12 March (Archive reference: OLA-ON-CORRESPONDENCE).

Lucas, I. (1996). *Proposed OLAA-Open Net merger: guidelines for preparation of proposal*. Briefing paper for Terrence Cutler. 12 March (Archive reference: OLA-ON-BOARD).

Lundin, R. (1993). *Overseas experience in non-traditional modes of delivery in higher education using state-of-the-art technologies: best practice*. Canberra: AGPS.

Maling, J., & B. Keepes. (1998). Chapter 3: the Australian higher education system. In V. L. Meek & F. Q. Wood (Eds.), *Managing higher education diversity in a climate of public sector reform*. Canberra: Evaluations and Investigations Programme, Higher Education Division, Department of Employment, Education, Training and Youth Affairs, pp. 29–44.

Manz, C. C., & H. P. Sims. (1995). *Company of heroes: unleashing the power of self-leadership*. New Jersey: John Wiley and Sons.

Marginson, S. (1993a). *Education and public policy in Australia*. Cambridge: Cambridge University Press.

Marginson, S. (1993b). Markets and higher education: Australia. In J. Smyth (Ed.), *Academic work: the changing labour process in higher education*. Buckingham: Open University Press, pp. 17–39.

Marginson, S. (1998). Competition and diversity in the Australian higher education system. In V. L. Meek & F. Q. Wood (Eds.), *Managing higher education diversity in a climate of public sector reform*. Canberra: Evaluations and Investigations Programme, Higher Education Division, Department of Employment, Education, Training and Youth Affairs, pp. 81–96.

Marginson, S. (2000). *Monash: remaking the university*. Sydney: Allen and Unwin.

Martin, L. H. (1964). *Tertiary education in Australia: report of the Committee on the Future of Tertiary Education in Australia to the Australian Universities Council, Vol. 1*. Canberra: Commonwealth Government Printer.

Maslen, G. (1992). Doubts over value of TV university. *West Australian*, 4 February, p. 9 Liftout.

McCallum, J. (1992). *Home uni looks like hard work*. Copy of original: The Australian, 15 January. No pagination. (Archive reference: MU92-0034 FOLIO 17a).

McKay, M., & J. Clarke. (1998). *Resource issues in flexible learning, the way forward: round table no. 8 (May 1998), seams in the seamless: technology and delivery*. Melbourne: National Scholarly Communications Forum, University of Melbourne.

McLoughlin, C. (1999). The implications of the research literature on learning styles for the design of instructional material. *Australian Journal of Educational Technology*, 15 (3), pp. 222–241.

McLoughlin, I., & M. Harris. (1997). *Innovation, organisational change and technology*. London: International Thomson Business Press.

McNicol, D. (1990). *Untitled. Catalogue reference: 732.* Personal communication to Mal Logan. 19 December (Archive reference: MU91-0104 FOLIO 8).

Meek, V. L., & L. Goedegebuure. (1989). *Higher education: a report.* New South Wales: University of New England.

Meek, V. L., & F. Q. Wood. (1997). *Higher education governance and management an Australian study: 97/1.* Canberra: Evaluations and Investigations Program, Higher Education Division, Department of Employment, Education, Training and Youth Affairs, Commonwealth of Australia.

Meek, V. L., & F. Q. Wood. (1998). *Managing higher education diversity in a climate of public sector reform: 98/5.* Canberra: Evaluations and Investigations Program, Higher Education Division, Department of Employment, Education, Training and Youth Affairs, Commonwealth of Australia.

Miles, T. (1994). Open learning and critical reflection: implications for OTEN. *Australian Journal of Educational Technology,* 10 (1), pp. 19–26.

Millar, A. (1985). Distance education – education's new frontier. *Australian Journal of Educational Technology,* 1 (2), pp. 8–13.

Mitchell, J. (2002). *Telephone interview with author conducted 27th November.* Sydney.

Monash University. (1990). *Open Learning Project: summary of the proposal (fourth draft).* Unpublished report. 19 November (Archive reference: MU91-0104 FOLIO 5f+).

Monash University. (1992a). *An invitation to participate in Monash's submission on the OLI.* Official letter. 20 July (Archive reference: MU92-0769B FOLIO 49).

Monash University. (1992b). *Structural arrangements for an OLI.* Unpublished report. 10 July (Archive reference: MU92-0769B FOLIO 30).

Monash University. (1992c). *Television Open Learning Consortium meeting agenda for 3 March, 1992.* Includes attachments. 30 March (Archive reference: MU92-0303 FOLIO 13).

Monash University. (1992d). *Untitled. Catalogue reference: 943.* Media report (collected newspaper articles). 14 February (Archive reference: MU92-0034 FOLIO 33).

Monash University. (2002a). *Enhancement studies program 2003.* Retrieved 1 December, 2002, from *http://www.monash.edu.au/pubs/enhancement/* (electronic document).

Monash University. (2002b). *VCE enhancement program 2002.* Retrieved 1 December, 2002, from *http://www.arts.monash.edu.au/phil/undergraduate/vce.html* (electronic document).

Monden, Y. (1983). *Toyota production systems.* Norcross, GA: Institute of Industrial Engineers.

Moodie, G. (1990a). *The Commonwealth's Open Learning project.* Internal report. 22 October (Archive reference: MU91-0104 FOLIO 4).

Moodie, G. (1990b). *Untitled. Catalogue reference: 714.* Personal communication to Anthony Pritchard. (Archive reference: MU91-0104 FOLIO 2a).

Moodie, G. (1990c). *Untitled. Catalogue reference: 718.* Personal communication to Alan Wiley. 23 October (Archive reference: MU91-0104 FOLIO 4a).

Moodie, G. (1990d). *Untitled. Catalogue reference: 729.* Personal communication to Watt. 13 December (Archive reference: MU91-0104 FOLIO 6e).

Moodie, G. (1991a). *The Commonwealth's open learning project.* Report. 29 January (Archive reference: MU91-0104 FOLIO 9+).

Moodie, G. (1991b). *Open Learning project meeting Wed 27 March.* Personal communication to John Evans, Bruce King, Don Perlgut, Alan Wylie. Includes attachment: The Australian 27 March, 1991 'TV uni's distorted image'. 27 March (Archive reference: MU91-0104 FOLIO 11e).

Moodie, G. (1991c). *Report on the eight bids for the Open Learning Project.* Personal communication to Jocelyn Calvert. 9 April (Archive reference: MU91-0104 FOLIO 12c).

Moodie, G. (1991d). *TV Open Learning.* Unpublished report. 29 May (Archive reference: MU91-0104 FOLIO 30a).

Moodie, G. (1991e). *Untitled. Catalogue reference: 762.* Personal communication to Dean Ashenden. 2 July (Archive reference: MU91-0792 FOLIO 16).

Moodie, G. (1991f). *Untitled. Catalogue reference: 781.* Personal communication to Wally Howse. 8 August (Archive reference: MU91-1159 FOLIO 3).

Moodie, G. (1991g). *Untitled. Catalogue reference: 784.* Television Open Learning Consortium Meeting agenda. Includes attachments. 12 August (Archive reference: MU91-1159 FOLIO 6).

Moodie, G. (1991h). *Untitled. Catalogue reference: 844.* Personal communication to Leora Black (Synergy Communications) & Don Perlgut. 8 November (Archive reference: MU91-1604 FOLIO 4a+).

Moodie, G. (1991i). *Untitled. Catalogue reference: 891.* Personal communication to Anthony Pritchard. 13 December (Archive reference: MU91-1604 FOLIO 32a).

Moodie, G. (1992a). *Costing of TV program acquisition for the TV Open Learning Project.* Personal communication to Leo West. 25 March (Archive reference: MU92-0303 FOLIO 9).

Moodie, G. (1992b). *Draft discussion paper on a further expansion of the TV Open Learning Project.* Unpublished report. April (Archive reference: MU92-303 FOLIO 13).

Moodie, G. (1992c). *Untitled. Catalogue reference: 908.* Personal communication to Collis-George (ABC). 2 January (Archive reference: MU92-0034 FOLIO 2).

Moodie, G. (1992d). *Untitled. Catalogue reference: 940.* Personal communication to members of the Television Open Learning Consortium. 12 February (Archive reference: MU92-0034 FOLIO 29).

Moodie, G. (1992e). *Untitled. Catalogue reference: 991.* Personal communication to Leo West and Anthony Pritchard. 30 March (Archive reference: MU92-0303 FOLIO 12).

Moodie, G. (1992f). *Untitled. Catalogue reference: 1000.* Personal communication to Anthony Pritchard. 7 April (Archive reference: MU92-0303 FOLIO 19+).

Moodie, G. (1992g). *Untitled. Catalogue reference: 1142.* Personal communication to Denise Kerr (Monash University Solicitor). 8 July (Archive reference: MU92-0769B FOLIO 28aa+).

Moodie, G. (1992h). *Untitled. Catalogue reference: 1146.* Personal communication to members of the Television Open Learning Consortium. 9 July (Archive reference: MU92-0769B FOLIO 29).

Moodie, G. (1992i). *Untitled. Catalogue reference: 1262.* Personal communication to Mal Logan. 31 August (Archive reference: MU92-0920 FOLIO 32aa).

Moodie, G. (1993a). *Some thoughts on the submission.* Personal communication to Pritchard. 8 January (Archive reference: MU92-1574 FOLIO 10b).

Moodie, G. (1993b). Speculations on the implications of open learning for Australian distance education. In T. Nunan (Ed.), *Distance education futures.* Adelaide: University of South Australia, pp. 169–176.

Moodie, G., & D. Nation. (1991). *Open learning and distance education.* Discussion paper. 30 May (Archive reference: MU91-0104 FOLIO 31).

Moodie, G., & D. Nation. (1993). Reforming a system of distance education. In T. Evans & D. Nation (Eds.), *Reforming open and distance education.* London: Kogan Page Limited, pp. 130–149.

Moore, M. G., & G. Kearsley. (1996). *Distance education: a systems view.* Belmont, California: Wadsworth.

Moran, L., & B. Myringer. (1999). Flexible learning and university change. In K. Harry (Ed.), *Higher education through open and distance learning.* London: Routledge, pp. 57–71.

Morgan, D. (1991). *Untitled. Catalogue reference: 774.* (Faculty of Engineering, Monash University) Personal communication to Brown. 23 July (Archive reference: MU91-0792 FOLIO 28).

Mugridge, I. (1992). Response. *Open Learning,* 7 (3), pp. 61–62.

Murray, K. (1957). *Report of the Committee on Australian Universities.* Canberra: Commonwealth Government Printer.

Muttray, F. (1992). *Untitled. Catalogue reference: 956.* Personal communication to members of the Television Open Learning Consortium. 24 February (Archive reference: MU92-0221 FOLIO 2b).

Myers, S., & D. G. Marquis. (1968). Successful industrial innovations: a study of factors underlying innovations in selected firms. *National Science Foundation,* pp. 69–71.

Nation, J. (1996). *ON future.* Personal communication to Mal Logan. 2 December (Archive reference: OLA-ON-CORRESPONDENCE).

National Board of Employment Education and Training. (1989). *Credit transfer: a discussion paper*. Canberra: AGPS.

National Board of Employment Education and Training. (1992a). *Post-compulsory education and training: fitting the need*. Canberra: AGPS.

National Board of Employment Education and Training. (1992b). *Changing patterns of teaching and learning: the use and potential of distance education materials and methods in Australian higher education*. Canberra: National Board of Employment, Education and Training, AGPS.

National Board of Employment Education and Training. (1992c). *Distance education in Australia: advice of the National Board of Employment, Education and Training and its Higher Education Council*. Canberra: AGPS.

National Board of Employment Education and Training. (1994a). *Costs and quality in resource-based learning on and off-campus, commissioned report no. 33*. Canberra: AGPS.

National Board of Employment Education and Training. (1994b). *Resource implications of the introduction of good strategies in higher education for disadvantaged students, commissioned report No. 30*. Canberra: National Board of Employment, Education and Training, AGPS.

National Distance Education Conference. (1991). *Record of meeting: NDEC and colleagues, meeting on 13 February at 2.00 pm*. Minutes. Melbourne. 15 February (Archive reference: MU91-0104 FOLIO 9f).

Neat, G. (1990). *Untitled. Catalogue reference: 719*. Personal communication to Rory Sutton. (Archive reference: MU91-0104 FOLIO 5).

Neumann, R., & J. Guthrie. (2001). *The corporatisation of research in Australian higher education*. Paper presented at the Symposium 2001 Conference on The University in the New Corporate World, Wednesday, July 18th, 2001, University of South Australia, City East Campus, Adelaide, South Australia.

Nipper, S. (1989). Third generation distance learning and computer conferencing. In R. Mason & A. Kaye (Eds.), *Mindweave: communication, computers and distance education*. Oxford: Pergamon Press, pp. 63–73.

Noble, D. (1998). Digital diploma mills: the automation of higher education. *First Monday*, 3 (1). Retrieved from *http://www.firstmonday.dk/issues/issue3_1/noble/index.html* (electronic document).

Olsen, A., & D. Aeuckens. (1997). *Submission number 175: access rates and participation rates for higher education in Australia*. Retrieved 2 July, 2002, from *http://www.dest.gov.au/archive/highered/hereview/submissions/submissions/O/Olsen.htm* (electronic document).

Open Learning Australia. (1993a). *Open Learning student handbook 1993*. Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1993b). *OLAA Board of Director's meeting: December, 1993*. Open Learning Agency of Australia Pty Ltd Melbourne. December (Archive reference: OLA-OLESS).

Open Learning Australia. (1994a). *Agreement on offering higher education units (agreement between the Open Learning Agency of Australia and the unit provider).* Open Learning Agency of Australia. Contract template. Melbourne. 20 May (Archive reference: OLA-GM).

Open Learning Australia. (1994b). *Final copy: running sheet for the OLESS launch: Regency Institute, Days Road, Regency Park, 9:30am 14th September, 1994.* Information sheet. 12 September (Archive reference: OLA-ON-CORRESPONDENCE).

Open Learning Australia. (1994c). *OLESS future directions, a report to the Board of Directors.* October (Archive reference: OLA-ON-BOARD).

Open Learning Australia. (1994d). *Open Learning Australia: registration form—1994.* Distribution material. Melbourne. (Archive reference: OLA-FORMS-1994).

Open Learning Australia. (1994e). *Open Learning Electronic Support Service: student's guide: September–December, 1994.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1994f). *Open Learning: annual report 1993.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1995a). *Degree pathways through Open Learning.* Promotional booklet. Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1995b). *Memorandum and articles of association of Open Net Pty Ltd.* Melbourne: Open Learning Agency of Australia Pty Ltd. July (Archive reference: OLA-ON).

Open Learning Australia. (1995c). *Open Learning Australia: annual report 1994.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1996a). *Introduction and overview.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1996b). *Open Learning Australia: annual report 1995.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1996c). *Open Learning Australia handbook 1997.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1997a). *Open Learning Australia: annual report 1996.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (1997b). *Open Net register of directors.* 1 February (Archive reference: OLA-ON).

Open Learning Australia. (2000). *Open Learning Australia: annual report 1999.* Melbourne: Open Learning Agency of Australia Pty Ltd.

Open Learning Australia. (2002). *Open Learning Australia: curriculum.* Retrieved 28 November, 2002, from *http://www.ola.edu.au/cgi-bin/hive/hive.cgi* (electronic document).

Open Learning Australia, & Open Learning Technology Corporation. (1994). *Joint proposal: Open Learning Australia and Open Learning Technology Corporation: Open Learning Electronic Support Service (OLESS).* Draft report. 27 July (Archive reference: OLA-OLESS).

Open Learning Electronic Support Service. (1994a). *OLESS Board of Directors meeting 4/94*. Agenda. Sydney. 31 October (Archive reference: OLA-ON-BOARD).

Open Learning Electronic Support Service. (1994b). *OLESS Board of Directors meeting 5/94*. Agenda. 12 December (Archive reference: OLA-ON-BOARD).

Open Learning Electronic Support Service. (1994c). *Open Learning Electronic Support Service: student guide*. Adelaide: Open Learning Technology Corporation Pty Ltd.

Open Learning Technology Corporation. (1996). *Open learning update: February 1995 No 1 (updated 17/7/96)*. Retrieved 1 June, 2002, from *http://www.educationau.edu.au/archives/OLUP1/Index.htm* (electronic document).

Open Learning Technology Corporation. (1997). *The nature of open learning*. Retrieved 1 June, 2002, from *http://www.educationau.edu.au/archives/olstat/Olstat1.htm* (electronic document).

Open Learning Technology Corporation, & Open Learning Australia. (1994). *A request for comment to provide services for an Electronic Support Service for OLESS Pty Ltd*. (Archive reference: OLA-ON).

Open Net Pty Ltd. (1994). *Open Net Board of Directors meeting 5/94*. Minutes. 12 December (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1995a). *Open Net Board of Directors meeting 1/95*. Minutes. 11 January (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1995b). *Open Net Board of Directors meeting 2/95*. Minutes. Sydney. 8 February (Archive reference: OLA-ON-CORRESPONDENCE).

Open Net Pty Ltd. (1995c). *Open Net Board of Directors meeting 3/95*. Minutes. 5 April (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1995d). *Open Net Board of Directors meeting 4/95*. Minutes. 7 June (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1995e). *Open Net Board of Directors meeting 5/95*. Minutes. 2 August (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1995f). *Report on the launch*. Unpublished report. June (Archive reference: ON-REPORTS).

Open Net Pty Ltd. (1996a). *Open Net Board of Directors meeting 1/96*. Minutes. 23 February (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1996b). *Open Net Board of Directors meeting 3/96*. Minutes. 19 April (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1996c). *Open Net Board of Directors meeting 5/96*. Minutes. 13 September (Archive reference: OLA-ON-BOARD).

Open Net Pty Ltd. (1996d). *Untitled. Catalogue reference: 1630*. Complaints file, containing letters of complain from subscribers for May 1995–December 1996. (Archive reference: ON-CORRESPONDENCE).

Open University. (2002a). *About us: the Open University*. Retrieved 3 October, 2002, from *http://www.open.ac.uk/about/* (electronic document).

Open University. (2002b). *Professor Diana Laurillard (home page).* Retrieved 20 December, 2002, from *http://iet.open.ac.uk/pp/d.laurillard/cv.cfm* (electronic document).

Pargetter, R. (1992). *Untitled. Catalogue reference: 1282.* File note: a meeting of 3-12-92. 4 December (Archive reference: MU92-1243 FOLIO 37a).

Parliament of Australia. (2001). *Joint sittings, Ministries.* Retrieved January, 2003, from *http://www.aph.gov.au/library/parl/hist/ministries.htm* (electronic document).

Pascoe, R., A. McClelland, & B. McGaw. (1997). *Perspectives on selection methods for entry into higher education in Australia: commissioned report no. 58.* Canberra: Department of Employment, Education and Youth Affairs.

Patterson, G. (1992). *Credit transfer in tertiary education: issues and problems, current practices in credit transfer and related issues.* Canberra: AGPS.

Pennington, D. (1997). *Submission to the review of higher education financing and policy: Appendix A.* Canberra: DEETYA.

Perlgut, D. (1991a). *Open Learning consortium meeting.* Personal communication to Gavin Moodie. 26 September (Archive reference: MU91-1159 FOLIO 22b).

Perlgut, D. (1991b). *Untitled. Catalogue reference: 900.* Personal communication to Gavin Moodie. 18 December (Archive reference: MU91-1604 FOLIO 37).

Perlgut, D. (1992a). *Untitled. Catalogue reference: 958.* Personal communication to Anthony Pritchard. 25 February (Archive reference: MU92-0221 FOLIO 5).

Perlgut, D. (1992b). *Untitled. Catalogue reference: 962.* Personal communication to Anthony Pritchard. 2 March (Archive reference: MU92-0221 FOLIO 10).

Perlgut, D. (1992c). *Untitled. Catalogue reference: 965.* Personal communication to members of the Television Open Learning Consortium. 4 March (Archive reference: MU92-0221 FOLIO 13).

Peters, O. (1983). Distance teaching and industrial production: a comparative interpretation in outline. In D. Sewart & e. al (Eds.), *Distance education: international perspectives.* London: Croom Helm, pp. 95–113.

Peters, O. (1997). *Industrialised teaching and learning.* Paper presented at the conference: Professional Development for University Faculty and Administrators: January 12–March 20, 1998, University of Maryland University College, Institute for Distance Education.

Peters, O. (2000a). Digital learning environments. *International Review of Research in Open and Distance Learning,* 1 (1), pp. 1–19.

Peters, O. (2000b). The transformation of the university into an institution of independent learning. In T. Evans & D. Nation (Eds.), *Changing university teaching: reflections on creating educational technologies.* London: Kogan Page, pp. 10–23.

Peters, T. (1987). *Thriving on chaos: handbook for a management revolution.* New York: Harper-Collins.

Peters, T., & R. Waterman. (1982). *In search of excellence.* New York: Harper and Row.

Petre, D. (1996). *Resignation from Board.* Personal communication to Terrence Cutler. 23 October (Archive reference: OLA-ON-CORRESPONDENCE).

Phillips, B. (2002). *Managerial strategies of labour control: the transformation of industrial production and managerial methods.* Retrieved 3 October, 2002, from *http://www.kuleuven.ac.be/hiva/english/iwot5/Brian%20Phillips.pdf* (electronic document).

Phillips, D. (1995). *Untitled. Catalogue reference: 618.* Personal communication to Mal Logan. 30 November (Archive reference: OLA-ON-BOARD).

Phillips, D. (1996a). *Approval of diploma in business management.* Personal communication to Anthony Pritchard. 4 August (Archive reference: OLA-ON-CORRESPONDENCE).

Phillips, D. (1996b). *Relationship between OLA and ON.* Personal communication to Anthony Pritchard. 10 December (Archive reference: OLA-ON-CORRESPONDENCE).

Phillips, M. (1996c). *The Australian internet survey.* Electronic resource. Sydney: AGB McNair.

Piore, M. J., & C. F. Sable. (1984). *The second industrial divide: possibilities for prosperity.* New York: Basic Books.

Pizzey, D. (1992). *Untitled. Catalogue reference: 1273.* (Principle, St. Catherine's High School, Melbourne) Personal communication to Anthony Pritchard. 11 November (Archive reference: MU92-1243 FOLIO 29).

Plunkett, S. (1995). Net gains in a digital world. *Business Review Weekly, 6 May,* pp. 52–56.

Porter, D. (1992). *Untitled. Catalogue reference: 1268.* Personal communication to Mal Logan. 8 September (Archive reference: MU92-0920 FOLIO 43).

Postman, N. (1992). *Technopoly: the surrender of culture to technology.* New York: Vintage Books.

Powell, G. (1995). Open Net open. *The computer report,* 22 May (Australian periodical).

Pritchard, A. (1991a). *Briefing for the Dean's committee.* Unpublished report. (Archive reference: MU91-0104 FOLIO 17).

Pritchard, A. (1991b). *Open learning by TV.* Personal communication to Brian Watt. Includes attachment: "TV open learning" by Gavin Moodie. 7 May (Archive reference: MU91-0104 FOLIO 14b).

Pritchard, A. (1991c). *Television Open Learning Project.* Personal communication to M. Skilbeck (VC Deakin). 24 May (Archive reference: MU91-0104 FOLIO 24).

Pritchard, A. (1991d). *Untitled. Catalogue reference: 758.* Personal communication to Edward Lim (Librarian, Monash University). 26 June (Archive reference: MU91-0792 FOLIO 12).

Pritchard, A. (1991e). *Untitled. Catalogue reference: 761.* Personal communication to Wally Howse. 2 July (Archive reference: MU91-0792 FOLIO 15).

Pritchard, A. (1991f). *Untitled. Catalogue reference: 764.* Personal communication to John Chick. 2 July (Archive reference: MU91-0792 FOLIO 18).

Pritchard, A. (1991g). *Television Open Learning Project: status report, 30 August 1991.* Progress report sent to Brian Watt, Institutional Development Branch, Department of Employment Education and Training. (Archive reference: MU91-1159 FOLIO 15a+).

Pritchard, A. (1991h). *TV Open Learning Project, 'Campus Review Vol 1, No 11, October 24–30'.* Personal communication to J. Richardson, Campus Review Weekly. 29 October (Archive reference: MU91-1159 FOLIO 38+).

Pritchard, A. (1991i). *Untitled. Catalogue reference: 828.* Personal communication to Leora Black (Synergy Communications). 29 October (Archive reference: MU91-1159 FOLIO 38+).

Pritchard, A. (1991j). *Untitled. Catalogue reference: 859.* Personal communication to D. Walker (Deakin). 21 November (Archive reference: MU91-1604 FOLIO 12).

Pritchard, A. (1991k). *Untitled. Catalogue reference: 881.* Personal communication to Ian Teasdale. 5 December (Archive reference: MU91-1604 FOLIO 28b).

Pritchard, A. (1992a). *Untitled. Catalogue reference: 911.* Personal communication to Kim Beazley. 8 January (Archive reference: MU92-0034 FOLIO 4).

Pritchard, A. (1992b). *Untitled. Catalogue reference: 925.* Personal communication to David Hill. 4 February (Archive reference: MU92-0034 FOLIO 20+).

Pritchard, A. (1992c). *Some thoughts.* Personal communication to Bruce Keepes. 5 February (Archive reference: MU92-0034 FOLIO 21).

Pritchard, A. (1992d). *Untitled. Catalogue reference: 935.* Media release. 10 February (Archive reference: MU92-0034 FOLIO 25b).

Pritchard, A. (1992e). *Main points from the TVOLP Consortium meeting of 3 April, 1992.* Unofficial minutes. 6 April (Archive reference: MU92-0303 FOLIO 14).

Pritchard, A. (1992f). *Untitled. Catalogue reference: 1005.* Personal communication to Geoff Arger. 13 April (Archive reference: MU92-0303 FOLIO 24a).

Pritchard, A. (1992g). *Open Access Agency or tertiary access office—The TAO—on the way!* Personal communication to Doug Porter. 8 May (Archive reference: MU92-0538 FOLIO 5+).

Pritchard, A. (1992h). *Report on the open learning initiative.* Personal communication to Monash University Executive. 13 May (Archive reference: MU92-0538 FOLIO 7).

Pritchard, A. (1992i). *Expansion of the Television Open Learning Project.* Personal communication to Deans of Faculties, Monash University. 20 May (Archive reference: MU92-0538 FOLIO 16).

Pritchard, A. (1992j). *Open Learning Initiative.* Personal communication to Michael Gallagher. Including attachment: submission to DEET. 20 May (Archive reference: MU92-0538 FOLIO 12).

Pritchard, A. (1992k). *Television Open Learning Project—possible expansion*. Personal communication to Mal Logan. 21 May (Archive reference: MU92-0538 FOLIO 17).

Pritchard, A. (1992l). *Untitled. Catalogue reference: 1036*. Personal communication to members of the Television Open Learning Consortium. 21 May (Archive reference: MU92-0538 FOLIO 19).

Pritchard, A. (1992m). *TV Open Learning project progress report*. Personal communication to George Zuber. 27 March (Archive reference: MU92-0538 FOLIO 11a).

Pritchard, A. (1992n). *Untitled. Catalogue reference: 1056*. Personal communication to Tony Bennett. 27 May (Archive reference: MU92-0538 FOLIO 31).

Pritchard, A. (1992o). *Untitled. Catalogue reference: 1068*. Personal communication to John Chick. 2 June (Archive reference: MU92-0538 FOLIO 37).

Pritchard, A. (1992p). *Untitled. Catalogue reference: 1117*. Personal communication to Raol Wortley (Monash University Solicitor). 1 July (Archive reference: MU92-0769A FOLIO 9).

Pritchard, A. (1992q). *Untitled. Catalogue reference: 1168*. Personal communication to Collis-George (ABC). 14 July (Archive reference: MU92-0769B FOLIO 35e).

Pritchard, A. (1992r). *Untitled. Catalogue reference: 1208*. Personal communication to Mal Logan. 30 July (Archive reference: MU92-0769B FOLIO 61a).

Pritchard, A. (1992s). *Untitled. Catalogue reference: 1217*. Personal communication to Doug Porter. 4 August (Archive reference: MU92-0769B FOLIO 68).

Pritchard, A. (1992t). *Untitled. Catalogue reference: 1229*. Personal communication to Clifford J Hawkins. 7 August (Archive reference: MU92-0920 FOLIO 5a).

Pritchard, A. (1992u). *OL meeting with Baldwin—Monday*. Personal communication to Mal Logan. 20 November (Archive reference: MU92-1243 FOLIO 31).

Pritchard, A. (1993a). *Untitled. Catalogue reference: 1418*. Personal communication to Robert Pargetter. 20 January (Archive reference: MU92-1574 FOLIO 7d).

Pritchard, A. (1993b). *Untitled. Catalogue reference: 1299*. Personal communication to Gavin Moodie. 24 May (Archive reference: MU93-0393 FOLIO 30a).

Pritchard, A. (1993c). *Confidential note: allegations of bias in tendering*. Includes attachment. Personal communication to Michael Gallagher. 22 June (Archive reference: MU93-0393 FOLIO 41b).

Pritchard, A. (1993d). *OL computer database*. Personal communication to Mal Logan. 21 October (Archive reference: MU93-1236 FOLIO 11).

Pritchard, A. (1994a). *Brief report about OLAA and OLESS*. Personal communication to Mal Logan. 17 January (Archive reference: MU93-1784 FOLIO 16).

Pritchard, A. (1994b). *Untitled. Catalogue reference: 1313*. Personal communication to Mal Logan. 25 January (Archive reference: MU93-1784 FOLIO 15a).

Pritchard, A. (1994c). *Board of directors and other issues*. Personal communication to Mal Logan. 7 March (Archive reference: MU93-1784 FOLIO 29a).

Pritchard, A. (1994d). *Untitled. Catalogue reference: 1394*. Personal communication to Julie Carr. 13 May (Archive reference: OLA-OLESS).

Pritchard, A. (1994e). *Announcement of chair for OLESS Pty Ltd*. Speech delivered at the Regency Institute of Vocational Education and Training. 14 September (Archive reference: OLA-ON-GENERAL).

Pritchard, A. (1995a). *Policy issues*. Personal communication to John Julian. 1 March (Archive reference: OLA-ON).

Pritchard, A. (1995b). *Service contracts*. Personal communication to Whittleston (Open Net). 26 March (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996a). *Disgruntled student*. Personal communication to Ronald Watts. 27 February (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996b). *Response to personal attack*. Personal communication to Ronald Watts. 29 February (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996c). *Credit card payment complaint*. Personal communication to Ronald Watts. 5 March (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996d). *Credit card payment options*. Personal communication to Ronald Watts. 7 March (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996e). *Dispute*. Personal communication to Terrence Cutler. 12 March (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996f). *Transfer of OLTC share in ON to OLA*. Personal communication to Woollett. 15 April (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996g). *Untitled. Catalogue reference: 560*. Personal communication to Ronald Watts. 21 June (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996h). *Open Net Pty Ltd*. Personal communication to Amanda Vanstone. 11 July (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996i). *Untitled. Catalogue reference: 629*. Personal communication to Ian Creagh. 12 July (Archive reference: OLA-ON-BOARD).

Pritchard, A. (1996j). *Transfer of OLTC's share in ON*. Personal communication to John Nation. 2 August (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1996k). *Restructure of the ON Board*. Personal communication to Amanda Vanstone. 28 October (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1997a). *Outcome of Board meeting 10/1/97*. Personal communication to Ronald Watts. 13 January (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A. (1997b). *Outcome of Board meeting 15/1/97*. Personal communication to Nicholson. 24 January (Archive reference: OLA-ON-CORRESPONDENCE).

Pritchard, A., & G. Macleod. (1993). *Open learning electronic support service (OLESS)*. Official communication to the Minister for Employment, Education and Training. Includes attachment: 'Initial proposal for OLESS' (Joint bid for OLESS by OLA and UNE-NR). 16 December (Archive reference: OLA-ON-Corresondence).

Probyn, C. (1992). *Untitled. Catalogue reference: 998.* (Head, Dept. English, Monash University) Personal communication to Anthony Pritchard. 27 March (Archive reference: MU92-0303 FOLIO 16+).

Pusey, M. (1991). *Economic rationalism in Canberra: a nation-building state changes its mind.* Melbourne: Cambridge University Press.

Quartly, M., W. Renner, F. Perry, & C. Baker. (1995). *Final report: a study of assessment procedures in Open Learning units: quality project: OLA.* Melbourne: Monash University and the University of South Australia.

Rae, I. (1992). *OL unit proposal.* (Dean, Faculty of Science, Monash University) Personal communication to Anthony Pritchard. 3 April (Archive reference: MU92-0303 FOLIO 16).

Raggart, P. (1993). Post-Fordism and distance education—a flexible strategy for change. *Open Learning,* 8 (1), pp. 21–31.

Ramsay. (1992). *Untitled. Catalogue reference: 1197.* (NSW TAFE). Personal communication to Anthony Pritchard. 23 July (Archive reference: MU92-0769B FOLIO 55).

Ramsay, G. (1988). The ABC's changing role as a provider of education television programs. *Australian Journal of Educational Technology,* 4 (1), pp. 31–45.

Rassool, N. (1993). Post-Fordism? Technology and new forms of control: the case of technology in the curriculum. *British journal of sociology of education,* 14 (3), pp. 227–244.

Ray, R. (1993). *Question on notice: open learning, question No: 114, 11 May, p790.* Canberra: Senate Hansard, Australian Federal Government Senate.

Renner, W. (1995). Post-Fordist visions and technological solutions: educational technology and the labour process. *Distance Education,* 16 (2), pp. 284–301.

Ritzer, G. (1996). *The MacDonaldisation of society: an investigation into the changing character of contemporary social life.* Thousand Oaks, Ca: Pine Forge Press.

Robinson. (1992a). *Untitled. Catalogue reference: 1186.* Personal communication from VC, University South Australia to Mal Logan. 21 July (Archive reference: MU92-0769B FOLIO 50a).

Robinson, C., & L. Babblett. (1998). *Making a difference: the impact of Australia's indigenous education and training policy.* Kensington Park, SA: National Centre for Vocational Education Research Ltd,.

Robinson, D. (1992b). *Untitled. Catalogue reference: 1200.* Personal communication to Mal Logan. 23 July (Archive reference: MU92-0769B FOLIO 58).

Rumble, G. (1992). The competitive vulnerability of distance teaching universities. *Open Learning,* 7 (2), pp. 31–45.

Rumble, G. (1994). The competitive vulnerability of distance teaching universities: a reply. *Open Learning,* 9 (3), pp. 47–49.

Rumble, G. (1995a). Labour market theories and distance education 1: industrialisation and distance education. *Open Learning,* 10 (1), pp. 10–20.

Rumble, G. (1995b). Labour market theories and distance education II: how Fordist is distance education? *Open Learning*, 10 (2), pp. 12–28.

Rumble, G. (1995c). Labour market theories and distance education III: post-Fordism – the way forward? *Open Learning*, 10 (3), pp. 25–42.

Ryan, Y. (2001). The provision of learner support services online. In G. Farrell (Ed.), *The changing faces of virtual education*. Vancouver: The Commonwealth of Learning, pp. 71–94.

Sabel, C. F. (1982). *Work and politics: the division of labour in industry*. Cambridge: Cambridge University Press.

Sabel, C. F., & J. Zeitlin. (1985). Historical alternatives to mass production: politics, markets and technology in nineteenth century industrialization. *Past and Present*, 108, pp. 133–176.

Schon, D. (1983). *The reflective practitioner: how professionals think in action*. New York: Basic Books.

Senate Employment, Education and Training Reference Committee. (1994). *Inquiry into the development of Open Learning in Australia: part 1*. Canberra: AGPS.

Senate Hansard. (1994). *Estimates Committee: Department of Employment Education and Training: program 2, higher education*. Canberra: Page 120, Discussion involving: Senator Tierney; Mr Gallagher; Senator Schacht; Senator Teague; Senator Zakharov; Ms McKay; Mr Peacock; Senator Margetts; Ms Swift; Mr Daniels, Parliament of Australia.

Senate Standing Committee on Employment, Education and Training. (1994). *The present and future role of Open Learning in education and training: submission no. 35*: The Senate Standing Committee on Employment, Education and Training, AGPS.

Senge, P. M. (1990). *The fifth discipline*. New York: Doubleday.

Sewart, D. (1986). Single mode versus dual mode: a fair qQuestion? *Open Campus*, 12, pp. 10–15.

Skilbeck, M. (2001). *The university challenged: a review of international trends and issues with particular reference to Ireland*. Dublin: The Higher Education Authority.

Snowdon, W. (1993). *OL to become more accessible*. Media release. 18 August (Archive reference: MU93-1236 FOLIO7).

Spearritt, P. (1995). *Open Net and content*. Unpublished paper. 7 June (Archive reference: OLA-ON-CORRESPONDENCE).

Strange, S. (1988). *State and markets: an introduction to international political economy*. New York: Basil Blackwell.

Sumner, S. (2000). Serving the system: a critical history of distance education. *Open Learning*, 15 (3), pp. 267–285.

Synergy Communications. (1991a). *Public relations report*. Unpublished report. 16 October (Archive reference: MU91-1159 FOLIO 31).

Synergy Communications. (1991b). *Untitled. Catalogue reference: 839.* Press release. 8 November (Archive reference: MU91-1604 FOLIO 3).

Synergy Communications. (1992a). *Media issues.* Personal communication to Anthony Pritchard. 22 January (Archive reference: MU92-0034 FOLIO 17).

Synergy Communications. (1992b). *Report on public relations consultancy for Television Open Learning launch project.* Unpublished report. 31 March (Archive reference: MU92-0538 FOLIO 4).

Synergy Communications. (1992c). *Untitled. Catalogue reference: 945.* Personal communication to Anthony Pritchard. Includes attachment: Media release and Launch Speech by the Hon. Peter Baldwin, 17 February, 1992, Melbourne. 17 February (Archive reference: MU92-0034 FOLIO 36).

Taylor, J., J. Kemp, & J. V. Burgess. (1993). *Mixed-mode approaches to industry training: staff attitudes and cost effectiveness.* Canberra: Department of Employment, Education and Training, AGPS.

Taylor, J., & V. White. (1991). *The evaluation of the cost-effectiveness of multimedia mixed-mode teaching and learning.* Canberra: Department of Employment, Education and Training, AGPS.

Taylor, P., L. Lopez, & C. Quadrelli. (1996). *Flexibility, technology and academics' practices: tantalising tales and muddy maps*: Evaluations and Investigations Program, Department of Education, Employment and Youth Affairs.

Teasedale, I. (1991a). *Untitled. Catalogue reference: 883.* Personal communication to Anthony Pritchard. 6 December (Archive reference: MU91-1604 FOLIO 28d).

Teasedale, I. (1991b). *Untitled. Catalogue reference: 892.* Personal communication to Anthony Pritchard. 16 December (Archive reference: MU91-1604 FOLIO 32b).

Television Open Learning Consortium. (1991a). *Television Open Learning Consortium meeting of 4 October, 1991.* Agenda. 30 Sepember (Archive reference: MU91-1159 FOLIO 26).

Television Open Learning Consortium. (1991b). *Minutes of the Television Open Learning Consortium Meeting: 2 August 1991.* (Archive reference: MU91-0792 FOLIO 42).

Tierney, W. (2001). The autonomy of knowledge and the decline of the subject: postmodernism and the reformulation of the university. *Higher Education,* 41, pp. 353–372.

Tight, M. (1991). The reorganisation of Australian distance education: some comments. *Open Learning,* 6 (3), pp. 53–55.

Trinca, H. (1992). Class act has television students glued to the box, Australian Universities' Review. *The Australian,* 3 March, p. 5.

University of Melbourne. (2002). *What is MUPHAS?* Retrieved 1 December, 2002, from *http://www.services.unimelb.edu.au/muphas/customer/intro.html* (electronic document).

University of New England. (2002). *Discover UNE.* Retrieved November 16, 2002, from *http://www.une.edu.au/unehist.htm* (electronic document).

University of New England, & University of South Australia. (1991). *Open Learning project proposal: University of New England and University of South Australia.* 28 March (Archive reference: MU91-0104 FOLIO 11k).

University of Wollongong. (1991). *University of Wollongong: TV Open Learning project proposal: submission to DEET.* Unpublished Submission. 27 March (Archive reference: MU91-0792 FOLIO 9).

University Partnerships. (1992). *Implementation of the Open learning Initiative.* Submission to DEET. 26 August (Archive reference: MU92-0920 FOLIO 26).

Vanstone, A. (1996a). *OLA to takeover ON.* Personal communication to Mal Logan. 7 November (Archive reference: OLA-ON-CORRESPONDENCE).

Vanstone, A. (1996b). Personal communication to Ronald Watts. 7 November (Archive reference: OLA-ON-CORRESPONDENCE).

Vaughan, G. (1992). *Untitled. Catalogue reference: 912.* Personal communication from Acting VC, Monash University to Paul Keating. 9 January (Archive reference: MU92-0034 FOLIO 5).

Volker, D. (1995). *Untitled. Catalogue reference: 1340.* Personal communication to R. Watts. Official letter from DEET. 25 September (Archive reference: OLA-ON-BOARD).

Wallace, T. (1998). Fordism. In M. Poole & M. Warner (Eds.), *Handbook of human resource management.* London: Thomson Business Press.

Watt, B. (1990). *Untitled. Catalogue reference: 731.* Institutional Development Branch, Department of Employment Education and Training. Personal communication to Gavin Moodie. 18 December (Archive reference: MU91-0104 FOLIO 7b).

Watts, R. (1994). *OLESS Pty Ltd – Outline business plan.* Unpublished report. December (Archive reference: ON-STRATEGICPLANS).

Watts, R. (1995a). *Summary of calls by answering point.* Briefing paper for Open Net Board of Directors. Unpublished. September (Archive reference: OLA-ON-BOARD).

Watts, R. (1995b). *Network traffic and performance.* Circular Communication to Open Net Board of Directors. (Archive reference: OLA-ON-BOARD).

Watts, R. (1995c). *Business plan briefing.* Personal communication to Brian Johns. January 4 (Archive reference: OLA-ON-BOARD).

Watts, R. (1995d). *ON launch.* Circular Communication to Open Net Board of Directors. 24 May (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1995e). *Apology.* Personal communication to Anthony Pritchard and Peter Spearritt. 14 June (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1995f). *Untitled. Catalogue reference: 1627.* Personal communications to Brian Johns. 29 July (Archive reference: ON-CORRESPONDENCE).

Watts, R. (1995g). *Appointment of a multimedia manager.* Personal communication to Anthony Pritchard. 21 August (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1995h). *Tariff changes*. Briefing paper for Open Net Board members. Unpublished. 19 October (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1995i). *Briefing on ON tariffs*. Circular Communication to Open Net Board of Directors. 6 November (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1995j). *ON tariffs*. Personal communication to Ian Creagh. 13 December (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996a). *Chief Executive's report*. Unpublished report. (Archive reference: OLA-ON-BOARD).

Watts, R. (1996b). *Untitled. Catalogue reference: 1632*. Circular communication to Open Net Board members. 3 February (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996c). *Untitled. Catalogue reference: 1631*. Circular communication to members of the Open Net Board. 19 February (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996d). *Credit card payments*. Circular communication to Open Net Board of Directors. 28 February (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996e). *Competitive relationship*. Personal communication to Anthony Pritchard. 25 June (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996f). *Selective circulation of documents*. Circular communication to Open Net Board of Directors. 29 August (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996g). *OLA's future*. Personal communication to Mal Logan. 28 November (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996h). *OLA invoices*. Personal communication to Anthony Pritchard. 3 December (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996i). Personal communication to Anthony Pritchard. 6 December (Archive reference: OLA-ON-CORRESPONDENCE).

Watts, R. (1996j). *Indigenus e-network*. Personal communication to Anthony Pritchard. 20 December (Archive reference: OLA-ON-CORRESPONDENCE).

Webb, R. (1992a). *Untitled. Catalogue reference: 1046*. Personal communication to Mal Logan. 26 May (Archive reference: MU92-0538 FOLIO 30).

Webb, R. (1992b). *Untitled. Catalogue reference: 1191*. Personal communication to Mal Logan. 22 July (Archive reference: MU92-0769B FOLIO 53a).

Weinberg, G. (1975). *An introduction to general systems theory*. Toronto: John Wiley and Sons.

West, L. (1992). *Untitled. Catalogue reference: 1254*. Personal communication to Dick Johnson. 26 August (Archive reference: MU92-0920 FOLIO 27).

White, M. (1982). Distance education in Australian higher education—a history. *Distance Education*, 3 (2), pp. 255–278.

White, V. (1992). Response. *Open Learning*, 7 (3), pp. 59–60.

Whittlestone, S. (1992). *Untitled. Catalogue reference: 959*. Personal communication to Johnson. 25 February (Archive reference: MU92-0221 FOLIO 6).

Widdowson, K. (1991). *Untitled. Catalogue reference: 776*. Personal communication to Anthony Pritchard. 25 July (Archive reference: MU91-0792 FOLIO 29a).

Wilkinson, B. (1983). *The shop floor politics of new technology*. London: Heinemann.

Williams, H. (1995). *Curriculum conceptions of open learning: theory, intention and student experience in the Australian Open Learning Initiative*. Brisbane, Kelvin Grove: Ph.D. Thesis, Queensland University of Technology.

Wilson. (1992a). *Untitled. Catalogue reference: 1192*. Personal communication to John Maloney (VC, Curtin). 22 July (Archive reference: MU92-0769B FOLIO 53b).

Wilson, B. (1992b). *Untitled. Catalogue reference: 1020*. Personal communication to Mal Logan. 8 May (Archive reference: MU92-0538 FOLIO 5+).

Womack, J. P. (1987). *The Japanification of the American automobile industry*. Cambridge, MA: The MIT Japan Program.

Womack, J. P., D. T. Jones, & D. Roos. (1990). *The machine that changed the world*. New York: Harper Collins Publishers.

Woollett, H. (1996). *Open Net Directors' resignations*. Personal communication to Anthony Pritchard. 29 October (Archive reference: OLA-ON-BOARD).

Zeegers, M., & P. Macauley. (2000). *Distancing libraries: the times they are a-changing*. Paper presented at the conference: Distance education: an open question?, 11–13 September, University of South Australia, Adelaide.

Zuber, G. (1991). *Untitled. Catalogue reference: 854*. Personal communication to Anthony Pritchard. 18 November (Archive reference: MU91-1604 FOLIO 9+).