The Effectiveness of Models of Flexible Provision of Higher Education

01/9

Peter Ling
Geoff Arger
Helen Smallwood
Swinburne University of Technology
Ron Toomey
Ron Toomey and Associates
Denise Kirkpatrick
Ian Barnard
Charles Sturt University

Evaluations and Investigations Programme
Higher Education Division
Department of Education, Training and Youth Affairs.
The Effectiveness of Models of Flexible Provision of Higher Education

Peter Ling
Geoff Arger
Helen Smallwood
Swinburne University of Technology

Ron Toomey
Ron Toomey and Associates

Denise Kirkpatrick
Ian Barnard
Charles Sturt University

Evaluations and Investigations Programme
Higher Education Division
# Contents

**Acknowledgments** xi  
**Abbreviations and Acronyms** xiii  
**Executive Summary** xvii  
**Part One: Introduction**  
1. **Key concepts** ........................................................................................................... 3  
   1.1 Introduction ........................................................................................................ 3  
   1.2 Key concepts .................................................................................................... 3  
   
   1.2.1 Guided choice: elements of flexibility .......................................................... 3  
   1.2.2 Strategies for provision—examples of learning and teaching techniques and  
   technologies employed ......................................................................................... 4  
   1.2.3 Strategies for provision—examples of policies for flexible provision employed ...... 4  
   1.2.4 Typology of flexible provision—models employed ........................................... 5  
   1.2.5 Effectiveness of flexible provision .................................................................. 6  
   1.2.6 Cost effectiveness of flexible provision .......................................................... 7  
   1.3 The approach to the study ............................................................................. 7  
   2. **Context** ............................................................................................................... 9  
   2.1 Introduction ..................................................................................................... 9  
   2.2 Educational, social and technological context .................................................. 9  
   2.3 Understandings of the key concepts in this study ............................................. 10  
   2.3.1 Key concepts ............................................................................................ 10  
   2.3.2 Flexibility ................................................................................................ 10  
   2.3.3 Effectiveness ........................................................................................... 12  
   2.3.4 Cost effectiveness .................................................................................... 16  
   2.4 Conclusion ............................................................................................. 17  
   3. **Methodology** .................................................................................................... 19  
   3.1 The topic and research question .................................................................... 19  
   3.2 Research genre .............................................................................................. 19  
   3.3 The research schema .................................................................................... 21  
   3.4 Domains or elements of flexibility .................................................................. 21  
   3.5 Typology ..................................................................................................... 22  
   3.6 Survey of flexible provision of higher education in Australia ......................... 22  
   3.7 Case studies ............................................................................................. 22  
   3.8 Summary of methods applied to derive data pertinent to the investigative  
   questions ............................................................................................................. 23  
   3.9 Representation of case study findings ............................................................. 25  
   3.9.1 Depiction of findings ............................................................................... 25
Effectiveness of Models of Flexible Provision of Higher Education

3.9.2 Application of depictograms to the cases .................................................... 26
3.9.3 Reliability ..................................................................................................... 26

Part Two: Findings

4 A survey of flexible provision of higher education in Australia ...................... 29
  4.1 Introduction .................................................................................................. 29
  4.2 The functions of the survey ........................................................................ 29
  4.3 Approaches to flexible provision of higher education in Australia ............... 29
  4.4 An interpretation of the survey ................................................................... 50
  4.5 Selection of cases from the survey .............................................................. 51

5 Swinburne University of Technology (Lilydale) .............................................. 55
  5.1 Context ....................................................................................................... 55
  5.2 Flexible provision policy and practice ......................................................... 58
   5.2.1 Policy ...................................................................................................... 58
   5.2.2 Practice ................................................................................................. 60
  5.3 Flexible delivery and student outcomes .................................................... 62
  5.4 Flexible delivery and student participation ................................................ 63
  5.5 Cost effectiveness of flexible delivery ....................................................... 64

6 University of South Australia (Bachelor of Nursing Whyalla) ....................... 65
  6.1 Context ....................................................................................................... 65
  6.2 Flexible provision policy and practice ......................................................... 66
   6.2.1 Policy ...................................................................................................... 66
   6.3 Whyalla campus and its context ................................................................. 68
   6.4 Flexible provision practice ....................................................................... 69
  6.5 Student outcomes ....................................................................................... 71
  6.6 Student participation ................................................................................... 72
  6.7 Cost effectiveness ....................................................................................... 72

7 University of Tasmania (BAVE programme) ................................................. 75
  7.1 Context ....................................................................................................... 75
  7.2 Flexible provision policy and practice ......................................................... 76
   7.2.1 Policy ...................................................................................................... 76
   7.2.2 Practice ................................................................................................. 78
   7.2.3 Flexible delivery and student outcomes ............................................... 79
   7.2.4 Flexible delivery and student participation ........................................... 81
   7.2.5 Cost effectiveness of flexible delivery ................................................... 81
  7.3 Conclusions ................................................................................................ 82

8 Victoria University of Technology (Nyerna Studies – Echuca) ..................... 85
  8.1 Context ....................................................................................................... 85
  8.2 Detail of Nyerna Studies ............................................................................ 86
  8.3 Flexible provision policy and practice ......................................................... 88
  8.4 Flexible learning and programme outcomes ............................................ 90
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5 Flexible learning and student outcomes</td>
<td>91</td>
</tr>
<tr>
<td>8.6 Flexible learning and student participation</td>
<td>91</td>
</tr>
<tr>
<td>8.7 Flexible learning and cost effectiveness</td>
<td>92</td>
</tr>
<tr>
<td>9 Deakin University and Ford Australia</td>
<td>93</td>
</tr>
<tr>
<td>9.1 Context</td>
<td>93</td>
</tr>
<tr>
<td>9.2 Flexible provision policy and practice</td>
<td>94</td>
</tr>
<tr>
<td>9.2.1 Policy</td>
<td>94</td>
</tr>
<tr>
<td>9.2.2 Practice</td>
<td>95</td>
</tr>
<tr>
<td>9.3 Flexible delivery and student outcomes</td>
<td>97</td>
</tr>
<tr>
<td>9.4 Flexible delivery and student participation</td>
<td>97</td>
</tr>
<tr>
<td>9.5 Cost effectiveness and flexible delivery</td>
<td>98</td>
</tr>
<tr>
<td>10 Griffith University (Logan)</td>
<td>99</td>
</tr>
<tr>
<td>10.1 Context: General issues</td>
<td>99</td>
</tr>
<tr>
<td>10.1.1 Context: Logan-specific issues</td>
<td>100</td>
</tr>
<tr>
<td>10.1.2 Applications to study at Logan</td>
<td>101</td>
</tr>
<tr>
<td>10.1.3 Enrolments by age</td>
<td>101</td>
</tr>
<tr>
<td>10.1.4 Enrolments 2000</td>
<td>102</td>
</tr>
<tr>
<td>10.2 Flexible learning policy, practice and support</td>
<td>103</td>
</tr>
<tr>
<td>10.2.1 Policy</td>
<td>103</td>
</tr>
<tr>
<td>10.2.2 Practice</td>
<td>104</td>
</tr>
<tr>
<td>11 University of Queensland (Ipswich)</td>
<td>109</td>
</tr>
<tr>
<td>11.1 A new campus for a new approach</td>
<td>110</td>
</tr>
<tr>
<td>11.2 Student profiles</td>
<td>112</td>
</tr>
<tr>
<td>11.3 UQ Ipswich at a glance</td>
<td>114</td>
</tr>
<tr>
<td>11.4 University of Queensland policy on flexible learning</td>
<td>115</td>
</tr>
<tr>
<td>11.5 Providing for flexible learning</td>
<td>116</td>
</tr>
<tr>
<td>11.6 Accommodating learner needs, preferences and choices</td>
<td>118</td>
</tr>
<tr>
<td>11.7 Effectiveness of the model</td>
<td>122</td>
</tr>
<tr>
<td>11.7.1 Student satisfaction with the model</td>
<td>122</td>
</tr>
<tr>
<td>11.7.2 Staff satisfaction with the model</td>
<td>125</td>
</tr>
<tr>
<td>11.7.3 Community satisfaction with the model</td>
<td>126</td>
</tr>
<tr>
<td>11.7.4 Cost effectiveness of the model</td>
<td>127</td>
</tr>
<tr>
<td>11.8 Conclusion</td>
<td>128</td>
</tr>
<tr>
<td>12 Charles Sturt University (Dubbo)</td>
<td>129</td>
</tr>
<tr>
<td>12.1 Context</td>
<td>130</td>
</tr>
<tr>
<td>12.1.1 The campus</td>
<td>130</td>
</tr>
<tr>
<td>12.1.2 Staffing</td>
<td>131</td>
</tr>
<tr>
<td>12.1.3 Courses and enrolments</td>
<td>132</td>
</tr>
<tr>
<td>12.1.4 Flexible teaching–learning approaches</td>
<td>133</td>
</tr>
<tr>
<td>12.2 Resourcing</td>
<td>136</td>
</tr>
</tbody>
</table>
16 Conclusion .............................................................................................................. 195
16.1 The topic and research question .................................................................... 195
16.2 Models of flexible provision of courses in Australian higher education .......... 196
16.3 The effectiveness of models of flexible provision of higher education against project criteria and in their own terms .................................................. 198
16.4 The cost effectiveness of models of flexible provision of higher education ...... 200
16.5 Possibilities suggested by the findings .............................................................. 200

Appendix: Survey of universities ........................................................................... 203
Glossary ...................................................................................................................... 207
Bibliography ............................................................................................................. 209

Tables

Table 3.1 Methods applied to derive data pertinent to the investigative questions .......................................................... 25
Table 4.1 A map of policies, practices and rationales from data provided or available on the World Wide Web .............................................................. 30
Table 4.2 A typology for the flexible provision of Australian higher education ........................................................................... 52
Table 5.1 Numbers of applicants to Lilydale campus by first preference, within first three preferences, and within all Year 12 preferences .......... 57
Table 5.2 Swinburne (Lilydale) percentage enrolment by age group in 1999 ........................................................................... 57
Table 5.3 Swinburne (Lilydale) higher education student enrolments in 1999 by course ........................................................................... 58
Table 5.4 Swinburne (Lilydale) enrolments by postcode groups as a percentage of the total university campus population ..... 63
Table 5.5 Comparative retention rates for selected common courses Swinburne (Hawthorn) and Swinburne (Lilydale) ............................ 64
Table 6.1 Home residence in 2000 – Bachelor of Nursing (external) ................... 69
Table 6.2 Whyalla campus (Bachelor of Nursing – external) enrolment by age group in 2000 ........................................................................... 70
Table 7.1 Comparative statistics for Bachelor of Adult and Vocational Education (BAVE) ........................................................................... 76
Table 7.2 Comparison of lapse rates in any year since 1995 ................................. 81
Table 10.1 Applications for admission to Logan campus 1998–2000 .................... 101
Table 10.2 Enrolments by age in 1999 and 2000 ................................................... 102
Table 10.3 2000 enrolments – Logan campus ....................................................... 102
Table 10.4 Logan campus enrolment in 2000, by geographical area .................... 107
Table 10.5 Scale and cost of GFLS subject design and development services ........................................................................... 108
Table 11.1 Percentage of total campus enrolment, by degree, in first two years of operation ................................................................. 111
Table 11.2 Enrolment profiles ............................................................................. 112
Table 11.3 Enrolments by age ........................................................................... 112
Table 11.4 Living situation ................................................................................. 113
Table 11.5 Highest educational qualification .................................................. 113
Table 11.6 Work patterns ................................................................................. 113
Table 11.7 Preferred learning style ................................................................. 113
Table 11.8 Access to IT .................................................................................... 114
Table 11.9 Levels of confidence in software applications ............................... 114
Table 11.10 Home location of enrollees in 1999 ............................................. 120
Table 12.1 The growth of courses and enrolments at Dubbo since 1997 ........ 132
Table 13.1 Student profile ............................................................................. 144
Table 13.2 Location/number of USQ’s Australian distance education students in 1998 ................................................................. 144
Table 13.3 Nature of USQ’s off-campus student population ......................... 145
Table 13.4 Models of distance education – a conceptual framework .......... 153
Table 16.1 The typology and instances of flexible provision .......................... 197

Figures

Figure 1.1 Flexible provision of higher education typology .............................. 5
Figure 1.2 Aspects of effectiveness of flexible provision .................................. 6
Figure 1.3 A typology of the effectiveness of flexible provision of higher education. ................................................................. 7
Figure 1.4 A typology of the cost effectiveness of flexible provision of higher education. ................................................................. 7
Figure 1.5 Components of the study and their derivation ............................... 8
Figure 3.1 Research schema ........................................................................ 20
Figure 3.2 Regional participation and cases map ......................................... 24
Figure 3.3 Depictogram concept ................................................................ 26
Figure 6.1 The planning and review cycle of the University of South Australia ... 68
Figure 7.1 Full-time and part-time enrolments in BAVE since 1995 .............. 81
Figure 13.1 Unit team model – the USQ approach to courseware design and development .......................................................... 147
Figure 13.2 Distance education student communication methods ................ 151
Figure 15.1 Depictogram example (simulated) ........................................... 173
Figure 15.2 Swinburne University of Technology (Lilydale).......................... 175
| Figure 15.3 | University of South Australia (Bachelor of Nursing – Whyalla) .......... 177 |
| Figure 15.4 | University of Tasmania (BAVE programme) ........................................ 179 |
| Figure 15.5 | Victoria University (Nyerna Studies – Echuca) ................................... 181 |
| Figure 15.6 | Deakin University and Ford Australia .................................................. 183 |
| Figure 15.7 | Griffith University (Logan) .............................................................. 185 |
| Figure 15.8 | University of Queensland (Ipswich) .................................................... 187 |
| Figure 15.9 | Charles Sturt University (Dubbo) ......................................................... 189 |
| Figure 15.10 | University of Southern Queensland (Distance Education Centre) .......... 191 |
| Figure 15.11 | University of Ballarat (Graduate Certificates) ...................................... 193 |
| Figure 16.1 | The flexibility and effectiveness of models of flexible provision of higher education ................................................................. 199 |
| Figure 16.2 | The cost effectiveness of models of flexible provision of higher education ................................................................. 201 |
Acknowledgments

Research team
Peter Ling (Project Director)
Geoff Arger
Helen Smallwood
Learning and Teaching Support, Swinburne University of Technology
Ron Toomey
Ron Toomey and Associates
Denise Kirkpatrick
Ian Barnard
Charles Sturt University

Contributors to case studies
Charles Sturt University Denise Kirkpatrick
Deakin University and Ford Australia Ron Toomey
Griffith University Peter Taylor
Swinburne University of Technology (Lilydale) Ron Toomey
University of Ballarat Kate Brass, Colleen O’Hara, Joy Nunn, Natalie Radomski, Allan Donnelly and Lyn Roberts.
University of Queensland Allison Brown
University of South Australia Ian Reid and Jim Harvey
University of Southern Queensland USQ Distance Education Centre
University of Tasmania Sue Kilpatrick and John Williamson
Victoria University of Technology Neil Hooley

Contributors to data interpretation
Charles Sturt University Kristen Davis

Other contributions
The contributions of the large number of people who provided data and otherwise assisted authors of the cases studies and university personnel who responded to the researchers requests for information is gratefully acknowledged.
## Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANU</td>
<td>Australian National University</td>
</tr>
<tr>
<td>AV</td>
<td>Audiovisual</td>
</tr>
<tr>
<td>BAVE</td>
<td>Bachelor of Adult and Vocational Education (University of Tasmania)</td>
</tr>
<tr>
<td>CADFL</td>
<td>Centre for Academic Development and Flexible Learning (University of Western Sydney)</td>
</tr>
<tr>
<td>CAE</td>
<td>Council of Adult Education</td>
</tr>
<tr>
<td>CELT</td>
<td>Centre for Enhancing Learning and Teaching (Charles Sturt University &amp; University of Western Sydney)</td>
</tr>
<tr>
<td>CMA</td>
<td>Computer-mediated assessment</td>
</tr>
<tr>
<td>CML</td>
<td>Computer-managed learning (University of Southern Queensland)</td>
</tr>
<tr>
<td>CSU</td>
<td>Charles Sturt University</td>
</tr>
<tr>
<td>DEC</td>
<td>Distance Education Centre</td>
</tr>
<tr>
<td>DETYA</td>
<td>Department of Education, Training and Youth Affairs (Commonwealth)</td>
</tr>
<tr>
<td>DOCS</td>
<td>Department of Community Services (New South Wales)</td>
</tr>
<tr>
<td>DVC</td>
<td>Deputy Vice-Chancellor</td>
</tr>
<tr>
<td>ECU</td>
<td>Edith Cowan University</td>
</tr>
<tr>
<td>EFSTU</td>
<td>Equivalent full-time student units</td>
</tr>
<tr>
<td>EN</td>
<td>Enrolled nurse</td>
</tr>
<tr>
<td>FET</td>
<td>Further Education and Training</td>
</tr>
<tr>
<td>FLC</td>
<td>Flexible Learning Centre (University of South Australia)</td>
</tr>
<tr>
<td>GCE (TE)</td>
<td>Graduate Certificate of Education (Tertiary Education) (University of Ballarat)</td>
</tr>
<tr>
<td>GCNOPC</td>
<td>Graduate Certificate of Nursing (Oncology/Palliative Care) (University of Ballarat)</td>
</tr>
<tr>
<td>GFLS</td>
<td>Griffith Flexible Learning Services (Griffith University)</td>
</tr>
<tr>
<td>GIHE</td>
<td>Griffith Institute for Higher Education</td>
</tr>
<tr>
<td>GU</td>
<td>Griffith University</td>
</tr>
<tr>
<td>HEFA</td>
<td>Higher Education Funding Act 1988</td>
</tr>
<tr>
<td>IASOS</td>
<td>Institute of Antarctic and Southern Ocean Studies (University of Tasmania)</td>
</tr>
<tr>
<td>ICDE</td>
<td>International Council for Open and Distance education</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technologies</td>
</tr>
<tr>
<td>ID</td>
<td>Instructional Designer</td>
</tr>
<tr>
<td>ILS</td>
<td>Interactive Learning Services</td>
</tr>
<tr>
<td>IMM</td>
<td>Interactive multimedia</td>
</tr>
<tr>
<td>ISDN</td>
<td>International standard digital network</td>
</tr>
<tr>
<td>IT</td>
<td>Information technology</td>
</tr>
<tr>
<td>JCU</td>
<td>James Cook University</td>
</tr>
<tr>
<td>LAN</td>
<td>Local area network</td>
</tr>
<tr>
<td>LIFT</td>
<td>Centre for Learning Innovations and Future Technologies (Edith Cowan University)</td>
</tr>
<tr>
<td>LRDU</td>
<td>Learning Resources Development Unit (University of Queensland)</td>
</tr>
<tr>
<td>MBA</td>
<td>Master of Business Administration</td>
</tr>
<tr>
<td>MDO</td>
<td>Material Development Officer</td>
</tr>
<tr>
<td>MML</td>
<td>Multi-modal learning</td>
</tr>
<tr>
<td>MUD</td>
<td>Multiple user domain</td>
</tr>
<tr>
<td>OLA</td>
<td>Open Learning Australia</td>
</tr>
<tr>
<td>OP</td>
<td>Overall position (Queensland)</td>
</tr>
<tr>
<td>PALS</td>
<td>Peer-assisted learning sessions</td>
</tr>
<tr>
<td>PC</td>
<td>Personal computer</td>
</tr>
<tr>
<td>PVC</td>
<td>Pro Vice-Chancellor</td>
</tr>
<tr>
<td>QTAC</td>
<td>Queensland Tertiary Admissions Centre</td>
</tr>
<tr>
<td>QUT</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>RBL</td>
<td>Resource-based learning</td>
</tr>
<tr>
<td>RLO</td>
<td>Regional Liaison Officer</td>
</tr>
<tr>
<td>RN</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td>RPL</td>
<td>Recognition of Prior learning</td>
</tr>
<tr>
<td>SEDS</td>
<td>Scholarship and Educational Development Services (University of Ballarat)</td>
</tr>
<tr>
<td>SES</td>
<td>Special Entry Scheme (University of South Australia)</td>
</tr>
<tr>
<td>SMB</td>
<td>School of Mines and Industries (University of Ballarat)</td>
</tr>
<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
</tr>
<tr>
<td>TALSS</td>
<td>Teaching and Learning Support Services (Queensland University of Technology)</td>
</tr>
<tr>
<td>TEDI</td>
<td>Teaching and Educational Development Institute (University of Queensland)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>TER</td>
<td>Tertiary entrance rank</td>
</tr>
<tr>
<td>TLC</td>
<td>Teaching and Learning Committee (University of Tasmania)</td>
</tr>
<tr>
<td>UAC</td>
<td>University Admissions Centre (New South Wales and Australian Capital Territory)</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Economic Social and Cultural Organisation</td>
</tr>
<tr>
<td>UQ</td>
<td>University of Queensland</td>
</tr>
<tr>
<td>USQ</td>
<td>University of Southern Queensland</td>
</tr>
<tr>
<td>UTAS</td>
<td>University of Tasmania</td>
</tr>
<tr>
<td>UWS</td>
<td>University of Western Sydney</td>
</tr>
<tr>
<td>VUT</td>
<td>Victoria University of Technology</td>
</tr>
<tr>
<td>WIT</td>
<td>Wimmera Institute of TAFE</td>
</tr>
<tr>
<td>WWW</td>
<td>World Wide Web</td>
</tr>
</tbody>
</table>
Executive Summary

The topic

This study constitutes an investigation of the effectiveness of several models of flexible provision of higher education in Australia.

The study grew out of a concern about the effectiveness of flexible provision initiatives in affording study choices to students in non-metropolitan regions of Australia. The cases chosen for close investigation are ones which provide for students in non-metropolitan regions.

The notion of flexible provision is not defined in any agreed way in the research literature, nor is there a single, commonly adopted approach to it in practice. In this study the term flexible provision of higher education, does not refer to the use of a particular learning and teaching technique or technology—a meaning sometimes adopted—but to the provision of choice for learners.

In this report flexible provision refers to offering guided choice to the learner in one or more of the following domains:

- The *time* at which study occurs.
- The *pace* at which the learning proceeds.
- The *place* in which study is conducted.
- The *content* that is studied, which includes the concept of flexible *entry* and *exit* points to a programme.
- The learning *style* adopted by the learner.
- The form(s) of *assessment* employed.
- The option to *collaborate* with others or to learn independently.

Flexible provision of higher education, that is the provision of choice for learners, may be afforded through the employment of various strategies including the use of learning and teaching techniques and technologies such as CD-ROM, online materials, online communications, print materials, face-to-face tuition, distributed face-to-face sessions, video-on-demand, videotape/audiotape, videoconferencing, teleconferencing, TV and radio.

Flexible provision of higher education may also be afforded through the adoption of policies affecting choices for learners such as open entry, recognition of prior learning, credit transfer arrangements, articulated and embedded awards, content choices within programmes, multi-modal provision of education, and negotiated assessment.

Research questions

The research questions were framed as:

- Are different models of flexible provision of higher education apparent in Australia?
- Are models identified effective in the provision of higher education?

The second question includes the concept of cost effectiveness.
Research genre

The research genre adopted is interpretative. Neither universities nor programmes can be sorted into simple flexible and non-flexible categories. Each case is peculiar. In view of this the identification of factors associated with effective flexible provision of higher education has not been attempted. The investigation involves the identification and description of cases of flexible provision of higher education. The descriptions utilize both qualitative and quantitative data. The quantitative elements are employed descriptively rather than inferentially.

Models of flexible provision of higher education in Australia

Each university in Australia was provided with the definitions employed in the study and the conceptual schema and was invited to indicate policies of the university directed at flexible provision of higher education. For each policy they were requested to provide a rationale and an example or examples of practice. All universities responded.

Three major themes emerged from the data. Many universities defined flexible provision of higher education in terms of offering choices to learners. Of these there were universities who understood flexibility to be directed at access. There were other universities who understood flexibility as being about accommodating a range of learning needs and preferences. The third common response referred to the use of new learning technologies to address the quality of learning. In this study this purpose does not come within the definition of flexible provision; however the practices that arise from it may provide flexibility and to that extent they were included.

The survey of universities indicated a wide range of approaches to the flexible provision of higher education. In fact for many universities several approaches co-existed. For the purposes of this study two broad categories and six strategies of flexible provision have been distinguished on the basis of literature and responses to the survey.

Provision affording access and convenience:
- Moving time and place of study to suit the learner.
- Removing fixed time and place constraints.
- Removing entry requirements.

Provision accommodating learning preferences:
- Providing alternative entry and exit points.
- Accommodating learning style, pace and collaboration preferences.
- Accommodating content and assessment preferences.

These broad categories and strategies provide a typology of flexible provision of higher education in Australia.

The effectiveness of models of flexible provision of higher education was
explored in this investigation through case studies. The case study reports constitute descriptions of the context of the case, policies relevant to the case, practices, student participation, learning outcomes and cost effectiveness.

Ten cases were selected. The ten cases cover the notional models of flexible provision identified in the survey of universities. The cases, however, do not match the notional models. Most span two or three models. In selecting the cases a focus on provision for non-metropolitan regions was a factor.

Case study findings were summarized employing depictograms. The depictogram is a tool for providing a graphic summary of an interpretation of data derived from descriptive case studies. In the case of the evaluation and investigation of the effectiveness of models of flexible provision of higher education a set of depictograms was used to depict flexibility, effectiveness and cost effectiveness.

The findings from the individual case studies have been agglomerated in the Conclusion to give an overall picture of the flexibility, effectiveness and cost effectiveness of the cases investigated.

---

**The effectiveness of models for flexible provision of higher education**

As a descriptive/interpretive approach is taken and as each case differs substantially from other cases, it is not appropriate to make generalized conclusions. Nevertheless the case findings can be said to indicate that:

- The cases of flexible provision of higher education investigated were indeed flexible – that is they offered choices to students.
- The cases could be classed as effective against the criteria of effectiveness adopted for the study as well as in terms of the intent of the universities in offering flexible arrangements.

---

**The cost effectiveness of models for flexible provision of higher education**

Cost effectiveness was addressed in this investigation by separately considering effectiveness and costliness. As for flexibility and effectiveness, a picture of cost effectiveness of flexible provision of higher education emerges from the case studies which suggests that:

- As indicated above, the cases could be classed as effective.
- Flexible provision tends to make marginal additional demands on infrastructure costs. In most cases it makes additional demands on support services and academic staff time. The additional demands on the resource academic staff time are not usually reflected in additional budget allocations. The demands on academic staff time are satisfied in part at the cost of time spent on research and in part by staff working longer hours.
The costliness of most of the cases studied is due in part to their innovative status involving establishment costs and small scale of operation.

For institutions with established off-campus or multi-modal arrangements and which make allowance for design and development demands, flexible provision is not costly, though communication with students is increasingly demanding on academic staff time.

There may be opportunities for adoption of more economical procedures.

**Recommendations**

Each case is individual, reflecting institutional responses to their own histories, needs and environments, and the research approach adopted does not lead to generalizable conclusions. A review of the findings of the cases in conjunction with the literature does, however, suggest some possibilities for effective and cost effective flexible provision of higher education which inform the following recommendations.

It is recommended that:

- Universities, rather than making incremental and additive changes to programmes, should consider redesigning programmes for flexible provision taking into account the educational potentials of available media, opportunities for economies of scale and the constraints on available resources, particularly academic staff time.

- Universities should seek opportunities to make use of tuition materials for both on-campus and off-campus tuition and combinations of the two in order to make provision economical and to make provision flexible in terms of time, place and learning style preferences of students.

- Universities should seek opportunities to spread design and development costs of tuition materials including collaboration between institutions, voluntary or commercial pooling of learning resources using metadata tagging, and the purchase of commercially available materials.

- Universities should consider making more use of infrastructure and resources outside of the higher education sector, such as those in the workplace and the home, which are available at little cost to the education provider and are convenient for the learner.

This study suggests further areas for research:

- Further research and evaluation of learning processes and learning outcomes associated with flexible provision of higher education is required.

- This study has focused on non-metropolitan flexible provision of higher education. The effectiveness of flexible provision of higher education in metropolitan regions requires investigation and evaluation.

- This study has reflected on the extent to which campuses and programmes have attracted students from non-metropolitan regions. This does not necessarily indicate the impact of the campuses and programmes on regional participation in higher education. Changes in patterns of non-metropolitan regional participation in higher education should be investigated when new census material becomes available.
Part One

Introduction

Part One of the report identifies the key concepts involved in the investigation. It provides a background to the study based on literature and World Wide Web materials. It outlines the methodology used to pursue the investigation and evaluation.
1. Key concepts

1.1 Introduction

This is a report of an investigation of the effectiveness of several models of flexible provision of higher education in Australia, sometimes termed ‘flexible delivery’. The term ‘provision’ is preferred in this study as the word ‘delivery’ could imply a focus on the one-way delivery of packaged tuition materials to learners. The word ‘provision’ is taken here to be more encompassing—including the provision of packaged learning materials, both static and interactive, but embracing also student–student and student–teacher communications.

The notion of flexible provision is not defined in any agreed way in the research literature, nor is there a single, commonly adopted approach to it in practice. The term flexible provision of higher education, as used in this study, does not imply the use of a particular learning and teaching technique or technology but is focused on the provision of choice for learners. Flexible provision of higher education refers here to a mode of provision that provides learners with guided choice, in a number of domains, achieved through employment of various strategies including the use of learning and teaching techniques and technologies and the adoption of policies affecting choices for learners.

A definition of flexible provision is needed to identify the matter to be investigated and to allow the investigation to proceed. Adoption of the definition does not imply a commonality of view in Australia about flexible provision/delivery of higher education. In fact, as the investigation proceeded it became clear that universities use the adjective ‘flexible’ to describe a variety of policies and practices developed to suit their own histories, environments and intentions.

1.2 Key concepts

1.2.1 Guided choice: elements of flexibility

Flexible provision refers to offering guided choice to the learner in one or more of the following spheres:

- The time at which study occurs.
- The pace at which the learning proceeds.
- The place in which study is conducted.
- The content that is studied, which includes the concept of flexible entry and exit points to a programme.
- The learning style adopted by the learner.
- The form(s) of assessment employed.
- The option to collaborate with others or to learn independently.

This study focuses on cases displaying more than one of these elements of flexibility. The study grew out of a concern about the effectiveness of flexible...
provision initiatives in affording study choices to students in non-metropolitan regions of Australia. However, the elements of flexibility can be examined for effectiveness in providing access and in meeting student learning needs in general.

1.2.2 Strategies for provision—examples of learning and teaching techniques and technologies employed

Flexible provision of higher education, that is the provision of choice for learners, may be afforded through the employment of various learning and teaching techniques and technologies including:

- print materials
- CD-ROM
- online materials
- online communications
- face-to-face tuition
- distributed face-to-face sessions
- video-on-demand
- videotape/audiotape
- videoconferencing
- teleconferencing
- TV/Radio

Different learning and teaching technologies afford different elements of flexibility. For example:

- Print-based study guides offer time, pace, and place flexibility. On the other hand, by themselves, they provide no flexibility in learning style.
- The use of online real-time chat provides opportunities for collaborative learning and some flexibility in place of learning but does not provide flexibility in time or pace. By itself, it offers no flexibility in learning style.

1.2.3 Strategies for provision—examples of policies for flexible provision employed

Flexible provision of higher education may be afforded through the adoption of policies affecting choices for learners such as:

- open entry
- recognition of prior learning
- credit transfer arrangements
- articulated and embedded awards
- content choices within programmes
- multi-modal provision of education
- negotiated assessment
1.2.4 Typology of flexible provision—models employed

For the purposes of this study two broad categories of flexible provision of higher education have been distinguished. The first category comprises those forms of provision that have the effect of making higher education more accessible or more conveniently accessed. The second category comprises those forms of provision that accommodate content, assessment and learning style preferences of the learners.

Six broad strategies involving learning and teaching techniques and technologies, and/or institutional policies have been identified from the literature and experience and checked for veracity in an exercise mapping the approaches of Australian universities to flexible provision of higher education.

Provision affording access and convenience:
- Moving time and place of study to suit the learner.
- Removing fixed time and place constraints.
- Removing entry requirements.

Provision accommodating learning preferences:
- Providing alternative entry and exit points.
- Accommodating learning style, pace and collaboration preferences.
- Accommodating content and assessment preferences.

These broad categories and strategies provide a typology of flexible provision of higher education in Australia. Examples of the various types of flexible provision of higher education appear in Figure 1.1.

Figure 1.1 Flexible provision of higher education typology

<table>
<thead>
<tr>
<th>Examples of models</th>
<th>Typology of models of flexible provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace provision, multiple and/or regional campuses, study centres, summer schools</td>
<td>Provision affording access and convenience</td>
</tr>
<tr>
<td>Off-campus programmes (except for synchronous and residential components)</td>
<td>Moving time and place to suit the learner</td>
</tr>
<tr>
<td>Open learning, recognition of prior learning</td>
<td>Removing fixed time and place constraints</td>
</tr>
<tr>
<td>TAFE/higher education articulation, embedded courses e.g. staged Grad Cert, Grad Dip, Masters programme</td>
<td>Removing entry requirements</td>
</tr>
<tr>
<td>Multi-modal learning, e.g. face-to-face sessions, with online tuition and printed material.</td>
<td>Provision accommodating learning preferences</td>
</tr>
<tr>
<td>Customised industry programmes (meeting industry and/or student preferences), negotiated curriculum and assessment</td>
<td>Alternative entry and exit points</td>
</tr>
<tr>
<td></td>
<td>Accommodating learning style, pace and collaboration preferences</td>
</tr>
<tr>
<td></td>
<td>Accommodating content and assessment preferences</td>
</tr>
</tbody>
</table>
1.2.5 Effectiveness of flexible provision

The question of effectiveness is explored in this study both in terms of the intent of the provider and a conceptual framework of effectiveness adopted for this study. The conceptual framework for effectiveness of flexible provision is outlined in Figure 1.2.

**Figure 1.2 Aspects of effectiveness of flexible provision**

<table>
<thead>
<tr>
<th>Aspects of Effectiveness of Flexible Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision affording access and convenience</td>
</tr>
<tr>
<td>Moving time and place to suit the learner</td>
</tr>
<tr>
<td>Removing fixed time and place constraints</td>
</tr>
<tr>
<td>Removing entry requirements</td>
</tr>
<tr>
<td>Provision accommodating learning preferences</td>
</tr>
<tr>
<td>Alternative entry and exit points</td>
</tr>
<tr>
<td>Accommodating learning style, pace and</td>
</tr>
<tr>
<td>collaboration preferences</td>
</tr>
<tr>
<td>Accommodating content and assessment</td>
</tr>
<tr>
<td>preferences</td>
</tr>
</tbody>
</table>

With this framework in mind the effectiveness of flexible provision of higher education has been defined for the purposes of this study in terms of flexibility and of effectiveness.

Provision is flexible if it:
- affords access and convenience by:
  - moving time and place to suit the learner,
  - minimising constraints on time and place of study
  - relaxing entry requirements.
- accommodates learning preferences by:
  - offering alternative entry and exit points.
  - accommodating learning style, pace and collaboration preferences.

Effectiveness of provision is indicated by:
- a high level of attainment of the explicit intent of the provider
- accessibility including high non-metropolitan regional participation.
- attainment of valued specific and generic learning outcomes.
- high levels of student satisfaction.
Effectiveness of Models of Flexible Provision of Higher Education

- High levels of staff satisfaction.
- High levels of student retention and/or completion.

Flexibility and effectiveness are relative rather than absolute concepts. Cases of flexible provision of higher education may then be styled as falling into or as overlapping the quadrants indicated in Figure 1.3.

**Figure 1.3 A typology of the effectiveness of flexible provision of higher education**

<table>
<thead>
<tr>
<th>Low flexibility</th>
<th>High flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High effectiveness</strong></td>
<td>Effective provision with low flexibility</td>
</tr>
<tr>
<td></td>
<td>Effective highly flexible provision</td>
</tr>
<tr>
<td><strong>Low effectiveness</strong></td>
<td>Ineffective provision with low flexibility</td>
</tr>
<tr>
<td></td>
<td>Ineffective highly flexible provision</td>
</tr>
</tbody>
</table>

1.2.6 Cost effectiveness of flexible provision

Cost effectiveness is addressed in this study by separately examining elements of the effectiveness and the costliness of flexible provision of higher education.

Cost effectiveness is indicated by high effectiveness and low costliness.

High effectiveness is indicated as above.

Low costliness is indicated by:
- Low equipment and infrastructure cost per EFTSU.
- Low operating expenses per EFTSU.
- Low support cost per EFTSU.
- Low demand on academic staff time per EFTSU.

The employment of economies of scale will tend to lower the EFTSU cost.

Low costliness may be achieved at the expense of effectiveness. Cases of flexible provision of higher education may then be styled as falling into or as overlapping the quadrants indicated in Figure 1.4.

**Figure 1.4 A typology of the cost effectiveness of flexible provision of higher education**

<table>
<thead>
<tr>
<th>High cost</th>
<th>Low cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High effectiveness</strong></td>
<td>High cost effective provision</td>
</tr>
<tr>
<td></td>
<td>Low cost effective provision (=&quot;cost-effective provision&quot;)</td>
</tr>
<tr>
<td><strong>Low effectiveness</strong></td>
<td>High cost ineffective provision</td>
</tr>
<tr>
<td></td>
<td>Low cost ineffective provision</td>
</tr>
</tbody>
</table>

1.3 The approach to the study

This study uses Australian University case studies to provide examples of approaches taken to the flexible provision of higher education. The study evaluates the effectiveness of these flexible approaches using the definitions described above. The methodology employed in the study is described in Chapter 3.
### Components of the study and their derivation

<table>
<thead>
<tr>
<th>DERIVATION</th>
<th>COMPONENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIVEN</td>
<td>TOPIC: The effectiveness of models of flexible provision of higher education with particular reference to regional provision of higher education</td>
</tr>
<tr>
<td>NATURE IMPLIED</td>
<td>NATURE OF THE PROJECT: An evaluation of effectiveness / informed by investigation / evaluated against the intent of the provider* and against a set of criteria [THE APPROACH ADOPTED is an interpretative (rather than a mensurative) investigation of cases]</td>
</tr>
<tr>
<td>DERIVED from definition of flexible provision and concerns of the commissioners</td>
<td>CRITERIA: Related to the flexibility of the provision and the effectiveness of the approach, including the cost effectiveness of the approach.</td>
</tr>
<tr>
<td>SELECTED from possibilities in the literature and in university policy statements, REQUIRED in order to direct and advance the investigation</td>
<td>SOME KEY TERMS: flexible provision of higher education regional provision of higher education</td>
</tr>
<tr>
<td>PROPOSED on the basis of literature and experience and checked for veracity in an exercise mapping Australian university approaches to flexible provision of higher education. REQUIRED in order to identify models referred to in commissioning the project and in order to select representative cases.</td>
<td>MODELS: A typology of flexible provision of higher education generating ideal types or models with the expectation that in practice the approaches of universities may mix or span models.</td>
</tr>
<tr>
<td>SELECTED from possible cases identified in the mapping exercise to represent a range of models. Chosen with an emphasis on regional provision</td>
<td>REGIONAL PROVISION: Provision of higher education to residents of any non-metropolitan region, including provincial cities, rural areas and remote areas.</td>
</tr>
<tr>
<td>AN EVALUATION of effectiveness of models of flexible provision of higher education based upon the application of criteria to the cases investigated</td>
<td>CASES: Instances of flexible provision of higher education in Australia - pan-university approaches where university-wide policy and practice prevails, particular campuses or programmes where it does not.</td>
</tr>
<tr>
<td>OUTCOME: An evaluation (against intent and against criteria) of the effectiveness of cases representing models. The instances suggest possibilities regarding the effectiveness of models of flexible provision Generalisability of the evaluation of effectiveness is limited by: - the interpretative nature of the study - the limited number of cases investigated - the complexity of actual policy and practice against the simplicity of the definition of models</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES ON THE DEFINITION OF FLEXIBLE PROVISION**
1 The implicit or explicit definition of flexible provision of higher education in some literature and some university policies refers to the adoption of particular educational technologies, such as online education. In this study it is assumed that technologies are a means to an end. The most frequently mentioned end is provision of choice to learners.
2 The test of flexible provision as defined in this study is whether the policy and/or the practice elements of strategies for provision do provide choice to learners whether or not providing choice to learners is an explicit motivation for adopting the strategy. (This avoids the difficulty of distinguishing expressed intent from either implicit or actual intent)
3 Making flexible provision for higher education is not a bipolar condition. Learners can be offered more or less choice about one or more of the elements of flexibility.
2. Context

2.1 Introduction

This chapter presents the context of this investigation and evaluation project both in terms of educational, social and technological developments and in terms of current understandings of the key concepts involved.

2.2 Educational, social and technological context

There is a widely held view in Australia and overseas, that the providers of higher education need to devise much more flexible ways of reaching students (see for example the Web-based Education Commission, 2000). Becoming more flexible involves giving students more choices about matters such as the timing and location of their study. Greater student choice about such things is possible because of the array of learning and teaching techniques and technologies that have emerged. In particular, current technological advances like CD-ROM, online materials and videoconferencing are making the flexible provision of higher education more an option. The rationale for increasing the flexibility of the provision of higher education in Australia and elsewhere rests upon four main imperatives:

- The changing client base for higher education including students with work and domestic commitments, mature students, and prospective participants regional Australia.
- An expanding knowledge base and the changing conceptions of knowledge.
- A growing understanding of effective learning and teaching practices in conjunction with the use of information and communication technologies.
- The impossibility of cost effectively meeting massively growing client demand.

The imperatives are well founded. Rapid social and cultural changes are altering the client base of higher education. Returning and non-traditional adult students are now a very significant proportion of the higher education student population. Such students are requiring forms of flexibility that traditional students do not require.

The so-called knowledge explosion is placing pressure on the ‘knowledge transfer’ conception of teaching. The emergence of constructivism, together with employer demand for generic skill development, is forcing educators to rethink their positions on what is taught, and how it is taught. As a United States review reported about Internet education, ‘School administrators, teachers, parents and students are all demanding better educational programs, and many are beginning to see the NII [National Information Infrastructure] as a key tool for achieving that goal’ (Council on Competitiveness, 1995). Recognition of prior learning and the concept of lifelong learning (a consequence of social and economic change) are also exercising pressures in higher education for more process learning, the development of higher order thinking and for negotiated content to become standard aspects of higher education.

Developments in information and communication technologies, including the convergence of interactive multimedia, computer-mediated communication and the
World Wide Web, has the potential to contribute to the reformation of higher education. Print and conferencing technologies have for many years allowed students to choose when and where to study. New information and communication technologies, as their usage becomes more widespread, offer the opportunity to extend this flexibility. They can also contribute to the development of lifelong learning skills as well as play a role in the way students ‘construct’ their own knowledge. However, this latter development is a more complex task than can be accomplished by the technology alone. Several writers point out that it will require the development of appropriate pedagogy (Jakupec and McTaggart, 1996; Feenberg, 1999). Nevertheless, it is widely anticipated that information and communication technologies will help to change student learning outcomes and increase the measure of flexibility for the provision of Australian higher education in a cost-effective manner.

Technological and industrial change fuel an increasing demand for higher education which requires new approaches to provision. ‘The “new economy” … demands continuous organisational and individual learning in order to respond adequately to the pace and magnitude of change; the ability to learn will be critical for the success of the organisation’ (Kilpatrick, 1997). Thus, the flexible provision of higher education becomes integral to ‘the learning organisation’.

While it is clear that these four imperatives are placing pressure on higher education to become more flexible in the way it relates to its students, less clear are the consequences of attempting to become more flexible. It is not clear what outcomes in terms of student learning will accompany attempts at becoming more flexible and the jury is still out on the most appropriate strategies for the more flexible provision of higher education.

### 2.3 Understandings of the key concepts in this study

#### 2.3.1 Key concepts

The key concepts in this study include flexibility and effectiveness. Effectiveness—picking up on the indicators used in Chapter One—involves issues of access, outcomes, satisfaction of participants, course completion and cost. Cost effectiveness is treated separately in this study being the product of costliness and of effectiveness as indicated by the other elements of effectiveness listed above. In offering flexible provision of higher education providers have a range of intents, some of which lie outside attaining effectiveness as defined here. Observations of the effectiveness of flexible provision need, then, to take intent into account. Some of the alternative provider intents apparent from literature and the Web are indicated in this chapter.

#### 2.3.2 Flexibility

**Flexibility as choice for learners**

While the flexible provision of learning is a prominent aspect of the current reform agenda for Australian higher education, the meaning of flexible provision is not agreed. Terms like ‘flexible delivery’, ‘flexible learning’ and ‘flexible provision’ are often used interchangeably and without definition.
According to Kilpatrick (1997), any agreed definition of the flexible provision of higher education remains problematic because there is no universal model of it, and the related terms are used in various ways. Flexible provision is sometimes equated to ‘open learning’. Open learning is usually thought of as an approach to educational provision based upon open entry policies and employing learning packages delivered in a print or online form. It is closely associated with ideas about independent learning, which adds another element to its meaning. Open learning, then, could be seen to be open in terms of entry policy, open in terms of being accessible, or open in terms of being independent of traditional ties to the teacher.

Kilpatrick (1997) notes that, likewise, there are several different discourses about the flexible provision of higher education. As with open learning these include learning with technology and increased equity and access. When it comes to flexible provision there are also discourses related to the means by which institutions can achieve a competitive edge and increase efficiency and accountability.

As Shapiro (1993) commented, these discourses arise from the way higher education is being transformed by increased use of new technologies, limits to public funding, demands for greater public accountability, increased competition, and the challenges associated with dealing with the needs of a quasi-mass, as distinct from a quasi-elite, system.

The term ‘the flexible provision of higher education’ is sometimes applied simply to education which employs certain learning and teaching techniques and technologies. Taylor, Lopez and Quadrelli (1996), for example, focus on flexible provision of ‘practices which utilize the capacities for learner–learner and teacher–learner interactions made possible by recent developments in communication [technology]’.

The term ‘the flexible provision of higher education’ also often refers to the policies that are designed to provide flexibility. In this regard, Williams (1995), refers to removing structural barriers such as entry, and literacy and language requirements, overcoming physical and other access issues, such as work and family commitments by providing access to appropriate learning environments that overcome difficulties for students like their physical location.

The range and wide variety of perspective about appropriate forms and substance for the flexible provision of higher education in the research literature suggest that a study might usefully investigate how higher education institutions themselves conceptualize and practise ‘flexible provision’. The present study pursues this and reports in Chapter 4. What can be said at this point is that flexibility is conceived of as involving choice for learners. It is a concept sometimes expressed in the literature implicitly rather than explicitly. These choices are presented, in various permutations, as:

- choice about time, place and pace of tuition;
- choice about means and modes of study; and
- choice about independence or collaboration in learning.

**Choices offered to learners**

When institutions pursue policies and practices designed to provide higher education programmes more flexibly, a key intention is to give students, and for
that matter lecturers, choice about the place, pace, timing, style, and other aspects of their learning. A National Board of Employment, Education and Training (NBEET) report (1997) found that resource-based learning could offer customised higher education programmes, accommodation of individual learning styles and individual learning goals and time and place convenience for both staff and students.

The idea of giving students choice is rarely, if ever, considered to be problematic. However, in a year-long study of a project designed to provide courses flexibly across Europe via television, ISDN-based videoconferencing, and data communication tools for email, computer conferencing and access to the WWW via the Internet, Collis (1996) discovered that students were offered minimal choice. There were several reasons for this including the time constraints that course developers experienced. Those lecturers wanting to build choice into their offerings, were not given sufficient time to do so. Several lecturers’ thought that the legitimising agency, namely the university, required them to use traditional approaches to teaching and learning that did not provide choices for the students. It also seems that providing choice is perceived as being very costly. Finally, Collis (1996) notes that the ability to construct inventive courses that do give students choice was largely ‘outside the scope of most course providers’. Collis’ point about the negative effect of the legitimising agency on course development involving the provision of student choice is supported by Green (1999). She observes that it is predominantly the new universities and low-demand courses in the UK that are the major proponents of the flexible provision of higher education.

Diaz (1999) on the other hand suggests that preferred learning style can be accommodated through the use of flexible learning strategies. His work shows that learning style may influence the choices students make. Independent learners, it seems, may choose online courses and dependent learners choose on campus courses. Online learners may be driven by intrinsic motivation, preferring independent learning. As Feenberg (1999) puts it: ‘Students will pick out courses at an equivalent of Blockbuster Video and ‘do’ college at home without ever meeting a faculty member or a fellow student’. Where courses offer flexibility about individual or collaborative study, there is some evidence that courses promote collaborative learning (Landis and Wainwright, 1996).

### 2.3.3 Effectiveness

**Access**

Flexible provision includes the use of a range of self-paced, resource-based and technology-enhanced forms of tuition to address access and equity issues. A range of learning venues (for example workplace, home, learning centre) may be adopted, together or separately, to meet the needs of those learners under-represented in higher education, including those in non-metropolitan regions.

The issue of physical location, as a factor in people’s participation in higher education in Australia, is addressed in a study by the Department of Education, Training and Youth Affairs (DETYA). Stevenson, Maclachlan and Karmel (1999) conducted a study, the primary purpose of which was ‘to examine the variation in higher education participation and provision across regions’. Two major points that
emerge from their study are that ‘tertiary education participation rates are very much higher in metropolitan regions than in non-metropolitan regions [and that] inequality across metropolitan regions is almost as important as the inequality between metropolitan and non-metropolitan regions’. They conclude then that both proximity to university facilities and ‘factors other than distance to university’ play an important role in university participation.

Much of the literature in this area is concerned with equity issues. The NBEET report on resource based learning (1997) found that the effects on designated equity groups of the introduction of new technologies into resource based learning are not clear. While resource based learning offers time and place flexibility there is a possibility that financially disadvantaged groups might be further disadvantaged.

**Student learning outcomes**

Much of the research relating to the impact of flexibly delivered courses on student learning has a techno-centric orientation. That is, the studies often assume that the technology is the vital part of the teaching and learning process or that learning can be automated in some way. Kulik and Kulik (1991) in a meta-study of research projects on computer-based learning found that there was no significant difference between learning outcomes attained by traditional approaches and computer-based approaches. Billings (1994), focusing on distance education, likewise discovered that there was no significant difference in learning outcomes between distance education courses and on-campus courses. Leasure’s (2000) findings support this.

When the flexible provision of learning is thought of more in terms of self-managed learning, collaborative learning, cognitive apprenticeship and the like, another view of its impact on learning outcomes emerges. Ryan (1999) has shown that students participating in web-based courses develop improved critical thinking skills and creativity.

Clark’s (1998) study shows that there is parenthetic, additional learning that is developed, especially computer competency, when students undertake web-based courses. Ribbons (1998) also found improved higher order thinking skills and online team building and collaboration when students learn online. Finally, Bilge’s (1999) study suggests that ‘collateral learning’ occurs when students experience the flexible provision of higher education. He observed the way learning became more self-directed and the way students developed improved lifelong learning skills.

Rodrigues’ (1999) study, for example, shows that flexible provision, involving both face-to-face and online discussions, is strengthened when ‘face-to-face sessions are used to enable camaraderie to develop and continue in online discussions’. Others refer to the way web-based courses usually enable quicker and richer feedback to students based upon a greater array of assessment techniques (Misko, 1994).

The Web-based Education Commission of the U.S.A. (2000) refers to the promise of the internet to provide learning centred around students rather than classrooms, to focus on individual learners and to make lifelong learning a possibility. Diekelman’s study (2000) shows that technology-based distance education can encourage the teacher to reconsider, and improve upon traditional pedagogy; notwithstanding that it can be daunting for teachers to have to do so.
On the other hand, Ward’s study (1998) found that students’ use of Web materials is tied to their conceptions of traditional higher education. They explore little, and rather just use the web as a carrier of materials. In effect, the web becomes little more than a ‘page-turner’ for them. George and Luke’s (1996) study throws doubt on whether students have the necessary levels of information literacy to enable them to effectively engage flexible learning.

Commentators note the tensions that exist between learner needs and certain techniques that are used to more flexibly provide higher education. Ferguson (1998) for example, points out the difficulties that exist for engineers doing required laboratory experiments online. Some science faculties feel that laboratory work cannot be taught online or at a distance. Feenberg (1999) also points out that appropriate pedagogy has still to be worked out for the flexible provision of higher education. Currently, the old pedagogy of the lecture still dominates.

### Student satisfaction

In some cases, flexibility in the timing of the learning has been found to have appeal to students. Cragg (1994), for instance, found that registered nurses in a post-registration nurses baccalaureate programme found ‘time shifting’, the ability to participate in learning activities at the learner’s convenience, to be a major advantage of a computer-mediated conference course.

However, there are many studies that highlight the frustration experienced by students in web-based courses regarding the difficulty of accessing web-based materials, and with technical problems. Moreover, videoconferencing to give lectures, when used on its own, is unappealing to students (Feenberg, 1999). Many studies indicate that students often feel isolated in flexibly delivered courses (Cragg, 1994).

### Staff satisfaction

Flexible provision of higher education can offer time and place flexibility to staff as well students. However, developing online courses, and teaching online, are frequently not yet in the criteria for staff promotion and may not even be counted in workload. There is often an increased workload when distance education strategies are used (Billings, et al. 1994).

There is a good deal of evidence showing that staff members generally do not have the technical skills necessary to take advantage of some of the developments in information and communications technologies. This can be a serious obstacle to institutions developing policies, strategies and techniques for flexible provision. However, some argue that the necessary collaborations that occur between lecturers and technical experts as institutions strive to provide courses more flexibly can produce quite creative responses to the demands of flexible learning. Others claim that the move to flexible provision could have the effect of potentially ‘de-skilling’ staff.
Effectiveness of Models of Flexible Provision of Higher Education

Student participation
The provision of higher education in flexible forms is increasing rapidly and the growth can be expected to continue. The Web-based Education Commission (2000) notes a growing use in the United States of online content and tools in traditional courses, with 40 per cent of colleges using internet resources (compared with 15 per cent in 1996) and 59 per cent using electronic communications for tuition purposes (compared with 20 per cent in 1995). Off-campus use of online delivery is also growing rapidly in the United States with 84 per cent of four-year colleges expected to offer distance learning courses by 2002 (compared with 62 per cent in 1998) and 2.2 millions students expected to enrol in distance education courses by 2002 (compared with 0.7 million in 1998).

There has been a huge increase in the demand for places in higher education in Australia and overseas over the last fifteen years. Cameron (1998) considers flexible learning to be an important means of meeting the demands of ‘credential creep’. Flexible provision of higher education is in part designed to meet a continuing increase in demand, including demand from people with work and domestic commitments and people in non-metropolitan regions.

The intent of institutions in providing higher education more flexibly
There is literature that addresses the motive of institutions in developing policies directed towards the flexible provision of higher education. Evans (1999) notes that flexible provision is a way former regional Colleges of Advanced Education maintain a position in the current competitive arena of higher education. They do this by converting existing on-campus courses into dual-mode operations which incidentally produce economies of scale.

In a case study of one Australian higher education institution, Kirkpatrick (1997) discovered that there were four main reasons advanced within the institution for pursuing more flexible approaches to learning and teaching. They were:

• Developing niche markets both with local students and overseas students.
• Being more equitable by enabling greater participation in higher education by traditionally under-represented groups.
• Becoming more efficient, especially in terms of ‘provision’ capacity.
• Exploiting new knowledge technologies that enable mass education, usually at a distance.

Kirkpatrick’s study revealed that the impetus for flexible provision was mostly limited to the policy and rhetoric of universities and was not, as yet, much evident in their practice. This is understandable given that the policies, strategies and techniques for the flexible provision of higher education are still developing.

There are multiple reasons for increasing flexible provision of learning. Inglis, Ling and Joosten (1999) suggest institution adopt digital approaches to delivery of education because it is faster, cheaper and better in terms of presentation of the learning materials, support provided to students, and interaction that is possible between teacher and student and among the students themselves. It is clear that there are more agendas for the flexible provision of higher education than simply...
improving the quality of student learning itself or otherwise catering for the needs and preferences of learners. Investigating the motives for institutions attempting to provide higher education more flexibly is an element of this study.

2.3.4 Cost effectiveness

The matter of the cost effectiveness of the strategies for the flexible provision of learning is complex. Some studies examine the cost effectiveness issue in terms of comparable learning outcomes. Whittington’s (1987) meta-analysis of over a hundred studies related to distance education identified that, regardless of the distance education provision system, students receive a comparable education. The systems provided, however, can be more or less costly with small scale, multimedia intensive provision being at the high cost end.

Inglis, Ling and Joosten (1999) argue that cost effectiveness needs to be examined from the viewpoint of investment and economies of scale. Their work shows that an increase in student numbers from less than a hundred to several hundred in a resource-based course can result in substantial economies of scale but that the economic advantage of increased scale tapers off.

The major costs in flexible provision are:

• infrastructure costs
• materials development costs; and
• the costs of communicative interaction with students

The Web-based Education Commission (2000) points to infrastructure and development costs associated with online provision. They suggest that ‘technology is expensive and web-based learning is no exception’. Development of online courses can take anything from 66 per cent to 500 per cent longer than creating traditional courses. The Commission (2000) suggests the sharing of learning resources using ‘technical standards for the design of online courses and the meta-tagging of digital content’.

Taylor (1999) notes that models of distance education have moved from a first generation of printed correspondence courses, through multimedia and tele-learning, to a fourth generation of flexible learning which involves Internet-based access, interactive multimedia and computer mediated communication. This format involves each of the costly components of infrastructure, materials development and communicative interaction. Taylor has proposed a fifth generation which develops elaborate databases of responses to student communications thus automating elements of the communicative function and containing costs.

The cost effectiveness debate, when it relates to forms of resource-based learning, is usually premised on the assumption resource-based learning is an alternative to traditional classroom based practice. When it comes to flexible provision of higher education, the provision may involve multiple modes of tuition, including face-to-face tuition. The Web-based Education Commission observes that:

‘…if technology is used as an add-on to existing activities, rather than as a means to reshape education, then it will simply add to the total cost of operations and few savings will be realized.’

(Web-based Education Commission, 2000)
Evans (1999) points out the real costs of flexible learning can be masked by the dual mode operation of some universities offering flexible learning. In the dual mode system course materials developed for on-campus provision can easily be converted to a flexible provision mode. This form of cross-subsidisation masks the real costs of flexible provision. Moreover, Evans (1999) suggests that the cost of flexible learning should not be measured just in dollar terms. Evans’ view is that institutions sometimes have a ‘moral responsibility’ to offer professional development courses flexibly for small numbers, for example in the case of recently arrived doctors and other professionals.

Kilpatrick (1997) argues that this issue needs to be examined from a viewpoint of cost efficiency and not cost effectiveness. There are many difficulties with the idea of cost effectiveness that she has identified. Costs and outcomes cannot easily be compared across cases. Outcomes are not all immediate, and some emerge over time. There are degrees of subjectivity in comparing various performance indicators from a cost effectiveness perspective. The present study, however, is charged with reckoning cost effectiveness and has developed a method to do so (see Chapters 3 [3.2] and 15).

2.4 Conclusion

Notwithstanding very considerable pressure for higher education institutions to provide their courses more flexibly, the literature is still ambiguous about the meaning of ‘flexible provision’. It is discussed using alternative expressions such as ‘flexible delivery’, and ‘flexible learning’ and sometimes ‘online learning’, which have alternative nuances. While the flexible provision of higher education is often advocated on the grounds of access and equity, higher education institutions have additional motivations for developing policies and practices about flexible provision. A key purpose for becoming more flexible in the way higher education is offered is to provide choice to students to help them learn effectively and more conveniently. In a rapidly changing environment a number of facets of flexible provision of higher education are under-researched:

- The extent to which flexible provision does provide choices about the timing and place of learning and other matters of student preference.
- The effects of providing students with choices on their learning in terms of improving access and producing outcomes desired by universities, their students and their staff.
- The costliness of providing courses more flexibly.

These matters constitute an agenda for a study of the flexible provision of Australian higher education.
3. Methodology

3.1 The topic and research question

This study constitutes an investigation of the effectiveness of models of flexible provision of higher education in Australia, where flexibility refers to provision of supported choice for learners. The study makes particular reference to provision in non-metropolitan regions. The research question may be subdivided:

- Are different models of flexible provision of higher education apparent in Australia?
- Are the identified models effective in the provision of higher education?

To obtain answers to these questions the following investigative questions were employed:

**Are different models of flexible provision of higher education apparent in Australia?**

1. What approaches to the flexible provision of courses can be identified in Australian higher education?

**Are the identified models effective in the provision of higher education?**

2. What choices do the approaches offer to students in terms of time, pace, place, content, entry points, exit points, learning styles and interaction with teachers and other learners?

3. How effective are the various selected models in terms of the quality of teaching and learning processes/learning outcomes?

4. How effective are the various selected models in terms of student demand and participation?

**Are the identified models effective in the provision of higher education in their own terms?**

5. Why have the various approaches been developed by the institutions in which they are offered and do they serve the purposes intended?

**Are the identified models cost effective?**

6. What resources are applied to flexible provision of higher education?

3.2 Research genre

The research genre adopted is interpretative. Neither universities nor programmes can be sorted into simple flexible and non-flexible categories. Each case is peculiar. In view of this the identification of factors associated with effective flexible provision of higher education has not been attempted. The investigation involves the identification and description of cases of flexible provision of higher education. The descriptions utilise both qualitative and quantitative data. The quantitative elements are employed descriptively rather than inferentially. Case
Flexible provision of higher education:
A mode of provision of higher education which provides learners with supported choice and teaching

Elements of flexibility
Choice for learners about:
- place
- time
- pace
- style
- content
- entry/exit
- assessment
- collaboration

Examples of Types
- Workplace provision, multiple &/or regional campuses, study centres, summer schools
- Off campus programs
- Open learning, recognition of prior learning
- TAFE/Higher Education articulation, embedded courses
- Multi-modal learning
- Customised industry programs, negotiated curriculum & assessment

Models / Typology
Types of flexible provision of learning
- Strategies for involving techniques & technologies, &/or policies
- Access and convenience oriented provision
- Learning preference oriented flexibility
  - Alternative entry & exit points
  - Accommodating learning style, pace & collaboration preferences

Cases
- Instances of flexible provision of learning
- Incorporating strategies for provision combining techniques & technologies, &/or policies
- Actual cases are likely to involve orientations & features of more than one type

Techniques & technologies
- For provision:
  - Print materials
  - Online materials
  - Online communications
  - Face-to-face
  - Video on demand
  - Video conferencing
  - Teleconferencing
  - TV / Radio

Policies for provision:
- Open entry
- Recognition of prior learning
- Credit transfer arrangements
- Articulated and embedded awards
- Program choices
- Multi-model provision

Effectiveness of Models of Flexible Provision of Higher Education

Flexibility - Learning aspects
- Accommodates preferred learning style.
- Allows independent and collaborative learning.

Flexibility - Provision aspects
- Provides access to suit learner circumstances.
- Strategy of provision allows time and place flexibility.
- Curriculum design and policy accommodates variable pace of learning.
- Policies provide for recognition of prior learning, for content options and for variable exit points.

Effectiveness indicators
- Patterns of student learning outcomes
- Cost effectiveness
- Cost effectiveness & cost effectiveness of models investigated through cases

Cost Effectiveness
- Cost effectiveness
- Economies of scale
descriptions have been framed against a template, which incorporates identified indicators of effectiveness.

Answering the first of the broad research questions involved the conception of notional models of flexible provision of higher education that might be encountered, based on literature, experience and a survey of university flexible-provision policies and practices.

The second broad research question was answered through the investigation of cases representing a variety of the national models of flexible provision. Cases were reported against a template, which allowed:

1. The elements and extent of flexibility of programmes to be identified.
2. The effectiveness of the programmes to be evaluated against a number of quality indicators and on their own terms; that is, in terms of their explicit objectives.
3. An indication of the costliness of programmes in terms of demands on resources.

3.3 The research schema

At the outset, a research schema was developed to help shape the study. It is reproduced in Figure 3.1. The schema indicates that flexible provision of higher education is a matter of providing choices to learners in a number of domains. The provision of choice is afforded by the use of learning and teaching techniques and technologies and/or by the adoption of flexible policies. Forms of provision may be viewed as distinguishable models or notional types, which meet the choices of learners in different ways. The models are investigated through a study of cases selected to provide an evaluation, which span models of provision. The cases are evaluated against flexibility criteria (based on the forms of choice provided), effectiveness criteria and costliness criteria.

3.4 Domains or elements of flexibility

A typology of flexible provision was developed against which possible models have been defined (see Figure 3.1). Six broad models of flexible provision were employed. The models accommodate identified domains in which students might be offered choices.

These domains or elements of flexibility are: place and time of learning; the pace at which students are required to learn; the styles of learning accommodated; content requirements; program entry and exit points and the possibility of recognition of prior learning; choice of assessment tasks; and the option to study and prepare for assessment collaboratively.
3.5 Typology

The six broad models of flexible provision employed are:

**Those oriented to access and convenience for learners**

1. *Moving time and place to suit the learner*
   
   For example: provision in the workplace; offering programmes at regional or multiple campuses; provision of distributed study centres; and the offering of summer schools.

2. *Removing fixed time and place constraints*
   
   For example: off-campus programmes utilising print or digital tuition materials.

3. *Removing entry requirements*
   
   For example: open-access university programmes which have no academic entry requirement, such as those offered through Open Learning Australia; or programmes that recognise and give credit for prior learning.

**Those oriented to accommodating learning preferences**

4. *Providing alternative entry and exit points appropriate to the learner*
   
   For example: courses that articulate with TAFE studies providing advanced standing in the higher education course; programmes that provide alternate exit points such as Graduate Certificate, Graduate Diploma and Masters Degree.

5. *Accommodating learning style, pace and collaboration preferences*
   
   For example: programmes offered fully or partly in more than one mode; programmes with flexible time schedules; courses that permit but do not require collaboration.

6. *Accommodating content and assessment preferences*
   
   For example: modularised content allowing choice in construction of a programme; problem-based learning allowing some selection of content; alternative assessment tasks.

3.6 Survey of flexible provision of higher education in Australia

Each university in Australia was provided with the definitions employed in the study and the conceptual schema, and was invited to indicate policies of the university directed at flexible provision of higher education. For each policy they were requested to provide a rationale and an example or examples of practice. Descriptions of the university responses are included in Chapter 4.

3.7 Case studies

Cases are selected instances of flexible provision chosen for investigation. Cases were selected to cover policies and practices consonant with the identified models
of flexible provision of higher education. The individual cases do not match the notional models. For the most part they span models. The typology was used simply as a means to ensure a spread in the characteristics of the cases investigated.

The cases selected were:

- University of South Australia (Bachelor of Nursing – Whyalla campus).
- Swinburne University of Technology (Lilydale campus).
- University of Tasmania (BAVE program).
- Victoria University of Technology (Nyerna Studies – Echuca Campus).
- Deakin University and Ford Australia (MBA programme).
- Griffith University (Logan campus).
- University of Queensland (Ipswich campus).
- Charles Sturt University (Dubbo node campus).
- University of Southern Queensland (Distance Education Centre)
- University of Ballarat (Graduate Certificates)

The selection of cases allows the exploration of access to higher education for those in non-metropolitan regions and those with work and social commitments. The focus of the study on the regional provision of higher education, arising from the interests of the project commissioners, also influenced the selection of cases. Cases were drawn from non-metropolitan regions. Non-metropolitan regions tend to be areas with university participation rates lower than the rates which apply to metropolitan regions (Stevenson et al., 1999). The location of the cases and the patterns of participation in higher education for those locations in 1996 are indicated in Figure 3.2, which is based on maps developed in Stevenson et al (1999). The selection of non-metropolitan cases makes the findings of the research applicable to non-metropolitan regions only.

### 3.8 Summary of methods applied to derive data pertinent to the investigative questions

The investigation draws data from a variety of sources and employs a variety of methods. The case studies were conducted by separate researchers; rather than by the project research team. In most instances these researchers were associated with the case studied.
### 3.9 Representation of case study findings

#### 3.9.1 Depiction of findings

The findings for each case are summarised using a set of ‘Depictograms’ (see <www.swin.edu.au/lts/research.htm> for more information).

The depictogram is a tool for providing a graphic summary of an interpretation of data derived from case studies. It depicts one or more functions against one or more criteria for each case investigated.

Using *descriptors* drawn from the case studies, the depictogram allows the reviewer of a case study to:

- plot a function or functions;
- against criteria;
- by locating text descriptions and shaded areas in a band;
- on bars on a graded chart.

---

**Table 3.1 Methods applied to derive data pertinent to the investigative questions**

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Data Sources</th>
<th>Research Techniques/Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>What approaches to flexible provision can be identified in Australian higher education?</td>
<td>Literature and web material Higher education institutions</td>
<td>Programme evaluations Literature and web search</td>
</tr>
<tr>
<td>What choices do the approaches offer to students?</td>
<td>Course coordinators Students</td>
<td>Institutional survey</td>
</tr>
<tr>
<td>How effective are the various selected models in terms of learning processes?</td>
<td>Course coordinators Students</td>
<td>Case studies involving various of:</td>
</tr>
<tr>
<td>How effective are the various selected models in terms of student demand and participation?</td>
<td>Course Coordinators Institutional Profile Data Course/subject participants</td>
<td>- Policy analysis/document analysis</td>
</tr>
<tr>
<td>How cost effective are the various identified models?</td>
<td>Institution/Faculty/ Department key personnel</td>
<td>- Digests of programme evaluation</td>
</tr>
<tr>
<td>Why have the various selected approaches been developed by the institutions in which they are offered and do they serve the purposes intended?</td>
<td>Senior university personnel Course coordinators</td>
<td>- Student interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Staff interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Student questionnaires</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Staff questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Focus group interviews</td>
</tr>
</tbody>
</table>
3.9.2 Application of depictograms to the cases

In the case of the evaluation and investigation of the effectiveness of models of flexible provision of higher education a set of depictograms is used as a tool for depicting flexibility, effectiveness and cost effectiveness (effectiveness + costliness). The application of the depictogram methodology to the findings of the case studies is detailed in Chapter 15.

3.9.3 Reliability

The reliability of the process of depiction was enhanced by having three independent reviewers plot a set of depictograms for each case. Reviewers then conferred on the depictions and the rationales for the depictions as a basis for producing a final set of depictograms for the case.
Part Two

Findings

Findings of the investigation and evaluation comprise two components: a survey of flexible provision of higher education in Australia, presented in Chapter 4; and a series of case studies of flexible provision of higher education presented in Chapters 5 to 14.
4. A survey of flexible provision of higher education in Australia

4.1 Introduction

An initial part of this investigation involved surveying the flexible provision policies and practices of Australian higher education institutions. All higher education institutions were requested to provide information about their policies and practices regarding the flexible provision of higher education. All institutions responded. The quality of the data received was variable. It was supplemented with further data gathered from other sources including University policy documents, strategic plans, teaching and learning policy documents and similar material obtained from university web sites, handbooks, student information documents and other similar sources. Some of the entries were later supplemented with information gathered from the case study element of the investigation.

4.2 The functions of the survey

The survey had four main functions:

- The survey was used to answer the first of the major research questions: ‘what approaches to the flexible provision of courses can be identified in Australian higher education?’
- Responses to the survey contributed, along with a review of literature and the World Wide Web, to the development of a typology of flexible provision of higher education.
- The survey was used, in conjunction with the typology of flexible provision of higher education, to identify cases of flexible provision representative of a variety of models for further investigation.
- The survey was also used to provide information on why the various institutions adopted flexible provision policies and practices. This contributed to answering the research question ‘are the models identified effective in the provision of higher education in their own terms?’

4.3 Approaches to flexible provision of higher education in Australia

The information from the survey of higher education institutions is presented in Table 4.1. The information is tabulated under four categories: the institutions surveyed and the documents that were analysed; policies; rationale for policy including regional provision; and practices adopted.
### Table 4.1 A map of policies, practices and rationales from data provided or available on the World Wide Web

<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australian Catholic University</strong>&lt;br&gt;Campuses: • Aquinas • Christ • MacKillop • McAuley • Mercy • Mount Saint Mary • North Sydney • Signadou&lt;br&gt;Source: • Correspondence from PVC (Quality and Outreach)</td>
<td>• Policy on flexible learning is addressed within the University’s Strategic Plan (1999–2008).&lt;br&gt;• The policy recognises the need to promote and develop suitable learning technologies, in support of flexible learning modes.&lt;br&gt;• Variations on normal semesters including Summer Institutes and Winter Institutes.</td>
<td>• The key policy focuses on the need to ensure an emphasis on learning.&lt;br&gt;• To provide fully online courses to Australian and International students.&lt;br&gt;Regional Centres provide:&lt;br&gt;• mixed-mode learning models – face-to-face workshops combined with distance education print mode; and&lt;br&gt;• Indigenous programmes that combine residential on-campus provision with local tuition support.</td>
<td>• In partnership with NextEd Pty Ltd and the development of the ACUweb, the University offers complete online postgraduate and professional development courses.&lt;br&gt;• Offshore and mixed-mode programs.&lt;br&gt;• An electronic library resource.&lt;br&gt;• Distance education print mode.</td>
</tr>
</tbody>
</table>

<p>| <strong>Australian National University</strong>&lt;br&gt;Campus: • Canberra&lt;br&gt;Source: • Correspondence from PVC (Academic).&lt;br&gt;• Implementation Plan – Strategic Directions 1999–2001: Moving Forward.&lt;br&gt;• Web site | • Policy on flexible education currently being developed in line with the new strategic directions statement 1999–2001.&lt;br&gt;• Flexible Learning Action Group formed to ensure systematic integration of technology across teaching and learning | • Ensuring highest quality educational experiences through the use of technology.&lt;br&gt;• Ensuring flexible access and study patterns for students.&lt;br&gt;• Ensuring systematic integration of technology enabled changes to teaching and learning.&lt;br&gt;• Respond to changing student demands.&lt;br&gt;Not focusing on specific regional provision but enhancing on campus provision and increasing access to the global market | • Flexible learning action group convened in 2000.&lt;br&gt;• Flexible initiatives fellowship scheme established.&lt;br&gt;• Teach IT programmes, established in 1995 to encourage technology-based flexible teaching practices. |</p>
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| Bond University                                      | No University-wide policy | Not supplied                                      | No specific examples cited. However, the University offers:  
• An e-MBA in a ‘true executive mode’ – intensive short periods of class-based activity.  
• Online materials.  
• Videotape.  
• Off-campus programmes. |
| Charles Sturt University                             | • Student centred  
• Flexible Provision.  
• Lifelong learning.  
• Emphasise student-centred approaches to teaching.  
• To use the new and emerging technologies in combination with established approaches to most effectively develop and maintain learning and teaching environments that meet the needs of the students and staff of the university.  
• Emphasis on assisting staff in appropriate use of technology.  
• Development of an Interactive Learning Centre for resource-based learning.  
• Flexibility in content and medium and availability of resources.  
• Flexibility in timing of study.  
• Flexibility in student support | • Providing appropriate learning environments for a diverse student body  
• Addressing the needs of graduates in the 21st century especially those relating to lifelong learning  
• Recognition of opportunities provided by ICTs  
Regional Provision defined in terms of increasing access to higher education for rural and regional students especially in central and western NSW | New campus at Dubbo custom designed as an interactive learning centre.  
All subjects provided with online support in line with a general strategy of scalability of technology.  
Multi-mode provision, face-to-face on-campus resource-based learning, centre-based distance education, progression to year-round options through more flexible academic calendar.  
Coherent approach to the development of online provision of administrative and support services for students on and off campus. |
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| - Dubbo Campus Educational Brief.  
  - Academic Calendar Review Report.  
  - e-Communication Report | - Faculty board-endorsed policy relating learner centredness.  
  - Foster self-directed learning.  
  - Meet diverse learning styles.  
  - Accommodate diverse teaching styles  
  - Learner centredness is a key feature of University policy | - Fostering innovation is another key feature of the policy  
  - Meeting changed expectations of students.  
  - Enhancing Curtin’s aspiration to be a future world class teaching institution.  
  - Improving teaching through the use of new knowledge technologies.  
  - To improve two links with industry and business.  
  There is no policy on regional provision | - Variety of pathways.  
  - Variety of entry/exit points.  
  - Mixed mode study.  
  - Self-administered assessment.  
  - Availability of resources outside normal time.  
  - Electronic access |

**Curtin University**  
Campuses:  
- Bentley  
- Shenton Park  
- Kalgoorlie  
Sources:  
- Correspondence from DVC (Teaching and Learning).  
- Web site

**Deakin University**  
Campuses:  
- Melbourne  
- Geelong  
- Rusden  
- Toorak  
- Warrnambool  
- Geelong Waterfront  
To strengthen teaching and learning, including flexible and lifelong learning, through:  
- Focused planning for course development and delivery.  
- An increased emphasis on attracting and retaining an outstanding body of students and staff.  
  
- Improve quality of student learning.  
  - Make the University more globally competitive.  
  - Best utilise emerging knowledge technologies.  
  - Improve employment prospects of graduates.  
  - Change attitudes about the content of higher education.  

  - Dual-mode provision off-campus and on-campus.  
  - Online provision.  
  - Residential schools.  
  - Print-based materials.  
  - Work-based education programmes.
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources:</td>
<td>The University views its role as a provider of higher education both globally and through metropolitan and non-metropolitan, regional campuses.</td>
<td>• React positively to funding reductions. Regional provision defined in terms of globalisation and regional campus provision.</td>
<td></td>
</tr>
<tr>
<td>• Strategic Plan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teaching and Learning Management Plan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Case Study Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edith Cowan University</td>
<td>• Primary focus on the student as the university’s lifelong learner. • ECU’s need for genuine differentiation in a competitive marketplace. • Development in students of a core set of skills and capabilities that match employer expectations. • Relate learning to work</td>
<td>• Gaining a competitive advantage through smart use of technology resources for excellence in flexible delivery. • Enable students to balance study with work and other demands. • Maximise cost effectiveness through technology delivered and a simplified award structure. Flexible learning is pursued to enable the university to compete locally as well as remotely</td>
<td>• Establishment of LIFT (Centre for Learning Innovations and Future Technologies). • Support growth of student centred learning. • Enhance quality assurance. • Reduce or eliminate obstacles to alternative scheduling and delivery modes. • Support internationalisation and off shore course delivery. • Recognition of prior learning.</td>
</tr>
<tr>
<td>Campuses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• South West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Churchlands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mount Lawley</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Joondalup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Centres:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Broome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Albany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Geraldton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Katanning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Swan Tertiary Education Centre (Midland)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teaching and Learning Management: A Strategic Framework for Achievement to 2002.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Correspondence from DVC (Teaching and Learning)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Flinders University of South Australia</strong>&lt;br&gt;Campus: • Adelaide&lt;br&gt;Source: • Correspondence from DVC.</td>
<td>The University aims to:&lt;br&gt;• Promote the university-wide use of new educational technologies.&lt;br&gt;• Enhance the students learning experience.&lt;br&gt;• And provide students flexibility in learning, with a choice of time, pace and/or place.</td>
<td>• To advance new educational technologies across the university.&lt;br&gt;• To enhance the learning experience of all students.&lt;br&gt;• To facilitate learner choice about time, pace and/or place.&lt;br&gt;Regional provision policy not supplied.</td>
<td>• Off-campus programs.&lt;br&gt;• Face-to-face learning.&lt;br&gt;• Online materials.&lt;br&gt;• Online communications.&lt;br&gt;• Videotape.&lt;br&gt;• Videoconferencing.&lt;br&gt;• CD-ROM.</td>
</tr>
<tr>
<td><strong>Griffith University</strong>&lt;br&gt;Campuses:&lt;br&gt;• Gold Coast&lt;br&gt;• Logan&lt;br&gt;• Mt. Gravatt&lt;br&gt;• Nathan&lt;br&gt;• Queensland College of Art&lt;br&gt;• Queensland Conservatorium&lt;br&gt;Sources: • Correspondence from DVC&lt;br&gt;• Flexible Learning Statement&lt;br&gt;• Systemic Progress in Teaching and Learning at Griffith University.&lt;br&gt;• Case study research.</td>
<td>• Student centredness is key feature.&lt;br&gt;• Responsive to the changing needs of the student population.&lt;br&gt;• Provide flexibility of access and participation.&lt;br&gt;• Promote learner control.&lt;br&gt;• Enable flexible assessment.&lt;br&gt;• Encourage academic excellence.</td>
<td>Pioneer flexible learning, in preparation for its introduction to all campuses, as part of the University strategic plan. Provide students with skills that enable them to become independent students or self-managed learner. Regional mission defined for Logan district.</td>
<td>• Videoconferencing.&lt;br&gt;• Face-to-face learning.&lt;br&gt;• Workplace delivery.&lt;br&gt;• CD-ROM.&lt;br&gt;• Online materials.&lt;br&gt;• Video tapes/audio tapes.&lt;br&gt;• Online communications.&lt;br&gt;• Recognise prior learning.&lt;br&gt;• Include embedded courses.&lt;br&gt;• Incorporate combination of on-campus or off-campus modes.&lt;br&gt;• Deliver flexibility of time – inside or outside of semester.&lt;br&gt;• Enable students to negotiate curriculum and assessment.</td>
</tr>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------</td>
<td>---------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>James Cook University</td>
<td>• Deliver an enhanced student-centred approach to learning. • Enable the most effective, flexible and appropriate teaching and learning modes to coexist with suitable technology. • Enhance the quality of the learning environment by providing high quality physical and IT infrastructure for flexible learning across the range of JCU campuses and worldwide.</td>
<td>• Accommodate the competing demands on students’ time. Regional provision defined in terms of non-metropolitan regional campuses with global outreach.</td>
<td>• Online Materials. • CD-ROM. • Online communications. • Print materials. • Off-campus programmes. • Dual mode – combination of on campus or off campus modes. • Videoconferencing.</td>
</tr>
<tr>
<td>Campuses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cairns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Townsville</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexible Learning at James Cook University: Information for Students.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject listing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LaTrobe University</td>
<td>No University-wide policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campuses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albury-Wodonga</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beechworth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bendigo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bundoora</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mildura</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mt Buller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shepparton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correspondence prepared by the University’s Equity and Access Unit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Institutions and the documentation that was analysed**

- **James Cook University**
  - Campuses: Cairns, Townsville
  - Sources: Flexible Learning at James Cook University: Information for Students.
  - Subject listing.

- **LaTrobe University**
  - Campuses: Albury-Wodonga, Beechworth, Bendigo, Bundoora, Mildura, Mt Buller, Shepparton
  - Source: Correspondence prepared by the University’s Equity and Access Unit.

**Policies**

- Deliver an enhanced student-centred approach to learning.
- Enable the most effective, flexible and appropriate teaching and learning modes to coexist with suitable technology.
- Enhance the quality of the learning environment by providing high quality physical and IT infrastructure for flexible learning across the range of JCU campuses and worldwide.

**Rationale for policies including regional provision**

- Accommodate the competing demands on students’ time.
- Regional provision defined in terms of non-metropolitan regional campuses with global outreach.

**Practices adopted**

- Online Materials.
- CD-ROM.
- Online communications.
- Print materials.
- Off-campus programmes.
- Dual mode – combination of on campus or off campus modes.
- Videoconferencing.

**LaTrobe University**

- No University-wide policy

- Increasing access to education for students in regional campuses.
- Providing high quality education to international students.
- Providing access to diverse student populations and across equity profiles.
- Responding to up-to-date research regarding pedagogical practice.

Regional provision is defined in terms of non-metropolitan regional campuses.
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| **Macquarie University**                             | • Since the late 1980s has had a teaching and learning plan emphasising flexible learning.  
• To make full use of opportunities of new information technology  
• Providing more flexible access to time and place  
• Emphasising student centredness and supporting multiple learning styles  
• Policy of ‘borderless university’  
• Expansion of articulation arrangements  
• Provision of higher education for those under-represented  
• Excellence of teaching  
• Quality learning for the 21st century  
• Dealing with increased student load  
*Not specifically seeking to provide on a regional basis but rather international provision in a globally competitive environment through strategic alliances in Europe and Asia.* |                                              | • Competitive centralised strategic funding for innovation in flexible learning  
• Creation of Centre for Flexible Learning  
• Online teaching facility progressive conversion to digitally recorded lectures available to all students  
• Professional development for staff re the use of new technology  
• Multiple teaching modes involving course packs, audio recording of lectures, online non-synchronous teaching and multimedia packages. |
| **Monash University**                                | The flexible provision of education is incorporated in the University’s academic and education policies.  
Specifically, the provision is outlined in two Plans:  
1. The Strategic Plan – Leading the Way; and  
2. The Learning and Teaching Plan.  
In line with the University’s Plans, Monash has initiated the several strategies including:  
• The development of a series of ‘Flexible Learning and Case Study Guides’;  
Monash provides a learning environment that is student-centred and flexible, and incorporates the use of various educational technologies.  
*Regional Provision policy not supplied.* |                                              | The University’s online services include the following activities and practices:  
• Online materials.  
• Online communications.  
• Multiple campus provision.  
• Distributed and interactive communications.  
• Customised workplace provision. |
<table>
<thead>
<tr>
<th>Murdoch University</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campuses:</strong> Murdoch Rockingham</td>
</tr>
<tr>
<td><strong>Source:</strong> Correspondence from the Manager, Teaching and Learning Centre.</td>
</tr>
</tbody>
</table>

Presently, the University has no formal policy. However, the Academic Council has established a working party to formulate a University-wide flexible teaching and learning policy.

In 1998, the University established the Murdoch Online Mainstreaming Project. The Project resources have been used to develop and trial online teaching materials.

The University has an ongoing commitment to a flexible student-centred approach to learning. Regional provision policy not supplied.

The University’s online services include the following practices:
- Online course materials
- Online communications
- Off-campus programmes

The development of online facilities – the ‘Monash Portal’. Collaboration between Monash University and the Australian Broadcasting Corporation to produce the cross-media learning project ‘In the Pipeline’. The collaborative partnership of Monash University, Telstra and Ecole Superieure de Commerce de Paris to trial an online International Postgraduate Marketing Program.

The University’s online services include:
- Off-campus programmes.
- Online communications.
- Online course materials.

Institutions and the documentation that was analysed:

<table>
<thead>
<tr>
<th>Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policies Rationale for policies including regional provision</strong></td>
</tr>
<tr>
<td><strong>Regional provision</strong></td>
</tr>
<tr>
<td><strong>Practices adopted</strong></td>
</tr>
</tbody>
</table>

Effectiveness of Models of Flexible Provision of Higher Education
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| **Northern Territory University**                   | Policy in draft stage. The University is working towards:  
- Establishment of NTU mission in flexible learning  
- Increasing the number of programmes offered by flexible means  
- Definition of models of flexible learning  
- Identifying criteria for selecting courses to be flexibly delivered. | - Developing niche markets.  
Local provision of flexibly delivered courses to Territorians | Proposed at this stage only and include:  
- Staff development through internships and secondments.  
- Recruit staff with expertise in flexible delivery.  
- Staff development programme university wide.  
- Promotions criteria to include flexible delivery. |
| Campuses:                                           |          |                                                      |                  |
| • Casuarina                                         |          |                                                      |                  |
| • Palmerston                                        |          |                                                      |                  |
| • Rural College                                     |          |                                                      |                  |
| • Tiwi                                              |          |                                                      |                  |
| Regional Centres:                                   |          |                                                      |                  |
| • Tennant Creek                                     |          |                                                      |                  |
| • Jabiru                                            |          |                                                      |                  |
| • Katherine                                         |          |                                                      |                  |
| • Nhulunbury                                        |          |                                                      |                  |
| Source:                                             |          |                                                      |                  |
| • Information and Flexible Learning Strategy 2000.  |          |                                                      |                  |
| **Queensland University of Technology**             | Focus on learner.  
- Distributed learning a priority.  
- Flexible delivery to accompany suitable changes in pedagogy and assessment.  
- Integration of new technologies with existing and more traditional modes of teaching. | - Provide convenience for students.  
- Maintain quality.  
- Focused on providing flexibility of time and place.  
- Provide funding for the development of online teaching.  
Regional provision defined in terms of regional campus operations north of Brisbane | The strategies and techniques incorporated into the various 1999–2000 Large Grant Projects include:  
- Face-to-face learning.  
- Distributed face-to-face learning.  
- Online teaching facilities.  
- Online materials.  
- Online communications.  
- Central support (TALSS).  
- Off-campus programmes.  
- Summer semester. |
<p>| Campuses:                                           |          |                                                      |                  |
| • Gardens Point                                     |          |                                                      |                  |
| • Kelvin Grove                                      |          |                                                      |                  |
| • Carseldine                                        |          |                                                      |                  |
| Sources:                                            |          |                                                      |                  |
| • Detailed response prepared for the survey.        |          |                                                      |                  |
| • Academic Board Policy on Flexible Delivery.       |          |                                                      |                  |</p>
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Royal Melbourne Institute of Technology</strong></td>
<td>RMIT's policy is to have 60% of all courses online by the end of 2000.</td>
<td>• Niche marketing imperatives. • Greater productivity imperatives. • Fostering generic graduate attributes. • More diverse student population. • Need for student centred learning. Flexible learning policy is concerned with national and international provision rather than local provision.</td>
<td>• Major staff development programme. • Restructured organisation/ faculty levels: Directors of IT and Directors of Teaching Quality. • 37 online projects. • Continuous improvement processes inform the project.</td>
</tr>
<tr>
<td>Campuses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• City</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Bundoora</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Brunswick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A paper entitled: Developing and Evaluating a University-wide online distributed learning system, was analysed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Cross University</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campuses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lismore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Coffs Harbour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Port Macquarie</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centres:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Grafton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Murwillumbah</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Coolangatta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Correspondence from the Director of Teaching and Learning Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Although the University does not have an overall policy statement regarding flexible teaching and learning, it does have an ongoing commitment to providing flexibility within its programmes.</td>
<td>Not supplied.</td>
<td>The University includes the following practices: • Multi-modal provision. • Face-to-face. • Complemented face-to-face. • Customised workplace provision. • Recognition of prior learning. • Accreditation transfer arrangements. • Off-campus programmes.</td>
<td></td>
</tr>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------</td>
<td>---------------------------------------------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| **Swinburne University of Technology**              | • Flexible provision of learning is a major strategy of Swinburne University TAFE and higher education divisions.  
• The Lilydale Campus emphasises an independent, learner centred approach to teaching and learning. This is complemented by state-of-the-art technology to facilitate on-campus and off-campus provision of courses.  
• The University’s policy aims to provide maximum flexibility and choice. | • Provision of choice to students.  
• Student retention.  
• Maxmise quality of learning.  
• Constructivism.  
• Whole institutional reform.  
**Regional provision for the Yarra Valley.** | • Creation of a Learning and Teaching Support unit to advocate and facilitate flexible learning.  
• Summer semester.  
• Multi-modal learning [Lilydale].  
• Common core subjects [Lilydale].  
• Video-on-demand.  
• Print materials.  
• Online materials.  
• Online communications.  
• Some subsidises offered through Open Learning Australia. |
| **University of Adelaide**  
Campuses:  
• North Terrace  
• Roseworthy  
• Thebarton  
• Waite  
Sources:  
• Email responses from:  
-- Director of Quality Assurance;  
-- Faculty of Agriculture and Natural Resources Sciences.  
• University of Adelaide Learning and Teaching Plan 2000–2002 | ‘The University of Adelaide has a very limited programme of flexible delivery’. There has been a reduction in the distance education programme over the last 10 years.  
Although some courses are offered in a distance mode, the Learning and Teaching Plan includes an emphasis on the distribution of information technologies and telecommunications to learning and the distribution of teaching materials. | The University is committed to the interaction of students and staff in the common pursuit of knowledge. The use of IT&T will free up time for important learning activities in smaller groups and one-on-one settings.  
**Regional provision policy not supplied** | The Faculty of Agriculture and Natural Resources Sciences offers a Diploma in Wine Marketing and a Graduate Diploma in Wine Business, in distance mode. The mode provides students with access to online materials and discussions. |
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| **University of Ballarat**                          | • Focus on the learner.  
• Develop a combination of actual and virtual environments that encourage effective learning.  
• Development of a learning community.  
• Development of lifelong learners. | • Improvements in teaching and learning.  
• Utilise well the new knowledge technologies.  
• Collaborative learning.  
Regional provision is defined as central Victoria. | • Teaching excellence awards.  
• Support by Scholarship and Educational Development Services (SEDS).  
• Continuous improvement strategies. |
| Campuses:                                            |          |                                                     |                   |
| • Ararat                                             |          |                                                     |                   |
| • Horsham                                            |          |                                                     |                   |
| • School of Mines, Ballarat                          |          |                                                     |                   |
| • Mount St. Helen                                    |          |                                                     |                   |
| • Stawell                                            |          |                                                     |                   |
| Sources:                                             |          |                                                     |                   |
| • Email response from Scholarship and Educational Development Services. |          |                                                     |                   |
| • University Policy on Flexible Learning and Teaching. |          |                                                     |                   |
| • Case-study research.                               |          |                                                     |                   |
| **University of Canberra**                           | • A student-centred approach to flexible learning is a key feature of the policy.  
• The initial policy has been to consult widely within the university community and without to identify policy direction.  
A planned phased implementation process has been agreed. | • Student centredness is appropriate approach to teaching and learning for the future.  
• Make best use of the emerging knowledge technologies.  
Regional provision defined in terms of regional ACT complemented by a global outlook. | • Build upon existing developments and a range of pilot projects.  
• Staff development programme.  
• Adoption of a university wide management system for course materials delivery.  
Flexible learning competitive grants scheme.  
Establishment of a Centre for Integrated Technologies and Learning. |
<p>| Campuses:                                            |          |                                                     |                   |
| • Canberra                                           |          |                                                     |                   |
| Source:                                              |          |                                                     |                   |
| • Learning for the Future – The University of Canberra’s Flexible Learning Policy. |          |                                                     |                   |</p>
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University of Central Queensland</strong> &lt;br&gt; Campuses:  • Brisbane &lt;br&gt; • Bundaberg &lt;br&gt; • Emerald &lt;br&gt; • Gladstone &lt;br&gt; • Mackay &lt;br&gt; • Melbourne &lt;br&gt; • Rockhampton &lt;br&gt; • Sydney &lt;br&gt; Sources:  • Email correspondence from the Director of the Division of Distance and Continuing Education &lt;br&gt; • Review of Distance Education and Flexible Learning May 1999.</td>
<td>A major organisational review generated a four-pronged policy:  • Develop a flexible global learning platform.  • Maximise flexibility for students.  • Maximise relevance and responsiveness of the curriculum.  • Develop and demonstrate social responsibility.  • Drawing together in a range of material including core teaching materials available to all students and supplemented with a range of options including online interactivity.  • Videoconferencing, face-to-face, print, multimedia.</td>
<td>Main reasons:  • Funding.  • Competition.  • Demand.  • Markets.  • New knowledge technologies.  • To enable students to move freely between on-campus and off-campus modes.  • Provide choices across the range of campuses.  <strong>Regional provision policy is concerned to enable local students to move freely between on campus and off campus delivery modes and to expand distance provision.</strong></td>
<td>12 examples of individual efforts at flexible provision offered. They are all to be considered for inclusion in the institutional practices of the university’s policy on flexible learning.</td>
</tr>
<tr>
<td><strong>University of Melbourne</strong> &lt;br&gt; Campuses:  • Burnley &lt;br&gt; • Hawthorn &lt;br&gt; • Parkville &lt;br&gt; • Werribee &lt;br&gt; Regional Campuses:  • Creswick &lt;br&gt; • Dookie &lt;br&gt; • Gilbert Chandler &lt;br&gt; • Glenormiston</td>
<td>To have 50% of staff using multimedia or Internet-based courses by 2001.</td>
<td>Provision goals defined in terms of international market.  <strong>Regional Provision policy not supplied</strong></td>
<td>• Competitive grants scheme.</td>
</tr>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>
| University of New England                           | • There is no university-wide policy.  
• There are initiatives to identify a small suite of courses for flexible delivery online as a pilot.  
• Flexible delivery action plan is a part of the Teaching and Learning Plan 1999–2002. | • Increase the use of flexible teaching and learning approaches for distance education students.  
• International marketing.  
• Maintenance of a strong multimodal operation.  
Regional provision is defined in terms of local region and outreach centres. | Action plan for:  
• An online teaching initiative as a pilot.  
• Students access to Internet.  
• Establishment of outreach centres.  
• Linkages with other regional providers.  
• Staff development.  
• Policy development process. |
| University of New South Wales                        | There is no university-wide policy on the flexible provision of higher education. | Not supplied. | • Central support for interested staff through the Educational Development and Technology Centre. |

| Campus:  
• Armidale  
Source:  
• Correspondence from the Head of the Teaching and Learning Centre  
• Teaching and Learning Plan 1999–2002. |  
|-----------------------------------------------------|----------|--------------------------------------------------|-------------------|
| University of New England                           | • There is no university-wide policy.  
• There are initiatives to identify a small suite of courses for flexible delivery online as a pilot.  
• Flexible delivery action plan is a part of the Teaching and Learning Plan 1999–2002. | • Increase the use of flexible teaching and learning approaches for distance education students.  
• International marketing.  
• Maintenance of a strong multimodal operation.  
Regional provision is defined in terms of local region and outreach centres. | Action plan for:  
• An online teaching initiative as a pilot.  
• Students access to Internet.  
• Establishment of outreach centres.  
• Linkages with other regional providers.  
• Staff development.  
• Policy development process. |
| University of New South Wales                        | There is no university-wide policy on the flexible provision of higher education. | Not supplied. | • Central support for interested staff through the Educational Development and Technology Centre. |

| Source:  
• Correspondence from the Vice-Principal (Information) |  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University of New South Wales</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Campus:  
• Sydney  
• College of Fine Arts, Paddington  
• Australian Defence Force Academy, Canberra  
• Randwick  
• Cliffbrook, Coogee  
Source:  
• Report from the Director of the Educational Development and Technology Centre.  
• Web site. |  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University of New South Wales</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Campus:  
• Sydney  
• College of Fine Arts, Paddington  
• Australian Defence Force Academy, Canberra  
• Randwick  
• Cliffbrook, Coogee  
Source:  
• Report from the Director of the Educational Development and Technology Centre.  
• Web site. |  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>---------</td>
<td>---------------------------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| **University of Newcastle** | • To provide flexible and accessible learning opportunities through the provision of high quality teaching and learning infrastructure integrating new technologies  
• Promotion of learner centred learning. | • To expand student numbers.  
• To improve the quality of learning.  
• To motivate learners through the use of technology.  
Regional provision is defined as serving the Newcastle area. | A suite of flexibly delivered subjects:  
• internally – 61  
• externally – 38  
• Web based – 25 |
| Campuses:  
• Callaghan  
• Central Coast | Sources:  
• A Listing of Flexibly Delivered Subjects.  
• Teaching and management plan. | | |
| **University of Queensland** | • Deliver an enhanced student centred approach to learning.  
• Apply systematically the most effective, flexible and appropriate teaching and learning modes and technologies.  
• Enhance the quality of the learning environment by providing high quality physical and IT infrastructure for flexible learning. | • Improve the quality of student centred teaching and learning.  
• Develop computer lifelong learning skills.  
• Improve computer literacy skills to a level comparable with workplace expectations.  
• Develop information management skills.  
Regional provision through regional campus operation at Ipswich. | • Staff development programme on flexible delivery.  
• Learning Resource Development unit established to assist staff with flexible delivery.  
• 1997 working party developed policy on infrastructure, funding, staff support and academic considerations re flexible learning.  
• Tenure and promotion procedures address flexible delivery.  
• Establishment of Ipswich as a flexible learning campus. |
| Campuses:  
• St Lucia  
• Ipswich  
• Gatton | Sources:  
• Correspondence from the Deputy President of Academic Board.  
• Draft discussion paper on flexible delivery by the working party on academic Guidelines for flexible Delivery.  
• Case Study Research. | | |
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| **University of South Australia**                   | The University of South Australia has integrated the provision of flexible learning into its teaching and learning strategy. The strategy incorporates three concepts: a student-centred learning approach; the development of graduate qualities through a choice of teaching and learning arrangements; and flexible delivery through the use of technologies to provide more effective and better managed learning. | The University uses its UniSanet as a platform for the delivery of flexible learning. Regional provision policy not supplied. | The University’s policy framework incorporates the following activities and practices:  
- Recognition of prior learning.  
- Credit transfer arrangements.  
- Articulated/ embedded awards.  
- Off-campus programmes.  
- Face-to-face learning.  
- CD-ROM.  
- Online materials.  
- Video tapes.  
- Online communications. |
| Campuses:                                           | • City East  
• City West  
• Magill  
• Mawson Lakes  
• Underdale  
• Whyalla | Source:  
• Flexible Learning at the University South Australia. | |
| **University of Southern Queensland**                | The USQ policy of ‘flexible delivery’ means each unit team aims to provide educational materials independent of time and place and in a medium suited to the students. | To maintain the position of being the largest overseas higher education provider in Australia.  
• Single mindedness about sustaining funding levels.  
• Meeting the learning styles/ preferences of students.  
• Focus is to strengthen the university’s dual mode operation, which includes regional provision for the Darling Downs.  
Regional provision is directed at the Darling Downs. Flexible provision is also directed at the international market | |
| Campuses:                                           | • Toowoomba  
• Wide Bay | Sources:  
• Promotional material.  
• Web site.  
• Distance education student guide.  
• Case study research. |  
- Print.  
- Audiotape.  
- Videotape.  
- Teleconferencing.  
- CML.  
- CD-ROM.  
- Computer-mediated conferencing.  
- Online materials and communications. |
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University of the Sunshine Coast</strong>&lt;br&gt;Campus: &lt;br&gt;• Maroochydore&lt;br&gt;Source: &lt;br&gt;• Correspondence from Deputy Vice-Chancellor</td>
<td>No university-wide policy.</td>
<td>Not supplied.&lt;br&gt;Flexible provision is directed at the national and global markets</td>
<td>• Flexible online MBA offered.</td>
</tr>
<tr>
<td><strong>University of Sydney</strong>&lt;br&gt;Campuses:&lt;br&gt;• Burren Street&lt;br&gt;• Camperdown/Darlington&lt;br&gt;• Cumberland&lt;br&gt;• Kirkbride&lt;br&gt;• Mallett Street&lt;br&gt;• Orange Agricultural College&lt;br&gt;• St James&lt;br&gt;• Surrey Hills&lt;br&gt;• Sydney Conservatorium of Music&lt;br&gt;Sources:&lt;br&gt;• Academic Board policy.&lt;br&gt;• Statement on Flexible Student-Centred Learning.</td>
<td>Move the whole university community towards:&lt;br&gt;• Reducing the constraints on the modes by which it offers courses.&lt;br&gt;• Offering students greater choice of modes in which they can study.&lt;br&gt;• Increasing opportunities for students to enrol in a diversity of subjects from across the institution.&lt;br&gt;• Requiring that every unit offered involve students actively in the university’s learning community.&lt;br&gt;• Expanding the university’s continuing education programme.&lt;br&gt;• Exploring how technology can be used to produce smaller groups and more individualised teaching.</td>
<td>Importance in the future of:&lt;br&gt;• Lifelong learning.&lt;br&gt;• Student-centred education.&lt;br&gt;• Overcoming inequality of educational opportunity arising from social and economic circumstances.&lt;br&gt;Flexible learning policy is concerned national and international provision rather than local provision.</td>
<td>• Promulgation of numerous best example practices within the university including the ‘virtual’ graduate medical programme and the Orange agricultural programmes.&lt;br&gt;• Whole institution reform through widespread discussion of the implications of flexible learning.</td>
</tr>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| **University of Tasmania**                          | • Develop specific teaching and learning options in key programmes.  
• Improved access for students from disadvantaged groups.  
• Development of new IT services to support flexible learning developments.  
• Provide wide access to general education courses.  
• Develop professional education and career development programmes.  
• Develop programmes around theme areas.  | • Improved teaching and learning.  
Flexible delivery is directed towards regional provision for groups with difficulty gaining access as well as the internationalisation of programmes. | • Teaching and learning grant scheme.  
• PVC teaching and learning appointment.  
• WebCT endorsed.  
• Incipient staff development programme.  
• Extend teaching excellence awards around flexible delivery. |

**Campuses:**  
• Hobart  
• Launceston  

**Sources:**  
• Correspondence from the Academic Registrar.  
• Draft Teaching and Learning Development Plan.  
• Teaching and Learning Committees Review of Courses.  
• Case study research.

<table>
<thead>
<tr>
<th><strong>University of Technology, Sydney</strong></th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
</table>
| **Campuses:**  
• City  
• Kuring-gai  
• St Leonards  | • To be a quality 'university of the future'  
• To link flexible delivery to work-based learning  
• To provide student-negotiated learning contracts  
• To develop the Institute for Interactive Multimedia  
• To provide adequate resources to administrative and technical areas to provide infrastructure support for a flexible learning environment  
• To establish communication mechanisms to advertise flexible delivery policy and practices.  | • Improve quality of student learning.  
• Make the university more globally competitive.  
• Best utilise emerging knowledge technologies.  
• Improve employment prospects of graduates.  
• Change attitudes about the content of higher education.  
• React positively to funding reductions.  
Flexible delivery policy concerned more with addressing local and international competition than with adopting a specific regional focus. | • Flexible learning taskforce established.  
• Team based flexible learning programmes developed.  
• Flexible-learning action groups established.  
• Strategic Initiatives programme.  
• An Interactive web site on flexible learning.  
• Staff development programme on flexible learning. |

**Sources:**  
• Correspondence from PVC (Education and Quality Enhancement).  
• Triennial Planning Review  
• Reports of the flexible learning working party.  
• Marketing material.
<table>
<thead>
<tr>
<th>Institutions and the documentation that was analysed</th>
<th>Policies</th>
<th>Rationale for policies including regional provision</th>
<th>Practices adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University of Western Australia</strong>&lt;br&gt;Campus: • Crawley&lt;br&gt;Sources: • Correspondence from Deputy Vice-Chancellor. A formal detailed response to the mapping exercise.</td>
<td>There is no formal University-wide policy as yet. However, • Improving the University’s capacity for more flexible teaching and learning is a formal aspect of the Operational Priorities Plan. • The Teaching and Learning Committee is actively pursuing the issue.</td>
<td>• Utilising the knowledge technologies to their fullest. • Internationalisation. • More effective regional provision. Regional provision directed at regional campuses at Nedlands and Albany.</td>
<td>• Numerous exemplary practices across the university are cited. • Further innovation is encouraged through the strategic initiative grants. • A Centre for the Advancement of Teaching and Learning established. • Centre for Staff Development developing a strategy for identifying staff training needs.</td>
</tr>
<tr>
<td><strong>University of Western Sydney</strong>&lt;br&gt;Campuses: • UWS Chancellery • UWS Hawkesbury • Blacktown • Richmond • UWS Macarthur • Bankstown • Campbelltown • UWS Nepean • Parramatta • Penrith&lt;br&gt;Sources: • Promotional material. • Web site</td>
<td>Not supplied.</td>
<td>Not supplied.</td>
<td>• The Centre for Academic Development and Flexible Learning (CADFL), at UWS Nepean, provides Schools and individual staff access to a range of resource services to facilitate the development flexible learning and flexible delivery plans. • CADFL has also provided funding for the development of flexible learning, through the Nepean Flexible Learning Development Grant Scheme 1998/99. This grant scheme has since been separated into two funds: – Teaching Development Grants (internal and external); and – (School-based) Flexible Learning and Delivery Support Scheme • Similarly, the Centre for Enhancing Learning and Teaching (CELT), at Macarthur, provides funding for flexible learning through the Year 2000 Flexlearn Grants scheme.</td>
</tr>
<tr>
<td>Institutions and the documentation that was analysed</td>
<td>Policies</td>
<td>Rationale for policies including regional provision</td>
<td>Practices adopted</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>----------</td>
<td>-----------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td><strong>University of Wollongong</strong>&lt;br&gt;Campus: • Wollongong&lt;br&gt;Source: • Learning and Teaching Strategic Plan.</td>
<td>The University of Wollongong’s flexible provision polices aim to enhance the educational process. This is to be achieved through flexible programmes within which students are offered a choice in program entry levels, structure and delivery methods.</td>
<td>• Maximise the quality of the learning experiences.&lt;br&gt;• Student-centred curricula and resources.&lt;br&gt;• Provide students with the most appropriate delivery medium.&lt;br&gt;• Regional Provision policy not supplied</td>
<td>• Distributed face-to-face.&lt;br&gt;• CD-ROM.&lt;br&gt;• Print materials.&lt;br&gt;• Online materials.&lt;br&gt;• Online communications.&lt;br&gt;• Face-to-face.&lt;br&gt;• Distributed face-to-face.&lt;br&gt;• Video-on-demand.&lt;br&gt;• Videoconferencing.&lt;br&gt;• Teleconferencing.</td>
</tr>
<tr>
<td><strong>Victoria University of Technology</strong>&lt;br&gt;Campuses: • Footscray&lt;br&gt;• City&lt;br&gt;• St Albans&lt;br&gt;• Werribee&lt;br&gt;• Sunbury&lt;br&gt;• Melton&lt;br&gt;Regional campus: • Echuca&lt;br&gt;Source: • Web site&lt;br&gt;• Case study research</td>
<td>There is no university-wide policy.</td>
<td>Not supplied.</td>
<td>• Recognition of prior learning&lt;br&gt;• Compressed form teaching&lt;br&gt;• Regional campus for regional community [Echuca]</td>
</tr>
</tbody>
</table>
4.4 An interpretation of the survey

Flexible provision of higher education, as it is defined for this study (see Section 1.2 above) is focused on the nature of the choices that are offered to learners. The choices that are offered to learners relate to the time, pace, place of study, the entry and exit points for courses, content, approaches to assessment and the option to study individually or collaboratively. Such choices are afforded through the employment of various strategies or practices, including the use of learning and teaching techniques and technologies, and the adoption of policies effecting choices for learners such as recognition of prior learning.

While the definition of flexible provision of higher education adopted here focuses on choice for learners, the survey indicates alternative perceptions of, as well as a range of reasons for involvement in, flexible provision of higher education.

Many institutions defined flexible provision of higher education in terms of offering choices to learners. However, some conceptions of flexible provision explicit or implied in survey responses focused on educational technologies, identifying flexible learning or flexible delivery of higher education with the employment of information and communication technologies such as online education or videoconferencing. One is left to infer what is flexible about education provided electronically. It is assumed for the purposes of this study that the sense in which electronically provided education may be classed as flexible is that it does offer some choices (for example about time and place of study) though it may preclude other choices (for example face-to-face interaction between students and teachers). The survey, then, provides both direct and indirect support for the definition of flexible provision of higher education in terms of provision of choice for learners.

The definition of flexible provision of higher education adopted in this study does not imply a particular intent in the provision of choice for learners. Universities as the survey indicates, seek to provide choice for learners for reasons that vary from educational to instrumental. Some offer choices of mode of study, content and assessment for essentially educational reasons, reflecting ideas about adult learning, effective teaching and the demands of the knowledge economy. Some offer flexibility in entry and exit requirements, and in time, pace and place of study to facilitate access for altruistic or instrumental reasons. Some universities think about flexible provision in essentially instrumental terms, employing flexible learning techniques and technologies to teach larger groups or to reach a wider market at home or abroad.

Whatever the intent, universities adopt practices that do afford choices to learners. For example a determination to make use of new learning technologies for whatever reason may provide the learner with options about the time and place of study.
4.5 Selection of cases from the survey

The survey indicated a variety of approaches to flexible provision of higher education. Each case is different. In order to select a limited range of cases for further study the typology of flexible provision developed in Section 1.2.4 was employed. Ten cases were selected. The ten cases cover the notional models of flexible provision defined in the typology. The cases, however, do not match the notional models. Most span two or three models. In selecting the cases a focus on provision for non-metropolitan regions was also taken into account. The relationship between the typology and the cases is indicated in Table 4.3.

The cases selected ranged from the study of the operation of a distance education centre, to the study of campuses designed for flexible provision of higher education, to the study of particular programs and clusters of programs which displayed a flexible approach. The Distance Education Centre of the University of Southern Queensland was selected as an example of off-campus provision. The University of Southern Queensland offers programmes in print and online formats, supplemented by telecommunications and local student-support systems. The Lilydale campus of Swinburne University, the Logan campus of Griffith University and the Ipswich campus of the University of Queensland were selected as purpose built flexible provision venues on the outskirts of metropolitan regions. In addition to making local face-to-face provision for higher education these campuses offer alternative modes of provision including print and online materials, and online and teleconferenced communications. The Dubbo node campus of Charles Sturt University provides a similar but smaller scale instance located in a rural region. The programmes conducted by Deakin University in conjunction with Ford Australia were selected as workplace-based provision. The programmes employ both face-to-face tuition and off-campus educational materials but locate the offering and support in the workplace of the students. The Bachelor of Adult Vocational Education programme of the University of Tasmania, the Nyerna Studies of Victoria University of Technology, and a cluster of graduate certificate programmes of the University of Ballarat were selected as programmes that involve local face-to-face tuition and offer flexibility to students through content and assessment choices. They involve the development of learning communities based upon student work and social responsibilities.
Table 4.2  A Typology for the Flexible Provision of Australian higher education

<table>
<thead>
<tr>
<th>Model of Flexible Provision</th>
<th>Example</th>
<th>Instances</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision oriented to access and convenience for learners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Moving time and/or place to suit the learner</td>
<td>Provision in the workplace; offering programs at regional or multiple campuses; provision of distributed study centres; and the offering of summer schools.</td>
<td>Workplace-based learning – Deakin Summer semester – Swinburne Regional campuses – Swinburne, Griffith, LaTrobe, Queensland. Study centres – Southern Queensland, Charles Sturt</td>
<td>Deakin/Ford (MBA programme) Griffith (Logan) Queensland (Ipswich) Southern Queensland (Distance Education Centre) Charles Sturt (Dubbo)</td>
</tr>
<tr>
<td>2. Removing fixed time and place constraints</td>
<td>Off-campus programmes utilising print or digital tuition materials.</td>
<td>Off-campus programmes of Deakin, Southern Queensland, and Central Queensland.</td>
<td>Southern Queensland</td>
</tr>
<tr>
<td>3. Removing entry requirements</td>
<td>Open-access university programmes which have no academic entry requirement such as those offered through Open Learning Australia; or programmes that recognise and give credit for prior learning.</td>
<td>Open entry – Victoria Recognition of prior learning – Victoria, Deakin.</td>
<td>Victoria (Echuca) Tasmania (BAVE programme)</td>
</tr>
</tbody>
</table>
### Effectiveness of Models of Flexible Provision of higher education

**Those oriented to accommodating learning preferences:**

<table>
<thead>
<tr>
<th>Model of Flexible Provision</th>
<th>Example</th>
<th>Instances</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Providing alternative entry and exit points appropriate to the learner</td>
<td>Courses that articulate with TAFE studies providing advanced standing in the higher education course; programmes that provide alternate exit points such as Graduate Certificate, Graduate Diploma and Masters Degree</td>
<td>TAFE to higher education articulation – Swinburne, RMIT, Victoria. Programmes with alternative exit points – common and found mainly postgraduate level. Deakin / Ford (MBA programme)</td>
<td>Victoria (Echuca) Tasmania (BAVE programme) South Australia (Whyalla)</td>
</tr>
<tr>
<td>5. Accommodating learning style, pace and collaboration preferences</td>
<td>Programmes offered in full or in part in more than one mode; programmes with flexible time schedules; course which permits but does not require collaboration</td>
<td>Multi-modal programmes – Swinburne (Lilydale) Programmes offered in dual (on-campus and off-campus) mode – Deakin, Southern Queensland. Programs with flexible time schedules – Ballarat. Courses that permit collaboration – Ballarat, Victoria.</td>
<td>Swinburne (Lilydale) Ballarat</td>
</tr>
<tr>
<td>6. Accommodating content and assessment preferences</td>
<td>Modularised content allowing choice in construction of a program; problem-based learning allowing some selection of content; alternative assessment tasks.</td>
<td>Choice of content and/or assessment – Victoria Victoria (Echuca)</td>
<td></td>
</tr>
</tbody>
</table>
5. Swinburne University of Technology (Lilydale)

Ron Toomey

Swinburne (Lilydale), a campus of Swinburne University of Technology, was established to tailor a programme of higher education specifically for students in outer eastern Melbourne. It has adopted multi-modal learning as its approach to the flexible provision of higher education. Learning guides, online materials, online discussion, drop-in tutorials and video-on-demand, as well as face-to-face sessions, are all parts of the repertoire of resources and activities.

Multi-modal learning (MML) is intended to enable students to choose for themselves when to study, where to study, what to study, how they study and with whom they study. Initially students have been slow to take up these measures of flexibility. In the early part of their course most students expect conventional higher education teaching and learning practices. They expect set times for the teaching. They are largely ignorant about their learning styles. This pattern changes over their experience with the course.

At Swinburne (Lilydale) approximately 80 per cent of the students come from the immediate local region. Previously prospective students in the region experienced difficulty in accessing higher education. There is a satisfactory retention rate within most degrees.

According to employers, staff and the students themselves graduates have developed a range of generic skills and abilities well suited to future employment and lifelong learning. Students are generally very satisfied with their courses. Staff satisfaction with the programme is high. However the successes of the programme at Lilydale have come at significant cost. The programme is currently being delivered with student–staff ratios that are approximately double what they are on the Hawthorn campus of Swinburne. Moreover, because of the constraints on their time most staff members at Lilydale undertake virtually no research.

5.1 Context

The origins of the Lilydale Campus of Swinburne University of Technology go back to 1992. Then, the University established its first campus specifically designed to serve the outer east of Melbourne on the site of a former Grammar School. The Vice-Chancellor’s initial vision for the outer eastern campus was that not only should it provide higher education opportunities to the region but also it should adopt a ‘flexible’ approach to doing so. Flexible in this regard meant that at any one time a third of the student body would be learning on-campus, another third would be learning online off-campus, and the final third would be in work-based or community-based learning situations.

Lilydale was to be a ‘teaching only’ campus. Staff with strong personal and professional interests in learning and teaching gravitated to the campus. As one
staff member put it: ‘when Lilydale was established some of us saw it as an
opportunity to escape from the routines of the Hawthorn campus and become
much more student centred in our work’.

One hears a great deal of discussion about learning and teaching among staff
members at Lilydale. It is more focused on producing a quality learning
environment than some other institutions. As one staff member put it during
interview:

Lilydale prides itself above all else as being a provider of flexible teaching and
learning. Teaching and learning are genuinely valued here. And most people are
genuinely driven by excellence.

Sentiments such as these were regularly expressed during many other interviews.

In 1996, Swinburne transferred its outer eastern campus to the present Lilydale site.
Lilydale is located 50 kilometres east of Melbourne. It is the gateway to the Yarra
Valley, one of Australia’s top 50 regions for economic growth and development,
and prominent in the viticulture and tourism industries.

The site is a beautiful, highly positioned 24-acre rural setting overlooking Lilydale
Lake. The new spacious buildings that house the regional TAFE/higher education
provider provide a pleasant backdrop that helps contribute, at least from the
University’s viewpoint, to the sense of Lilydale gradually becoming a University
town. It is clearly a fledgling campus with an active capital works programme.
There are currently three impressive multi story buildings, one with a spectacular
glass and steel atrium that looks out over the town and beyond. A new building for
student accommodation is presently taking shape.

A Deputy Vice-Chancellor manages the campus. Unlike many other higher
education organisational arrangements, the other senior academic posts include a
Head of Studies and Discipline Leaders of Speciality Studies areas. There is a staff
of 41.4 equivalent full-time people. One senses a very strong collegial bond within
the staff. Most express a keen interest in improving their already very insightful and
well considered approaches to enabling student learning.

Lilydale is very much a ‘teaching institution’. Staff and students alike describe the
campus as ‘one big family’. There is a strong sense of determination on the part of
staff to build an identity for the institution around quality teaching and learning.
Many staff feel that their work is undervalued at the senior campus and they are
determined to reverse that situation. Many staff members are concerned about the
lack of time people have to give to research and about the way research is not as
encouraged as it is on the Hawthorn campus of the university.

There are 1658 equivalent full-time student units (EFSTU) currently on the
campus. They are offered 90 subjects. There is a policy of over-enrolment.
Presently, 978 of the student body come into the over-enrolment category. This
severely constrains the campus in its efforts to expand course offerings. Students
have access to a full range of electronic services, including online library services,
videos of lectures on demand, videoconferencing, email accounts and the Internet
on-campus and the Intranet off-campus. On-campus, the students have access to a
multimedia PC laboratory and several Pentium computer laboratories.
Student demand for the campus is relatively strong for a regional provider of higher education. Table 5.1 shows the pattern of student preferences for admission to Lilydale over the last three years.

Table 5.1 Numbers of applicants to Lilydale campus by first preference, within first three preferences, and within all Year 12 preferences

<table>
<thead>
<tr>
<th>Preferences</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–12</td>
<td>2856</td>
<td>4021</td>
<td>5611</td>
</tr>
<tr>
<td>1–3</td>
<td>738</td>
<td>1416</td>
<td>2330</td>
</tr>
<tr>
<td>First Preference</td>
<td>484</td>
<td>499</td>
<td>723</td>
</tr>
<tr>
<td>Commencing Students</td>
<td>653</td>
<td>751</td>
<td>781</td>
</tr>
</tbody>
</table>

Source: Swinburne University of Technology Information and Statistics Office.

The students reported in their responses to the questionnaire administered as part of the study that the proximity of the university to their home was a key factor in their choosing it.

The above table shows that all places can be filled without going beyond a student’s third preference. In fact, the Lilydale division has not had to make offers beyond the second round of choices in the past two years.

Uncharacteristically by national standards, the student population at Swinburne Lilydale is relatively young. Table 5.2 indicates the pattern of enrolment by age group in 1999.

Table 5.2 Swinburne (Lilydale) percentage enrolment by age group in 1999

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Swinburne</th>
<th>Lilydale</th>
<th>Total Swinburne</th>
<th>All Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and under</td>
<td>53</td>
<td>30</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>20-24</td>
<td>32</td>
<td>35</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>25-29</td>
<td>5</td>
<td>13</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>30 and over</td>
<td>10</td>
<td>21</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Swinburne University of Technology Information and Statistics Office.

The 90 subjects that the students are offered fall within thirteen speciality fields of study. These include: Accounting; Economics; Human Resource Management; Information Systems; Information Technology and Computing; Interactive Multimedia; Management; Marketing; Media; Psychology; Sociology; Social Statistics; and Tourism. All speciality fields of study teach, in an interdisciplinary sense, into the seven degrees that are offered including: Bachelor of Applied Science; Bachelor of Applied Science (Information Technology); Bachelor of Business; Bachelor of Business (Accounting); Bachelor of Business (Tourism and Enterprise Management); Bachelor of Social Science; and Bachelor of Social Science (Interactive Multimedia).

All degrees consist of 24 subjects. There is a compulsory core of four first-year subjects in all degrees designed for generic skill development, identification of individual preferred learning styles and a range of skills related to the workplace. A major is then taken from one of the speciality fields of study (6 subjects) and a sub-major from another (4 subjects) post-stage one. There are opportunities for work-
Effectiveness of models of flexible provision of higher education

based learning projects, cooperative education programs and elective studies in the remainder of the chosen degree.

The greatest proportion of students is in Business degrees as shown in Table 5.3

<table>
<thead>
<tr>
<th>Degree</th>
<th>Student Nos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Certificate in e-Business</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor of Applied Science</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>Bachelor of Applied Science (Computing)</td>
<td>136</td>
<td>7</td>
</tr>
<tr>
<td>Bachelor of Applied Science (Information Technology)</td>
<td>84</td>
<td>5</td>
</tr>
<tr>
<td>Bachelor of Business</td>
<td>856</td>
<td>46</td>
</tr>
<tr>
<td>Bachelor of Business (Accounting)</td>
<td>99</td>
<td>5</td>
</tr>
<tr>
<td>Bachelor of Business (Tourism and Enterprise Management)</td>
<td>132</td>
<td>7</td>
</tr>
<tr>
<td>Bachelor of Business (Accounting/Advanced Diploma of Business)</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor of Business/Associate Diploma of Business (Marketing)</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor of Business/Diploma of Hospitality and Management</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Bachelor of Business (Honours)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor of Social Science</td>
<td>336</td>
<td>18</td>
</tr>
<tr>
<td>Bachelor of Social Science (Interactive Multimedia)</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor of Social Science/Diploma of Community Studies (Welfare)</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor Tourism and Enterprise Management</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>1846</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Swinburne University of Technology Information and Statistics Office.

5.2 Flexible provision policy and practice.

5.2.1 Policy

As the issues of how flexible provision is conceptualised, and why, in Australian higher education are key questions for the study one needs ways of understanding these issues. Swinburne Lilydale’s expressed policy on the flexible provision of higher education provides insight to how the institution conceptualises the notion of the flexible provision of higher education and what the institution’s expectations are for staff delivering such a programme.
Multi-modal learning is the official expression for Swinburne Lilydale’s approach to the flexible provision of higher education. As one lecturer explained it:

“We want to be seen as being unique because we offer high quality, student-centred programmes. Multi-modal learning is our way of doing so. All subjects have a range of materials that makes the learning absolutely flexible and more importantly more student driven.’

More specifically, within multi-modal learning, traditional methods of learning, such as lectures, are intended to be complemented by a range of independent learning methods designed to capitalise on the benefits offered by computer and media technology. The independent learning methods must include learning resources in the form of learning guides for every subject. Learning guides, theoretically, are to contain all the material that will make independent study of the subject possible. Thus, the learning objectives of the subject are carefully spelled out. Subject content material is modularised. Approaches to study are recommended. Self-managed assessment techniques are suggested. These guides are made available to all students ‘at cost’ and in high quality print form. Many are also made available electronically at no cost.

Other independent learning opportunities include ‘drop-in’ tutorials, video-on-demand, subject web sites, online discussion threads, online presentations, online learning support materials, CD-ROMs, computer-based learning and computer-based testing.

A policy of flexible programming is also a feature at Swinburne (Lilydale). As the policy states:

Students … [can] tailor programs to suit their own interests and career aspirations. Students can choose combinations of subject areas from any of the degrees on offer on the campus, as major and minor studies

(Swinburne University of Technology, 2000).

Such measures of flexibility are designed to encourage a student centred but teacher guided approach to higher education. Responsibility for learning rests with the student. The flexibility is intended to make the learning accessible, personally appropriate and enjoyable.

Multi-modal learning is intended to be both a product and a process. It is a product in the sense that a vast range of learning materials and opportunities are provided in various ‘hard’ forms such as print, video, online and others. It is a process according to two members of staff ‘in so far as (it) encourages students to adopt a deep learning approach and provides a framework for lecturers to improve their teaching’. Much of the material is intended to be problem based, suited to a variety of learning styles, continuously accessible and encouraging of reflection and critical analysis. Thus, it should seek to promote deep learning. Because the material and learning opportunities have to be developed within a framework of well articulated learning objectives and with deep learning in mind many staff members are therefore challenged to examine their traditional approaches to teaching. As one staff member said:

“We have to articulate our learning (emphasised) objectives very carefully here. In fact that process has been monitored. That has made us think very hard about what we want learned and how. Frequently, the practice of having to spell
out such things and talking to colleagues makes you rethink how you have been teaching."

5.2.2 Practice

The practices adopted by institutions to flexible provision not only provide further insight to how it is conceptualised they also show the level of choice students have about things like the timing of their learning and the place in which the learning is undertaken. As the levels of choice offered to students and the extent of their uptake are key parts of the study insights to them are likely to be found in the descriptions of the practice of flexible provision of higher education.

In practice, multi-modal learning is the object of individual interpretation. The teams that devise and refine the learning guides choose from the range of independent learning modes to produce various configurations of multi-modal learning. Notwithstanding that every subject must have a learning guide, subjects choose to include or exclude other modes. So, not all subjects have online chat. Some staff insist on student attendance at lectures while others do not. Some subjects deliberately use quite teacher directed approaches in the early years of their course before encouraging any independent learning. Thus, multi-modal learning takes a variety of forms. However, most of forms are carefully considered attempts to introduce more constructivist or other innovative approaches to teaching and learning.

In a Macroeconomics subject, for instance, lectures are mandatory because the lecturer feels that they are necessary for the students to develop the concepts central to the subject. There are also tutorials during which regular assessment is conducted. They are very well attended. There is also a peer support programme and a staff consultation arrangement either face-to-face, via a notice board on the web, through email or by voicemail. The study guide is interactive. There is a traditional textbook. There is also a well considered policy of increasing the amount of independent learning expected on a year by year basis. As one lecturer explained:

‘When they come here straight out of VCE they expect to be ‘spoon fed’. We have to retune them. This takes a while. But by year three they are all coping much better with independent learning.’

In the core subjects of first year much time is devoted to getting the students to identify their preferred learning style and to engage a range of meta-cognitive activities. Usually, the students initially resist these types of practices but accept and praise them later on.

Making subjects and courses appealing to students was a constant theme in the interviews. The e-Business course, for example, uses an electronic learning contract system to tailor make individual courses for students. Others spoke in interview about ‘trying to make the learning so enjoyable for the young people that they would not want to drop out’. The students place great value on having to come onto the campus. In the words of one staff member: ‘when efforts were stepped up to deliver material at more of a distance the students voted with their feet and insisted on having on campus activity’. In the student questionnaire responses there was regular mention made by many that they preferred to study on campus. A
variety of reasons were given including need for staff contact and the difficulty some experienced with the technology of online learning.

Currently, any insistence on attendance at on-campus lectures varies from subject to subject lecturer. Management subjects like to see students in lectures. The Bachelor of Applied Science (Information Technology), however, adopts a much more constructivist approach than most and uses an array of techniques to reach students. According to the lecturer responsible he is ‘concerned to develop thinking professionals’ and so uses problem-based learning techniques, online discussion, a learning guide and other techniques. The e-Business course uses ‘e-Coaches’ to support online learning.

The many and different techniques that are used within multi-modal learning are very thoughtfully prepared. There is a requirement at Lilydale that subjects and courses are planned with specific learning objectives in mind. Staff members have received a good deal of professional development in the area of writing learning objectives. More importantly, it has been followed up with other material about strategies that achieve the objectives especially in areas like higher order thinking, applied learning and generic skill development.

Many subjects have work-integrated learning projects associated with them. These might take the form of a student working briefly in industry to identify a particular need or issue and to use course time to address that issue in a practical sense. Cooperative education is also a strong feature of many courses. Students recounted how valuable they found this part of their respective courses. The way things like work-integrated learning provided practical experience and open up future work opportunities were both frequently mentioned.

Students have considerable choice about the timing of their learning. In the statistics subjects for example, only about 230 of the 370 students attend the lectures. Others use video-on-demand or other strategies to learn the material. While there is considerable choice available about the location of the learning students, generally speaking, do not take up the opportunities. Those that do are often mature age people with commitments that compete with study. One such student described this circumstance as follows:

‘Multi-modal learning has offered me a lot of freedom that other universities would not. As a mature-age student who works, has family and a long-term illness I needed to be able to do a large proportion of the work off campus.’

Online communication is not as heavily used as it could be. Students spoke about having regular difficulties with access.

Choices about, with whom the learning is done, extend to group assessment techniques and syndicated assignments.

There is much discussion among staff at Lilydale about learning style. In the core subject Learning and Communication Behaviour students are encouraged to consider how learning occurs, how different people learn differently and how people’s ‘learning styles’ and preferences emerge. Students are encouraged to identify their own preferred learning style and to use it as they progress throughout the course. Many students reported that they found this approach helpful and that they actually practised it. They made comments that reflected that they knew well their own learning style and how to use multi-modal learning to take advantage of it.
Students do not have a great amount of choice about the content they study. In some courses choices about content are constrained by the demands and requirements of professional bodies like the society of accountants and the Australian Psychological Society. However, in some subjects choices among topics are offered. In one course, e-Business, content is negotiated between lecturer and participant. In others flexibility is contained to the elective component of the course. Many students spoke about how they valued the multi-disciplinary approach used at the campus because it provided flexibility.

Similarly, there are limited choices about assessment in most subjects. In some cases ongoing assessment is conducted during tutorials. It takes the form of diagnostic assessment and the tutors use its results to shape the tutorial. Again in e-Business negotiated assessment is used. In most other subjects familiar and traditional assessment approaches are used.

5.3 Flexible delivery and student outcomes

Lilydale emphasises multi-disciplinary learning, learning outcomes sought by industry and employers and generic skill development. Many lecturers and students feel that these outcomes are very successfully developed at Lilydale. Employer surveys reveal that 'employers are very happy with what we are turning out from here'. The staff view about learning outcomes is captured in the words of one lecturer:

'They are better graduates because we are not a sausage factory here. We devote a lot of time developing independent study skills. We emphasise the types of skills and ability employers want. We produce self-starters in lots of cases.'

Students also spoke about how they felt that they had developed particular skills during their courses, which they perceived to be valued by employers. Computing skills, researching, self-management and others were mentioned. Over 80 per cent of students responded very positively to the question about student satisfaction with their course.

In general, the tertiary entrance rank for most Lilydale courses is not high. It seems that the independent skills of most of the students are poorly formed during the secondary school years. Consequently, many of the observations both staff and students make about the patterns of student development are significant. During discussions students spoke about their 'collateral' learning of computing. One student commented, for example, that:

'I have become quite expert in computing during my degree. I have not been specifically taught computing though. I have picked it up during the degree. I have refined my skills. Often I am helped by other students to do this. I have learned it along the way so to speak.'

Both staff and students spoke about how students had engaged ‘reflective learning’ practices. One staff member described it in this way:

'I have noticed how some students use the learning guide to be very well prepared for lectures beforehand. When they come to the lecture they are not just taking the information in they actually challenge and adopt critical positions in the lecture. They are very reflective about what they are learning.'
Some students talked about how they developed what one of them described as ‘work-related knowledge’:

‘The course here makes you more street-wise. You have so many opportunities to get out into the real world through WBL (work-based learning) that you get the edge on others for jobs. Like I saw that I needed to learn Oracle and not Excel when I was out in industry. I made sure I learned how to use it. I know the employer reckons I’m more employable now.’

### 5.4 Flexible delivery and student participation

Theoretically at least, the flexible provision of higher education is supposed to give access to higher education to students who otherwise would have difficulty participating. This issue is a key part of the investigation.

Participation in higher education by people from the Yarra Valley and adjoining districts has in the past been relatively low. Since Lilydale was established this pattern has been reversed. The table 5.4 below is evidence of this.

<table>
<thead>
<tr>
<th>Postcode Groups</th>
<th>Postcode Areas</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Knox</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>City of Maroondah</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Shire of Yarra Ranges</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Adjacent Localities</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Other</td>
<td>161</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Head of Studies, Academic, Swinburne University of Technology, Lilydale.

However, many students select Lilydale on grounds other than its flexible delivery policy. Many are unaware of the policy before seeking admission. However, in some cases flexible provision, often among many other things like location, is a specific reason for undertaking a course. E- Business is such an example.

The flexible provision of higher education is also supposed to improve the likelihood of students completing their courses. Retention rates are a rough measure of how well flexible provision encourages people to see out their course. One measure of retention developed by this case study was to compare the retention rates in three subjects at Lilydale that were rated as optimally ‘flexible’ with three others form the Hawthorn campus that were rated as ‘minimally flexible’.

The flexible subjects at Lilydale that were identified included:
- LSM 100 – a media subject entitled Texts and Context;
- LCR 100 – a statistics subject entitled Statistics and Research Methods; and
- LAI 100 – a computing subject entitled Information Systems Fundamentals.
The minimally flexible subjects were:

- LBE 100 – an economics subject entitled Microeconomics;
- LSS 100 – a sociology subject entitled Introduction to Sociology; and
- LSY 100 – a psychology subject entitled Psychology 1.

The retention rates were similar for the two groups. The retention rate for the flexible group of subjects was 71.0 per cent and for the minimally flexible group it was 72.6 per cent it should be noted that each of the subjects was level one. Another measure of retention is reported in Table 5.5.

### Table 5.5 Comparative retention rates for selected common courses Swinburne (Hawthorn) and Swinburne (Lilydale)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Abbreviation</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO56</td>
<td>Bachelor of Social Science (Hawthorn)</td>
<td>na</td>
<td>na</td>
<td>67.67</td>
<td>67.80</td>
</tr>
<tr>
<td>L050</td>
<td>Bachelor of Social Science (Lilydale)</td>
<td>62.60</td>
<td>71.90</td>
<td>69.40</td>
<td>65.20</td>
</tr>
<tr>
<td>A055</td>
<td>Bachelor of Business (Hawthorn)</td>
<td>82.36</td>
<td>82.92</td>
<td>67.14</td>
<td>70.00</td>
</tr>
<tr>
<td>L055</td>
<td>Bachelor of Business (Lilydale)</td>
<td>85.30</td>
<td>80.30</td>
<td>82.80</td>
<td>83.30</td>
</tr>
<tr>
<td>Z160</td>
<td>Bachelor of Applied Science (Computing) (Hawthorn)</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>87.80</td>
</tr>
<tr>
<td>L062</td>
<td>Bachelor of Applied Science (Computing) (Lilydale)</td>
<td>75.00</td>
<td>60.30</td>
<td>78.10</td>
<td>74.90</td>
</tr>
</tbody>
</table>

Source: Swinburne University of Technology Information and Statistics Office.

### 5.5 Cost effectiveness of flexible delivery

Many staff commented that the introduction of multi-modal learning to Lilydale was a costly exercise. Infrastructure was purpose built for multi-modal learning. However, building replacement cost estimates are only marginally higher than for traditional teaching buildings of the same age on the Hawthorn campus. As lectures are videotaped and offered as video-on-demand there are audio-visual production costs associated with lectures. There are design, development and printing costs for the print materials for each subject. Considerable academic staff time is devoted to the preparation of print-based learning guides, much more so than was the case on the Hawthorn campus of Swinburne. Similarly, staff spend significant amounts of time relating to students via email and in online discussion. Demands made by teaching preclude much staff involvement in research. As a matter of policy the Lilydale campus was established as a teaching campus rather than a mixed teaching and research enterprise.
6. University of South Australia (Bachelor of Nursing Whyalla)

Jim Harvey and Ian Reid

Whyalla campus is located 400 kilometres northwest of the five Adelaide-based campuses that form the University of South Australia. Initially established as a training centre for BHP Whyalla Steelworks, the campus has evolved through a number of iterations to become South Australia’s only regionally based University campus. Currently over 40 per cent of the campus’s student enrolments are off-campus. The largest off-campus programme is the Bachelor of Nursing, which has 147 of 254 students enrolled in various forms of resource-based flexible delivery.

This case study takes the Bachelor of Nursing as its focus to explore the processes, strategies and collaborative arrangements that underpin the campus’s experiences of becoming flexible.

The Bachelor of Nursing has an annual intake of 50. It is offered through resource-based flexible delivery including electronic delivery via UniSANet. Recognition of prior learning and articulation arrangements are conducted through a Memorandum of Understanding between the University and TAFE.

Retention rates are satisfactory for the course. Students perform relatively well in terms of course assessment. Students and staff alike hold the course in high regard.

The course is relatively costly to run.

6.1 Context

The largest university in South Australia, with 25 000 undergraduate and postgraduate students on six campuses, the University of South Australia is both a diverse and flexible institution. Through distance education, its regional campus at Whyalla, offshore teaching programmes and development partnerships, and through its welcoming of large numbers of international students, the University provides a range of flexible learning options to a diverse student population.

The University of South Australia was formed through the merger of the South Australian Institute of Technology with three campuses of the South Australian College of Advanced Education. These former institutions traced their history back to the South Australian School of Mines, founded in 1889, and the Adelaide School of Arts, founded in 1856.

The University’s commitment to serve the community by ameliorating educational disadvantage wherever possible has seen it establish, for example, a relationship with the University of Fort Hare in South Africa to provide in-service education for black teachers whose role will be pivotal to the rebuilding of post-apartheid South Africa. The University of South Australia was the first in the country to establish a Faculty of Aboriginal and Islander Studies and has a distinguished Aboriginal Research Institute.
The University’s four divisions offer a wide range of professional education. They are Business and Enterprise; Education, Arts and Social Sciences; Health Sciences; Information Technology, Engineering and the Environment. Courses are based on areas of research strength and community need and support priority areas for local and regional development.

The University of South Australia is committed to student-centred, resource-based, flexible learning systems, which emphasise appropriate use of technology, student autonomy and independence and real world experiences as part of the learning process. It has six campuses—five in metropolitan Adelaide and one in Whyalla, which has a special focus on the needs of rural and remote students. The University has a history of over 30 years in distance education, was previously nominated as a Distance Education Centre by the Federal Government, and has subsequently established the Flexible Learning Centre (FLC). This centre incorporates resource production services and professional development for academic staff teaching externally; audiovisual production; professional development for on campus academic staff; learning advisers; welfare, counselling and careers advisers; and support for international students. The FLC currently has three principal focuses of activity: professional development for academic staff; teaching and learning resource development and delivery; and student support services. All services are coordinated in terms of the University’s strategic directions, either directly or through service contracts with the academic divisions.

6.2 Flexible provision policy and practice

Flexible provision for learning in the University of South Australia is inextricably linked within the conceptualisation of a teaching and learning framework. This framework has been endorsed by the University’s Academic Board. It underpins a range of planning activities to 2003 to give effect to these concepts.

6.2.1 Policy

In order to realise the intentions of the conceptual framework, the University undertook planned, whole of institution changes to its academic and support infrastructures. These changes include changes to the academic and support infrastructure, tying local planning to access to resources, development of infrastructure such as UniSANet and reflecting teaching and learning priorities in recognition and reward systems. These are well on track to achieve the University’s preferred position by 2003.

There are three key concepts underpinning the University of South Australia’s approach to teaching and learning. They have been progressively developed, adopted and refined since 1993. Two (student-centred learning and graduate qualities) are organising concepts, and one (flexible delivery) is an enabling concept.

When applied in the teaching and learning environment, these three concepts are infused with the University’s distinctive mission, which emphasises equity and the application of knowledge in professional settings.
Organising concepts

Student-centred learning is about how learning best occurs. It means the intention to increase learner access to learning opportunities and learner control over learning processes.

Graduate qualities is concerned with the educational outcomes the University seeks for its graduates. It involves the choice of teaching and learning arrangements to develop the seven qualities of a University of South Australia graduate. The qualities we aim to develop are the capacity to:

1. operate effectively with and upon a body of knowledge of sufficient depth to begin professional practice;
2. be prepared for lifelong learning in pursuit of personal development and excellence in professional practice;
3. be an effective problem solver, capable of applying logical, critical, and creative thinking to a range of problems;
4. work both autonomously and collaboratively as a professional;
5. be committed to ethical action and social responsibility as a professional and citizen;
6. communicates effectively in professional practice and as a member of the community;
7. demonstrate an international perspective as a professional and as a citizen.

There has been widespread acceptance of these generic qualities in the University community as the kinds of outcomes we can reasonably expect from our courses. Since the acceptance of the seven-part statement, the University has begun to integrate the graduate qualities into the curriculum development and evaluation processes, teaching, learning and assessment.

Enabling concept

Flexible delivery means the provision of resources and the application of technologies to create, store and distribute course content, enrich communication, and provide support and services to enable both more effective learning and better management of learning by the learner. UniSAnet, the University’s online teaching and learning platform, is the University’s major vehicle for flexible delivery.

The outcomes and understanding of how learning best occurs are inextricably linked.

The University cannot foster the agreed qualities of a University of South Australia graduate unless students have the opportunity to practise the skills and attitudes which underpin them. Of necessity, this can only happen in a learning environment that invites and encourages choice, reflection and the possibility of exercising personal responsibility over personal learning. Flexible delivery describes the conditions the University seeks to establish to facilitate student managed progress to the outcomes the University community has identified as educationally, socially and professionally desirable.
In summary, the University’s teaching and learning strategy is built upon an intention to produce graduates with particular qualities in a teaching and learning environment which is student centred and flexible. The University’s planning and review cycle, policies and guidelines, academic structures and support infrastructure operates in a complex set of interrelationships to achieve this. This is best illustrated diagrammatically.

Figure 6.1 The planning and review cycle of the University of South Australia

6.3 Whyalla campus and its context

The establishment of the Whyalla campus of the University of South Australia had both instrumental and idealistic intentions. On the one hand, the Whyalla campus’s imperative to become flexible was targeted towards increasing the number of students from rural, regional, remote and indigenous communities, taking on campus face-to-face courses. On the other hand, the campus’s 1997 planning document Whyalla campus – Towards the Year 2000 identified another crucial component of access. It identifies the campus’s mission to become a central player in the development of the human capital that is resident in regional South Australia.

Regional Australian communities have experienced major declines in service levels across a wide range of areas. Bank branches have been closed, police services have been concentrated in larger regional centres and federal and state government agencies have retreated to larger centres. Health services have been severely effected by these trends. Local communities have witnessed a progressive decline in both the number of general practitioners willing to stay in country practices and a consequent downgrading of the services available through their local hospitals; and this at a time when the demographic trends have been towards rapidly ageing rural populations.

Many small country hospitals acknowledge that while they have sufficient enrolled nurses, they are experiencing major problems in both retaining and recruiting more senior registered nurses. What was required was a programme that enabled enrolled
nurses to upgrade their formal academic qualifications and associated skill levels to those of a registered nurse.

Accessing on-campus, generally metropolitan-based, Bachelor of Nursing degrees was neither possible (because it required relocation to the city for a minimum of two years) nor professionally appropriate because of the undergraduate, school leaver focus of the teaching approaches employed. Enrolled nurses are generally mature-aged women; many have significant levels of practical experience and responsibility in their health service settings. From this perspective, relevance becomes a major component of accessibility. Providing access for these students demanded much more from our programme than simply putting students in on-campus seats in ‘normal’ classes.

The challenge for Whyalla campus has been to respond to the teaching–learning needs of this diverse range of students by building in flexibility. ‘Flexibility’ at Whyalla campus now encompasses modes of delivery; location of delivery; attendance requirements; the production of pathways to higher level qualifications; together with innovative approaches to students recruitment and recognition of prior learning.

### 6.4 Flexible provision—practice

The nursing programme at the University of South Australia – Whyalla campus commenced in 1990. The then South Australian Institute of Technology, introduced nursing to the campus academic profile in response to the national proposal to move nurse education from its traditional hospital setting to tertiary education institutes. A purpose built nursing building housed the first cohort of 24 students and South Australia’s first non-metropolitan tertiary nursing course, a three-year Diploma of Applied Science (Nursing) commenced. The Diploma moved through several phases and became a Bachelor of Nursing degree in 1992.

In 1992, Whyalla was the first pre-registration Bachelor of Nursing programme in Australia to offer its first year of study by external (off-campus) delivery. The full three-year programme is now available in the external mode (using resourced-based flexible delivery methods). Students entering the programme at Whyalla come from a wide geographical area. A major concentration is in the South East of South Australia and Western Victoria due to the collaborative delivery of the Whyalla Bachelor of Nursing through the South East Institute of TAFE at Mount Gambier. Table 6.1 indicates the home residence of students enrolled in the external programme.

<table>
<thead>
<tr>
<th>Home Residence</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>7</td>
</tr>
<tr>
<td>NT</td>
<td>2</td>
</tr>
<tr>
<td>QLD</td>
<td>2</td>
</tr>
<tr>
<td>SA Metro</td>
<td>9</td>
</tr>
<tr>
<td>SA Other</td>
<td>109</td>
</tr>
<tr>
<td>VIC</td>
<td>18</td>
</tr>
<tr>
<td>WA</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6.1 Home residence in 2000 – Bachelor of Nursing (external)
The average intake has been 50 students and the total student enrolment over the period 1992–2000 has been approximately 240 or an average of 31 graduates each year. Nursing graduates from Whyalla have rapidly found work in rural and regional health services in South Australia and in other states. Others are working as nurses overseas.

The students enrolled in this programme are disproportionately older by national standards. Table 6.2 indicates the pattern of external enrolments by age in 2000. This is consistent with admissions data, which shows the high numbers of students which have been admitted by criteria other than Year 12 results, such as mature-age special entry, TAFE award etc.

### Table 6.2 Whyalla campus (Bachelor of Nursing – external) enrolment by age group in 2000

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–24 years</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>25–34 years</td>
<td>43</td>
<td>29</td>
</tr>
<tr>
<td>35–44 years</td>
<td>65</td>
<td>44</td>
</tr>
<tr>
<td>45 and over</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>147</td>
<td>100</td>
</tr>
</tbody>
</table>

The three key concepts underpinning the University of South Australia's approach to teaching and learning: student centredness, graduate qualities and flexible delivery, have all been embedded in the Whyalla campus’s off-campus delivery of its Bachelor of Nursing.

Traditionally nurse education has been located in hospital-based programmes. This ‘in-house’ approach facilitated local recruitment of nurses and its apprenticeship orientation enabled local hospitals to maintain their labour force requirements for registered and enrolled nurses. The move to university-based programmes for registered nurses removed these two options previously available to local hospitals. More recently, enrolled nurse training has been delivered by TAFE.

The Whyalla campus Bachelor of Nursing, delivered through the South East Institute of TAFE provides solutions to both these problems through student-centred learning.

Firstly, students have been provided increased access to learning opportunities. The programme is delivered by resource-based flexible delivery. The resources include intensive workshops and seminars, which support and develop print-based teaching-learning materials. Support is also provided electronically through the University’s UniSA.net—an online teaching and learning environment that provides students with access to and choices about learning opportunities and is available at anytime and from anywhere. UniSA.net is at <www.unisanet.unisa.com.au/unisanet>

A 1 800 telephone number has been established to enable geographically dispersed students to contact subject coordinators.

Access to learning opportunities has also been increased by some innovative, collaborative administrative arrangements. A Memorandum of Understanding between the University of South Australia and TAFE-SA has been employed to
drive the recognition of prior learning and course articulation agreement, which underpins the Mount Gambier programme. Students who complete TAFE diplomas are given agreed status within the Bachelor of Nursing. This provides both an academic pathway (TAFE diploma to university degree) and a career pathway (enrolled nurse to registered nurse).

Formal on-site teaching sessions are scheduled in intensive teaching blocks. These are held in Mount Gambier for students living in the South East of South Australia and Western Victoria and in Whyalla for all other students. These sessions combine theoretical and clinical skill components. Students evaluate the value of this mode of teaching very favourably. Recent comments include:

‘The workshop encouraged my understanding at a level that promoted building blocks to greater understanding.’ (Enrolled Nurse – Mount Gambier);

and

‘This intensive workshop was a comfortable learning environment. Well worth the travel – 450 km.’ (Enrolled Nurse – Whyalla).

The student-centred orientation of the Whyalla nursing programme attempts to incorporate a range of teaching strategies and learning arrangements that maximise student learning both in class and in their studies at home.

Student-centred learning is also organised by the integration of graduate qualities into the curriculum development process, and the evaluation of the teaching and learning experiences of the student. The graduate quality focus of each subject is declared in the detailed subject outlines provided to each student. Graduate qualities appropriate to the specific subject are incorporated in the choice of teaching and learning arrangements: for example embedding opportunities for collaborative work (Graduate Quality 7) in laboratory and tutorial sessions. Students are assessed on their capacity to demonstrate these qualities as well as being asked to evaluate these dimensions in their formal evaluation of the subject.

‘Resource-based flexible delivery’ is the term used to describe the delivery methods of the program. It refers to the provision of a variety of teaching and learning resources and the application of a range of technologies to create, share and distribute course content, enrich communication and provide support services appropriate to the needs of this mature, employed and geographically dispersed group of students.

6.5 Student outcomes

The most obvious outcome measures for these students have been their retention and completion rates. For example, of the 37 students who enrolled in the initial pilot course in 1997, 51 per cent have passed or are ongoing, 27 per cent completed in three years (full-time students) and 40 per cent completed in four years (full-time and part-time students).

One unusual characteristic of this group is the comparatively high proportion of students enrolled as external students who are full-time students. In 2000, 68 (46 percent) of the 147 external students were enrolled as full-time. Most of these
students are employed as enrolled nurses. It appears from these figures that the campus’s efforts to build flexibility into our modes of delivery, location of delivery and through our teaching and learning strategies have combined to deliver a pathway to higher level qualifications together with the retention of skilled workers in already stretched regional and rural health services.

6.6 Student participation

The University of South Australia has a strong tradition in promoting access and equity in higher education. The Whyalla campus is central to the University’s commitment to provide access to higher education for students from rural, isolated, low-SES, and Indigenous backgrounds. Currently the campus has enrolment of 93 per cent rural and isolated, 71 per cent low-SES, and 4 per cent Indigenous.

The major success of the off-campus Bachelor of Nursing has been the access the course has provided to a cohort of students for whom the previous ‘option’ was to move to generally metropolitan-based Bachelor of Nursing programmes. As described above, this cohort is demographically distinctive by age and geographical location. Further these students are disproportionately rural and from low socio-economic status areas. There is a small Indigenous enrolment of eight students. This group is located in Port Lincoln and is supported by a similar pattern of locally delivered, intensive workshops and assisted by a local tutor provided by the University’s Aboriginal and Islander Students Support Service.

Traditional barriers to access to higher education nursing programmes for many students have been replaced by an approach characterised by flexibility and high quality student-centred teaching and learning.

6.7 Cost effectiveness

In considering the cost effectiveness of any flexible delivery method, it is important to establish real costs (including staff, travel, materials and learning support) and to capture and where possible, quantify additional benefits.

The real costs incurred in the flexible delivery of the Bachelor of Nursing (off-campus) include the fixed costs associated with the actual delivery of the programme together with staff and materials development costs. The campus pays the South-East Institute for the facilities and services it provides. The capital costs of the flexible learning support infrastructure are largely borne by the Flexible Learning Centre. There are obvious efficiencies generated to the programme by utilising and, where necessary, adapting existing University-wide administration and communication systems.

For the campus, there are significant additional benefits in this form of delivery. A key benefit is the capacity to respond quickly to new opportunities made available through collaboration with other regional institutes of TAFE. Current course articulation and credit transfer agreements enable direct transition from TAFE to university studies. The campus is able to maintain financially viable off-campus programmes by scaling student enrolments to ensure profitability.
Finally, becoming flexible has meant that the campus has broken free from the previous constraints imposed by its geographical location in a regional city undergoing major economic adjustments. Flexibility in modes of delivery, location of delivery and in the facilitation of educational and occupational pathways has generated growth, improved quality and a renewed source of contribution to our regional communities.
7. University of Tasmania (BAVE programme)

Sue Kilpatrick and John Williamson

The Bachelor of Adult Vocational Education (BAVE) was developed out of a need to offer teachers and training professionals in the post-compulsory education sector a recognised qualification. Because most of the prospective students in this field are mature aged and are currently employed, the adoption of flexible teaching and learning principles has been made a high priority. University of Tasmania policy in the area of flexible teaching and learning is still under development but within specific course areas, such as the BAVE, the emphasis has been toward a more open, accessible and equitable delivery framework. The regionally decentralised nature of the University of Tasmania’s campuses and student population has to some extent forced the adoption of more flexible teaching and learning strategies.

7.1 Context

The Bachelor of Adult and Vocational Education (BAVE) was first offered by the University of Tasmania in 1996. The course was introduced because of changes in the way TAFE released teachers for training and development and to meet the changing needs of trainers/teachers in the area of adult and vocational education where cost-effective and flexible modes of delivery were increasingly demanded. Most of the students in this field of study are mature aged.

The University of Tasmania offers courses from three campuses across the state. The Hobart and Launceston campuses are well established and offer a wide range of courses. The North-West Centre, based at Burnie was established in 1995 to meet the needs of people in the north-west region of the state which had a low retention rate from school to tertiary education. The North-West Centre offers a limited range of courses.

The BAVE attracts mature-aged students (over half are over 40 years old), many of whom are studying to change careers. These students typically have been retrenched or are in jobs without a career path. Others are studying to increase skills and acquire a qualification related to their current job. The proportion in full time work is 57 per cent.

BAVE caters for equity groups. Many of the students did not have the opportunity to study for university entrance at school: 72 per cent are accepted based on qualifications other than HSC or previous university studies (typically TAFE qualifications). The BAVE has been active in meeting the Vice-Chancellor’s challenge to move to innovative teaching through a combination of print and Web-based delivery. It has a large proportion of students from rural Tasmania, especially the north-west coast. It has addressed equity issues through alternate entry and distance delivery, and as a result has attracted students from within the workforce who would otherwise not be able to study at university.
Twelve per cent of the students live interstate or overseas. A further 29 percent live and study in Tasmania, but outside the greater Hobart or Launceston regions. The course is offered in a fully external mode by a flexible delivery format. The distance materials are supplemented by a variety of flexible alternatives, including optional face-to-face tutorials and seminars, computer web sites, telephone and video seminars, email, fax and telephone.

Table 7.1 Comparative statistics for the Bachelor of Adult and Vocational Education (BAVE)

<table>
<thead>
<tr>
<th>Demographic categories</th>
<th>University of Tasmania – BAVE 1999</th>
<th>University of Tasmania – all courses 1999</th>
<th>All Universities 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Number %</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>under 30</td>
<td>21 16</td>
<td>62 (&lt;25)</td>
<td>60 (&lt;25)</td>
</tr>
<tr>
<td>30–39</td>
<td>37 28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40–49</td>
<td>60 46</td>
<td>38 (25+)</td>
<td>40 (25+)</td>
</tr>
<tr>
<td>over 50</td>
<td>12 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Number %</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>74 57</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56 43</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Term address</td>
<td>Number %</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Hobart region</td>
<td>54 42</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Launceston region</td>
<td>22 17</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Rural Tasmania</td>
<td>38 29</td>
<td>2 (North-west Tas)</td>
<td></td>
</tr>
<tr>
<td>Interstate or overseas</td>
<td>16 12</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Entry qualifications</td>
<td>Number %</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Equivalence (TAFE or similar qualifications)</td>
<td>94 72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Number %</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Employed – not casual</td>
<td>74 57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual or no employment</td>
<td>56 43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.1 demonstrates the demographic differences between participants in the BAVE and those participating in the University as a whole. In particular, the table shows that BAVE students tend to be older than others, and they are more likely to come from regional areas within the state and the majority is employed on a continuing or permanent basis.

7.2 Flexible provision policy and practice

7.2.1 Policy
Teaching and learning are fundamental activities of the University. Responsibility for organising and delivering programs of study lies with the faculties and schools. The Academic Senate and the Teaching and Learning Committee have special...
responsibilities for developing and monitoring university-wide policies and for quality assurance of teaching and learning activities. The issue of flexible learning and teaching has been under review and policies are being developed in this area which reflect the University’s commitment to best practice educational standards.

Development of flexible learning is now a major priority for the University and this is reflected in the revision of this plan undertaken by the Teaching and Learning Committee (TLC) for 2000. This priority is specifically reflected in the strategies and targets developed for the following objectives and contained in the Teaching and Learning Development Plan (Teaching and Learning Committee, 1999):

1.1 Wide access to General Education Programs/Student Access and Equity;
1.2 Professional education and career development programs;
1.3 Quality assurance for all teaching programs; and
1.5 Staff Development.

Special priority has also been given to objective 1.3, quality assurance, in response to the Federal Government proposals for the establishment of a quality assurance agency for 2001.

The Academic Senate has accepted a recommendation by the TLC working party on Flexible Teaching and Learning, for the adoption of a definition of flexible teaching and learning based on a University of Western Australia working party definition:

Flexible program delivery in relation to higher education concerns the provision of a learning environment for students (however defined) that provides a range of different access opportunities and a range of different learning modes. Flexible program delivery includes the expert shaping of learning environments within a particular course or program of study, incorporating, as appropriate, a variety in access and/or learning modes, specifically designed to optimise the learning opportunities of the enrolled students. In certain situations this will enable students to select their most appropriate form of access and/or learning mode with respect to a particular program of study, thus increasing learners’ access to, and control over, their learning environment.

The term flexible program delivery recognises differences between ‘the delivery of flexible programs’ and ‘the flexible delivery of programs’, and includes both in its scope. The term is seen as a generic one including, but not restricted to, a consideration of notions of ‘open’, ‘distance’ and ‘resource-based’ learning.

While flexible program delivery includes conventional teaching practices and learning modes it also recognises the enhanced opportunities for learner-learner and teacher-learner interaction made possible through recent developments in communications and information technology.


The Senate has also accepted the working party’s recommendation on the initial priority for the following courses/areas for University support for flexible teaching and learning development, on the basis of feasibility and sustainability generally, and in relation to the specific objectives and criteria indicated below.
To encourage enrolments:

• Bachelor of Agricultural Science.

• Psychology.

To facilitate achievement of key University Plan objectives for teaching & learning:

• IASOS (Theme area and internationalisation; enhancement of the University’s identity and standing nationally and internationally).

• North-West Centre (access and equity).

• Bachelor of Arts – selected units/majors (access to general education programmes).

Enhanced information literacy and online learning opportunities; capacity for extension of initiatives throughout the faculty/University:

• Bachelor of Computing and Bachelor of Information Systems.

In recommending these priority areas for initial support, the working party noted that:

• Each of the courses/areas had heads of school and staff with relevant expertise and commitment to flexible learning developments; an established track record; and funds already committed to relevant projects.

• Encouragement should continue to be provided to other areas/individuals currently involved in innovative/exemplary flexible learning developments – including the Bachelor of Teaching flexible learning (Web development) project and the Bachelor of Adult and Vocational Education.

• Existing University funding mechanisms (such as the Teaching Development Fund and Teaching Development Grants) would usefully be directed to flexible learning developments generally, and more specifically to the initial priority areas.

7.2.2 Practice

The responsibility for implementation of the policy directions outlined above ultimately rests with individual schools of the University and their heads. The needs and demands of the various stakeholders will determine the format for flexible teaching and delivery.

Within the BAVE, the needs of mature aged students, already employed in their field of study has meant that the course has for some time fitted the broad definition of flexible delivery outlined above. The geographically diverse locations of students undertaking the BAVE means that significant consideration is given to the following aspects with the course:

• A variety of access methods is provided.

• A choice of presentation methods is given.

• A variety of assessment methods is used, including oral or video presentations, online tasks, essays, reports, research projects and assessment of teaching skills in on-the-job or practice situations.

• Use of latest information technology is encouraged, where appropriate, to enhance the teacher/student relationship.
7.2.3 Flexible delivery and student outcomes

The nature of the BAVE as a course designed to encourage teachers of adults to learn alternative approaches to teaching and learning means that in some ways the programme has been a model for other flexible delivery programmes at the University of Tasmania. The relatively small scale of the course means that approaches to learning using Internet technologies and multimedia have been piloted or are in the process of continual development. The course has been able to demonstrate best practice approaches to teaching and learning which students then apply directly to the context of adult and vocational education in the Tasmanian TAFE training system and a variety of other adult learning environments.

The development of flexible delivery approaches in the BAVE has highlighted the need for the University to allocate resources to administrative and teaching structures that support and facilitate adult and part time learners. Students commented on University structures, which are inconsistent with flexible learning. These:

- restricted access to the library on weekends;
- did not provide professional librarian support when the library was open on weekends;
- did not provide administrative support at weekends or after hours (for example getting a student card or getting the code to access computer laboratories after hours was very difficult); and
- restricted time of study to fit within the University’s academic year.

There was a feeling among lecturers interviewed that some of the University’s leaders saw flexible learning as an opportunity for budgetary savings and were therefore reluctant to allocate funds required for the support systems that were needed to optimise the learning experience for students.

However, the model of flexible learning used in the BAVE has increased the marketability of the University and the course within the state, nationally and overseas. The programme has demonstrated that by adopting flexible approaches to teaching and learning, students need not be sourced from the geographical region of the physical university campus. One lecturer commented:

‘Research at this university shows on-campus study is diminishing because students increasingly need to support themselves financially, and there are an increasing number of mature-aged students. There is also a realisation that education is marketable, therefore flexibility can be marketed.’

The success of the programme has been evidenced by increasing numbers of part-time students, the numbers of continuing students and graduates, evaluation of teaching/content by students, research projects coming out of BAVE and external awards based on student nominations. Lecturers commented that student satisfaction levels were high and continually improving.

Lecturers tended to be more positive with their comments about student outcomes than the students themselves.

In terms of satisfying learner needs and preferences, both lecturers and students indicated that these were met with a variety of options:

- the distance education model ‘brought learning into the student’s environment’;
many assessment tasks could be based on students’ own work situations;
lecturers were accessible through a variety of means (email, fax, telephone, personal visit);
lecturers took into account particular student circumstances (for example, family and work demands) and readily gave extensions for assignments;
place of study was very flexible and fitted well with time commitments of full-time work; and
people with disabilities were well catered for and assistance was readily offered.

Students tended to agree that the range of options available meant that their personal learning styles were well catered for. However it should be noted that some students commented that they would prefer not to have choice on some matters and that their personal learning style would have been more in line with traditional face-to-face lecturing.

It was agreed generally also that within a framework of course objectives and overall structure there was adequate learner choice in terms of place, pace, timing (but not time of the year), content and assessment. However, several of the factors that reduced the flexibility of learning and restricted choice about learning in terms of place, pace and timing were related to the use of electronic materials and online delivery. These included:

- the requirement to have a CD drive to read CD-ROM resources, exacerbated by teething problems that accompanied the move from print to CD-ROM materials.
- the web-based communication facilities set up by the University were somewhat unreliable.
- remote students who did not have ‘at home’ Internet access found it difficult to participate in units where interactive online participation was required.

Other factors working against flexible learning and choice were:

- students in particular felt that the constraints of the University’s academic year were restrictive.
- lecturers identified budgetary constraints as limiting their ability to meet the ‘choice’ ideals of the programme, for example forcing a move from print to CD-ROM and limiting the number of face-to-face sessions.

Students and lecturers were in general agreement about the value of the course in terms of the value of the overall learning outcomes of the course. Both groups agreed that the course enabled students to learn how to learn and how to facilitate and teach adults how to learn. Students described the success of the course in terms of:

- improvements in their teaching style (all but a handful of students work as teachers of adults on a casual or permanent basis as they study the BAVE);
- increased possibilities made available in terms of career and life options;
- being challenged to pursue lifelong learning;
- personal and academic development and achievement.
However, some students felt that the success of the programme was limited because they were not taught, and that assistance and communication from some lecturers was inadequate. The issue of wanting to be taught rather than just ‘learn’ relates to issues about personal learning style discussed earlier. The BAVE’s flexible delivery does not fit every student’s learning style.

7.2.4 Flexible delivery and student participation

Students were in general agreement that the flexible nature of the BAVE made participation at university possible when traditional face-to-face delivery methods would not. No students suggested that it inhibited them from attending.

An analysis of retention rates of students since 1995 reveals no difference between the proportion of lapses for part-time students of the BAVE and all other University of Tasmania courses. However, the lapse rate for full-time BAVE students was significantly higher.

Table 7.2: Comparison of lapse rates in any year since 1995

<table>
<thead>
<tr>
<th>Courses</th>
<th>Part-time lapse rate</th>
<th>Full-time lapse rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAVE</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>All University of Tasmania courses</td>
<td>42%</td>
<td>26%</td>
</tr>
</tbody>
</table>

The difference for the full-time lapse rate is significant at $p<0.001$, $X^2 = 19.9$

It is apparent that the course is attractive for part time study, which is consistent with a combination of work and study.

Figure 7.1 demonstrates the ratio of part-time to full-time students in the BAVE.

7.2.5 Cost effectiveness of flexible delivery

It has been suggested earlier that one of the drivers for flexible delivery at the University of Tasmania is cost effectiveness. An assessment of the cost effectiveness of the BAVE on its own however, does not show savings over face-to-face delivery because of the relatively small size of the programme, with only
about 130 students currently enrolled in any year. Economies of scale may result from increased enrolment but, for example if increases come from north-west Tasmania, additional resources (such as computer support) may have to be applied to the North-West Centre to cater for the needs of this group of students.

The flexible delivery mode has freed academic staff from the restrictions imposed by a weekly timetable of lectures and tutorials. While not reducing overall time spent on teaching, this means that academic preparation and ‘delivery’ of content can be blocked into times that suit individual academic staff, leaving only occasional study school days as fixed commitments. This time flexibility was cited by academic staff as a significant factor in facilitating the increased research output of the group of staff, who lecture in the BAVE that has occurred since 1996. This has funding benefits to the University of Tasmania through research quantum funds.

Up until recently, the main costs associated with the course have been associated with production and mailing of print-based resource material. The introduction of CD-based learning resources in 2000 reduced the variable component of this cost significantly, although the initial cost of scanning material was high. It is likely that with the extension of web-based resources and refinements in scanning and CD production processes, costs will be further reduced.

However, given that the University’s policy on flexible delivery is premised, not simply on replacing face-to-face teaching with multimedia or web-based learning, but on a variety of other considerations. These include quality of delivery and accessibility, it is reasonable to expect that costs associated with flexible delivery may not fall as much as expected in the short term. There are significant development costs associated with providing high quality multimedia resources, web services and videoconferencing facilities, which will militate against the potential cost advantages of moving to flexible delivery models.

### 7.3 Conclusions

The BAVE has been offering students a flexible approach to learning since 1996. Since its introduction, it has promoted best practice teaching and learning practices and principles. The course therefore offers variety and learner choice, and because of its focus on adult and vocational learning it presents learners with several flexible models which can be used in an adult/vocational environment.

The flexible nature of the programme allows working students and those in remote regions to access university education that would not be available by traditional means of delivery. Flexible delivery also means that the course can be marketed outside the traditional student base for the University of Tasmania, and as such it has attracted students outside Tasmania including from overseas.

The four-year record of lapses, comparing BAVE with other University of Tasmania programmes, suggests that flexible delivery, while making courses initially more accessible, does not increase retention rates. Lapses for full-time BAVE students were significantly higher than those for other University courses. However, the increasing ratio of part-time to full-time participants, suggests that flexible learning meet the needs of part-time students, who are working and who live in remote or regional areas of the state.
The BAVE’s flexible approach to learning generally satisfied students’ learning styles and the range of choices within the programme was acceptable to most students—with the proviso that a flexible mode of delivery does not suit all students. This case study has also highlighted the need for the University to provide adequate administrative and structural resources and flexibility to cater for students who cannot attend libraries and administrative facilities during working hours. Both lecturers and students acknowledged the need for better multimedia and more reliable web-based resources to be developed to support flexible delivery strategies. A further issue arises with the use of web-based learning resources in that at the present time, a number of remote students have difficulty gaining access to computers and the Internet, which to an extent reduces the propensity of potential students to enrol.

The outcomes cited suggest that BAVE provides a model for flexible learning that delivers high quality university standard education for a relatively small target market. Given that the local market is small and numbers in the short term are unlikely to grow, particularly given Commonwealth funding constraints, flexible delivery is perhaps the only way a course of this type could attract sufficient student numbers to be viable.
8. Victoria University of Technology  
(Nyerna Studies – Echuca)

Neil Hooley

The notion of flexibility in learning adapting to the needs and learning styles of particular learners is the central element of the Bachelor of Education programme conducted by Victoria University of Technology in conjunction with the Koori community of Echuca. The School of Education, Victoria University of Technology, conducts pre-service and graduate programmes. It takes a general approach to teaching and learning that begins with the practice of students, seeks to investigate the dialectical relationship between practice and theory and leads to the graduation of reflective practitioners. In 1997–1998, the University entered into a partnership arrangement with the Koori community of the Echuca region in northern Victoria, involving the development and implementation of a relatively small four-year Bachelor of Education programme in the local area for both Koori and non-Koori students. A set of teaching and learning principles was negotiated emphasising participatory enquiry learning and holistic knowledge. Local students are enabled to study without leaving home, to negotiate arrangements for family, educational and employment responsibilities, to explore different approaches to personal learning and to work in close collaboration with people from different cultural backgrounds. The course has been well received by the forty-seven participants.

A key feature of cognitive flexibility is an emphasis on the achievement of learning outcomes rather than specific content for specific subjects. Outcomes that have been identified to date include increased cultural understanding, generic skills like teamwork and problem solving and a range of collateral learning, such as computing skills.

The course has retained most of its students partly because it is flexible enough to accommodate some participants’ desires to withdraw for a period and subsequently return to study.

It is a relatively high cost programme involving increased staff time commitment, extensive travel by staff and support costs that are higher than usual.

8.1 Context

In mid-1997, the Wembawemba community of Echuca-Moama approached Victoria University of Technology with a proposal that a tertiary presence be established in the region. By the commencement of the academic year 1998, a new Bachelor of Education programme called Nyerna Studies (‘to sit, to listen, to learn, to remember’) had been negotiated and designed, approved by the University and was ready for implementation. The four-year, pre-service programme consisted of Education Studies, Koori Culture and Knowledge, Youth and Community Studies, and Sport and Recreation. At present forty-seven students are enrolled, with
approximately 60 per cent being Koori. Eighty per cent of them are continuing students. While some students have left the program in its establishment phase, it is hoped that retention will improve as procedures and community links are strengthened and as the programme accommodates the desire of some participants to withdraw and return as personal circumstances dictate. The ‘coming and going’ of students is a conscious aspect of course flexibility in Nyerna Studies.

The guiding principles of the course involve community responsiveness and partnership, participatory inquiry approaches to teaching and learning, flexible pathways, an emphasis on learning outcomes rather than specific content, development of innovative practices and close connections with the land and natural environment. In addition, indigenous and non-indigenous students are participating in the course around the central idea of ‘learning with’, rather than ‘teaching about’ the significant issues in each subject area.

At this early stage, and the third year of operation, a number of points have emerged that seem to describe some of the key determinants of enquiry learning. These points include: an explicit political purpose for the programme; constructing the course as a community narrative that is culturally inclusive; and a style of learning that is integrated, informal and located in the knowledge and wisdom of the environment. A serious attempt is being made to identify and implement a set of teaching and learning conditions that are consistent with both indigenous and enquiry learning and which make a noteworthy contribution to local reconciliation in action.

The connections between formal education programmes conducted by non-indigenous institutions and reconciliation have become clearer as the participants have attempted to develop Nyerna Studies as the original planning group intended. This has involved a consideration and investigation of serious issues, in a serious and positive way by all staff and students, where there is mutual respect and a two-way approach as the basis of culture and understanding. The notions of culture and community have become two additional principles that underpin the programme, although both are still only partially explained.

Good will towards Nyerna Studies characterises the relationship within various sections of Victoria University, including the Academic Board, the library, student support services, different faculties, and equity and social justice. This has been the case since the initial approach by the local Koori community through the University’s Koori Unit to the then Dean of the Faculty of Human Development. Staff who attended the first meetings from the School of Education were also prepared to pursue development of the programme due to their commitment to the issue and their enthusiasm for ongoing curriculum innovation. The fact that the initial proposal has been pursued to its current stage may reflect the emphasis placed on social justice policies and practices by the University and the association of the University with the western suburbs of Melbourne.

8.2 Detail of Nyerna Studies

The program is flexible in that it recognises the previous educational and community experience of students, fixed time constraints are removed and flexible exit points are accommodated. In adopting this broad direction of flexible learning,
Nyerna Studies offers a range of avenues into tertiary education for students; avenues that have not been available within the region before. The programme emphasises recognition of prior learning and has added to this, the notion of community experience and culture which is particularly appropriate for indigenous people in providing access. Recruitment requirements are the same as for the Bachelor of Education in Melbourne and ensure that the University’s policy of personalised study is implemented fully. Because of small student numbers, staff–student relationships are close and respectful. Sixty per cent of students are over 20 years of age. Several of this group are older than 40. The other 40 per cent are younger than 20 years of age.

Programmes of study are flexibly arranged to take into account family and work commitments. The arrangements include incorporating block time, the provision of a set of course notes and the use of the Internet. Top Class is used to enable staff and students to engage in conversations about issues that arise from the course notes, class time or elsewhere. A bulletin board facilitates further student–student and student–lecturer contact.

While all students are enrolled in the four-year programme, exit points are possible at each year level, if students have completed all requirements and apply for the award. These involve TAFE certificates and diplomas at Year One and Two and a Bachelor of Arts at Year Three. All students are encouraged to work towards the four-year outcome, as this is in keeping with the original intention of providing higher education in the region. Entry points are flexible too. Several students have already completed other degrees or parts of degrees. Procedures for recognising prior learning and others for negotiating individualised programmes of study enable students to engage the practice of flexible entry points.

A number of detailed questions regarding teaching and learning will not be answered before at least the first four-year cycle is completed, graduates are working in the local community and a critical mass of experience regarding the specific program and higher education generally has been reached for the entire community. Attempts are being made to integrate knowledge as much as possible across all subjects and to work around the accumulation of learning outcomes rather than subject-located content. This raises issues regarding the spread of coverage versus depth of understanding, how students demonstrate that outcomes are being achieved and the capabilities of staff working in such a new environment. At this stage, the staff is pleased with the progress made and the way in which students are undertaking their investigations. Members of the Koori community remark similarly and observe both intellectual and personal growth.

Interviews held with students at the end of every semester to discuss academic progress, have witnessed many comments from participants concerning the way in which their views of people from different cultural backgrounds, have altered. They speak openly of stereotypical and biased views that have now changed, once the opportunity of working with others on serious questions is grasped. Understanding of different cultural perspective is growing, not so much by being engaged in a formally taught subject and course, as by discussing and exploring issues as they arise. Student projects on family history, the ‘stolen generation’, native title, significant sites, local events and people, all contribute to a coming together, as they proceed and are reported.
Staff also speak about a range of other learning outcomes. Collateral learning has been a feature of the programme to date. Students’ computing skills have significantly improved as a result of them using Top Class and other online aspects of the course. Team work and problem solving skills have also developed over the duration of the course.

8.3 Flexible provision policy and practice

Flexible mode learning has as its primary purpose the creation of a learning environment where cognitive flexibility is encouraged as a means of recognising the cultural background and preferred learning style of all learners. This is in contrast to expecting all students to be engaged in the same way, around the same preset ideas, at the same time.

Cognitive flexibility involves having access to various sites of knowledge and practical, real-life situations—in the mind of the learner—for experiment, reflection and redesigned practice. A feminist may prefer to interview the local childcare nurse regarding health policy, than to take notes in a lecture. A Koori person may find self-expression in painting the local wetlands, than writing an extended essay. Thinking about the meaning of education may best occur spontaneously when watching an eagle soar overhead when bush walking, than from a compulsory book review. The curriculum is structured to allow diverse approaches to learning to be accommodated, including those times when experience is shared, consolidated, evaluated and critiqued for its social benefit. The notion of cognitive flexibility seeks to emphasise the unitary nature of theory and practice in all events through the identification of a range of sites as well as the university where knowledge can be investigated and produced.

In keeping with the notion of cognitive flexibility, assessment arrangements for Nyerna Studies are rigorous and the object of constant review. Negotiated assessment is used within an action research framework. A set of options for assessment is developed by staff, supplemented by suggestions from students and then offered to all. Students contact to a particular option from those offered. The process itself, as well as the appropriateness of the options for assessment chosen by students, are monitored each semester.

Some issues around implementing a university approach to flexible learning and that have been attempted within Nyerna Studies, follow:

Establishment of a practice-based framework for teaching and learning, including a set of principles that support participation, enquiry and engagement.

The nature of human practice is a somewhat elusive concept, particularly as it is necessary to consider it in relation to human theory. Those who support a totally integrated approach to learning would argue a unity of opposites; that practice and theory are present as one in all phenomena. Practice then involves the experience and understandings of people that they bring to bear on known and unknown situations. Practice takes the background culture of participants as the starting point for learning.

Humans who have a close affinity with the natural environment; who see culture as essentially a process of expression and learning from the environment; who view
themselves as a part of the landscape; and whose very existence depends on harmony with the land, waters, plants and animals, must conceptualise their own learning, in both formal and informal systems, as being dependent on these relationships. Learning will otherwise be severely inhibited. Beginning with one’s own personal experience can generate a closer connection with the central ideas of an issue.

Identification of categories of knowledge and practice that emphasise learning from concrete experience, participatory enquiry and critical reflection leading to theorising and critique.

University life is not a repeat of secondary schooling, where emphasis is on the transmission and simplistic examination of knowledge decided as being worthwhile by those other than learners. At the tertiary level, it is to be expected that learning programmes are based on uncertainty and confusion, where issues for investigation are negotiated with, if not decided by, participants and are located within a broad framework of significant ideas whose origin is external to the learner. The bridge that allows practice to be converted to theory or explanation of practice, is critical reflection, where experience provides the basis for broader themes, principles and ultimately personal theories that are recycled into practice for change and improvement.

In the Nyerna programme, the separation of practice from theory is seen as counterproductive. Taking a field trip to a local area of grassland to catalogue the plants and animals present, will raise issues of conservation and ecology, particularly if endangered species are present. The theoretical reasons a certain plant should be protected may be difficult to see if its natural beauty is not able to be directly observed on location.

Clarification of broad year-level and graduate learning outcomes, rather than short-term clumps of knowledge and pre-specified content.

A holistic, integrated approach to knowledge and learning, implies that a curriculum will not be primarily based on knowledge segmented into different unrelated subjects, but will be structured around broad projects of interest, drawing upon the totality of experience, as required. Under this arrangement, a small number of conceptual learning outcomes for study programmes conducted over quite elongated periods of time, will indicate that learning progress has been successful. In the end, subjects will not exist, only outcomes.

The notion of outcomes rests on the idea that the journey is more important than the Destination. There are many beginning points and pathways to follow based on personal practice and preference. If the journey is planned carefully and undertaken thoughtfully and rigorously, the journey outcomes will be achieved. Predetermining what each traveller will learn in a narrow, checklist fashion, eliminates scope for exploration and experiment and focuses instead on deeper, conceptual understanding. Integrating subjects and year levels further broadens student challenge, where they must bring together what they previously kept separate and link ideas from what may be thought as unlinked domains. Taking a canoe trip, for instance, brings into stark relief the turbidity, flow, temperature, poetry and danger of the river, raises questions of cultural and geological explanation and distinguishes notions of adventure and wilderness.
Various ways of implementing a curriculum for cognitive flexibility are possible, depending on the number of students and staff and the time required. It is also preferable to include a number of different ‘intellectual or knowledge sites’ throughout the programme, in recognition that different students will learn in different ways. Such sites may include workshops, evening lectures, cluster seminars, field trips and the integration of information and communication technology. In this way, the combination of formal and informal approaches, is made available at various times to suit specific student needs.

Features of this particular model include:

- Demonstrated and generalised learning outcomes as the central concern of the curriculum, rather than specific knowledges. Learning outcomes are based on practical experience in the context of external understandings.
- Major educational ideas arise from partnership settings rather than the university and are identified at cluster seminars held at school every fourth Tuesday. Cluster meetings shift the centre of gravity from the university to the school. The purpose of school visits becomes preparing for and undertaking the seminars.
- Issues from school and broader perspectives are considered during workshop sessions. Different staff can arrange and negotiate these sessions in different ways. Some groups may decide to have a one-day workshop every second week, others may work in small groups or partnership teams. Information technology can be incorporated.
- Ideas to connect and theorise are covered during evening lectures. Staff undertakes to organise and participate in say one lecture per semester. Lectures can be for large or not so large groups, depending on the need.
- A combined forum and public display of outcomes enables public debate, feedback and communication of major issues. The forum could become a key aspect of student assessment.
- Student hours per semester remain the same. Staff hours will vary depending on how a year level team decides to organise the curriculum.

The above model will need to be adapted and involve more intensive study period if more than one subject is involved. The intensive ‘burst-mode’ does not allow for unhurried contemplation and reflection over time, so this approach needs to be handled carefully. It tends to assume that knowledge makes sense to the learner in this way. It may lead to a false efficiency. Flexible cognitive learning on the other hand, places emphasis on a progressive epistemology where many sites of intellectual challenge and immersion are possible over the four years of the programme.

8.4 Flexible learning and programme outcomes

Nyerna Studies cannot claim that the characteristics—illustrated with examples above—have been firmly established throughout the programme, but progress has been made on each of them. Close connections have been made with the local...
community, local knowledge, culture and history are respected and form the basis of investigations and two-way learning is being promoted. These features are extremely difficult to translate into other university programmes where student numbers are much greater and the constraints of structure and agency much stronger.

8.5 Flexible learning and student outcomes

With all students enrolled in a four-year programme, Nyerna Studies has not as yet graduated its first beginning teacher or community education professionals. In this sense, overall programme outcomes will need to be observed after another three years, when graduates will have had the opportunity of working in the local community and demonstrating the significance of the course.

Principals and managers of organisations where students are engaged in community partnership work for one day each week and the occasional extended time, comment on the progress being made as students come to a personal understanding of being a member of the local workforce. This is particularly complex for Year One students who in the very recent past were secondary students and adopted roles accordingly. Academic work continues to develop as students practice what it means to be a university student in a location where this has never happened before. They must attempt to negotiate and meet requirements, take initiative and act both independently and in collaboration with colleagues. Pleasing progress is being made in all of these areas.

As mentioned above, there is little doubt that the cause of reconciliation between Koori and non-Koori people is being furthered by Nyerna Studies and at this time, this may constitute the major outcome of the programme. It shows the link between education and reconciliation, in combating racism and prejudice. It provides a means by which dogmatic thinking can be altered for all participants. The concept of local reconciliation in action showed itself in dramatic relief when a mature-age, Koori student held up a handout, showing the different approaches to teaching and learning that schools can pursue, and said with great feeling, that he had not realised before the opportunity for change in schools and the possibilities for doing much better for Koori children.

8.6 Flexible learning and student participation

Student participation is similar to other university programmes, that is a core group who attend regularly and proceed with all requirements, a group whose attendance varies and a group who are yet to finalise their relationship with the course. There is strong support from within the student population for the practice of flexibility and the deeper cognitive issues encompassed. Starting with the knowledge and culture of the local community, and viewing learning as being integrated and holistic with life experience, is recognised as missing in more traditional approaches. Members of the Koori community and parents of both Koori and non-Koori students have expressed their satisfaction at the way in which the programme is proceeding, how students are conducting themselves and the responsibilities being taken up by students in schools and other organisations.
Participation rates are expected to continue to improve as the program gathers its own knowledge on these questions and is able to implement them with integrity. Ultimately, the issues, themes and ideas pursued must become a part of the ongoing narrative of the local community, Koori and non-Koori alike, informed by the broader knowledges that the university can provide. The conceptual basis of the programme is complex. It involves two-way cultural learning together with the idea of learning environmentally, of linking intellectual work with the land, rivers, plants and animals. Flexible learning must allow a full consideration of mind and body, sense and reason, practice and theory, and the organic and inorganic.

8.7 Flexible learning and cost effectiveness

Flexible cognitive learning is not necessarily cheaper than other forms of organisation. In reckoning the cost effectiveness of the Nyerna Studies program its role in making Australia a compassionate and civilised society and in establishing educational and working arrangements for Koori people needs to be born in mind.

In more traditional terms, Nyerna Studies has been allocated a global budget by the University to cover all aspects of the program including staff, facilities and curriculum. The School of Education provides administrative support. A Koori person has been appointed to a full-time, on-site coordinator position, funded through the University’s Koori support unit. All teaching staff are part-time and either visit from Melbourne on a regular basis, or live in the surrounding district. The programme operates on a balanced budget each year, but additional resources are required for sustainability purposes such as growth in a range of programs, information technology equipment and technical support and field trips for students to overcome the disadvantage of distance.

Lecturer time in terms of travel and accommodation adds expense in contrast to work in Melbourne. This may alter as the programme develops and new forms of organisation and management emerge. Appointment of a full-time lecturer, more specifically a Koori lecturer, to the Echuca Campus will alter the funding mix, although it will remain necessary to have close contact with Melbourne in some way, to ensure that the programme does not become isolated. The increasing use of information technology may also assist, but this will always need to be undertaken in relation to the desire to have person-to-person contact between Koori and non-Koori communities. Traditional forms of distance education or flexible delivery will not succeed within this programme.

Nyerna Studies is characterised by knowledge production rather than transmission, reflection on practice, involvement in systematic research and the theorising of practice to guide further action. A calm and unhurried participation in such an environment over a period of years should assist a shift from perceptual to conceptual knowledge and from surface to deep understanding. For Nyerna Studies, cognitive flexibility appears to be successful on all counts and, in fact, the only way to proceed when both Koori and non-Koori students are demanding a culturally inclusive educational democracy.
9. Deakin University and Ford Australia

Ron Toomey

One form of the flexible provision of Australian higher education is the work-based learning programme of the Ford–Deakin MBA. A three-tiered management programme is offered to members of a consortium established by the Ford Motor Company. It is offered very flexibly with its delivery involving printed resources, set textbooks, online discussion, teleconferencing, on-site tutorials and ‘revision’ weekends. Course content and assessment are directly related to practical aspects of the day-to-day work of participants who come from the local city council, water board, the Ford Motor Company and some local industries.

Symbiosis helps to explain the existence of the programme. Within the arrangement between the two organisations, the industry partner gets a staff development programme that is minimally disruptive of the long working hours culture of the organisation. The university gets a number of full fee-paying students.

Participants exercise significant choice about when they study, where they study and with whom they study. Participants have scheduled tutorial sessions in one or other of the workplaces of the participants. Otherwise, the place and time of study is the choice of the group or of individuals within it. There is also great flexibility about entry and exit points for the course.

The course is attended solely by people from the Geelong region and it was, in part, constructed with regional development in mind. It has retained most of the original participants. Students who withdrew did so reluctantly and for reasons beyond their control.

Students and staff alike note the development during the delivery of the programme of the set of generic skills that are so valued by employers. The programme is very cost effective. It largely involves slightly modifying already existing distance education materials and then making them available for the MBA for use by the Ford-Deakin consortium participants.

9.1 Context

In the early 1990s the Ford Motor Company asked the then Phillip Institute of Technology to deliver, at its Broadmeadows plant, the Institute’s MBA programme to a selected group of company participants. The impetus for the move came from the Australian Government’s training reform agenda designed to make the country more internationally economically competitive.

At the time, the response of Ford to the training reform agenda was to attempt to provide a continuum of learning across the company with people studying in various programmes from certificate level to degree level. As part of this attempt
the MBA was introduced onto the company site. According to the training manager of the time:

The rationale (for introducing the MBA) was to provide a flexible, business focused management program, that when combined appropriately, could lead to three-tiered management qualifications for prospective future company leaders.

This program was the precursor of the Ford–Deakin programme at Geelong. The company was considering introducing the Deakin MBA to the Geelong plant because there were staff members asking for a programme similar to the one at Broadmeadows. The company also has a commitment to staff development and recognised the value of the MBA in terms of future leadership development.

It was planned to introduce the programme in 1998. However, there were insufficient student numbers to run it solely for Ford personnel. The Ford training manager initiated a consortium to supply additional participants. He convinced several regional businesses of the value of the idea including Bonlac, Eastern Energy, City of Geelong, Powercorp and Barwon Water. In discussions with senior management from these organisations, he was persuasive about the value to the companies of a leadership programme for what he calls 'their high potential people' as well as the potential of the programme to contribute to 'regional cultural capital'.

The programme is flexible in the sense that the University delivers 'on-site' to consortium members by a combination of face-to-face and distance teaching modes. There are four face-to-face sessions each semester. They are conducted at the Ford site in Geelong. Moreover, certain work experiences are considered to be relevant prior learning for programme admission purposes. There are also flexible entry and exit points for the programme. From the consortium’s viewpoint, the content and assessment aspects of the programme are intended to be very specifically related to particular functions of the work place. This is a key feature of flexible learning from the industry viewpoint. The idea also helps the organiser of the consortium, the manager of training at Ford, ‘to sell’ the programme to very senior management and to convince the companies to pay for staff participation in it.

9.2 Flexible provision policy and practice

9.2.1 Policy

The university’s policy is quite explicit about the flexible provision of higher education to business and industry on a fee for service basis. It asserts:

Deakin works with organisations to design a delivery process that meets their business, cultural, economic and geographical requirements and offers the capacity to balance competing priorities of work and family life. Our delivery options minimise training related travel and time off the job while optimising successful completion and the effectiveness of training budgets. All units are supported by high quality materials and can be delivered face-to-face, in distance mode or a combination of both. Deakin’s flexible learning model uses electronic conferencing and access through the Internet to the wide range of resources at Deakin and elsewhere.

(Deakin Australia, 2000)
There is a symbiosis between Ford and Deakin that helps to explain why the relationship between industry and higher education is so enthusiastically engaged by these two partners. As the President of Ford Australia recently communicated:

*Today, Deakin supports Ford’s programs to provide life-long educational opportunities for our employees. Ford employees can progress from an hourly worker to professional engineer through University level certificates, diplomas and graduate degrees conducted on campus and in the workplace.*

Moreover, from the company’s viewpoint, such flexible provision of higher education results in professional development for the university lecturers involved by putting them in touch with the needs of industry. From the University viewpoint, the relationship provides the University with a significant source of funding outside its government grant.

Finally, the programme serves the very strong learning and development culture that has existed at the Ford Motor Company for much of its life in Australia. Currently, approved staff members are entitled to four hours of education a week in work time. Staff is actively encouraged to engage lifelong learning practices as it is seen to be in the company interest.

### 9.2.2 Practice

Delivering a very flexible programme has not been easy for Deakin University. The program was mounted at the time when the Faculty of Business and Law was attempting to disentangle its MBA programme from the APESMA (Association of Professional Engineers, Scientists and Managers, Australia) programme, which was a joint offering of the Faculty of Science and the Faculty of Business and Law. This was all part of the process of preparing to offer the MBA on campus at Burwood. It had previously only been offered in distance mode. All of this was further complicated by the way the Ford–Deakin programme was managed by two separate arms of the University. The first and second year programmes are managed by the University’s corporate arm, Deakin Australia, and the Faculty of Business and Law manages the third year programme. Deakin Australia energetically pursues the idea of maximising the flexible provision of higher education. The Faculty experiences some difficulty in flexibly delivering work based learning because it produces no real economies of scale.

Initially, 25 students undertook the programme. Ford provided a critical mass of eight. The remainder came from the other five members of the consortium. In the first two years of the program, Deakin Australia recruited lecturers from within the Faculty of Business and Law. The lecturers presented subjects in Financial Reporting and Analysis, Organisational Behaviour, Human Resource Management and Project Management. In the second year the following subjects were offered:

- Managerial Accounting,
- Operations Management,
- Economics for Managers; and
- Marketing Management.

In the final year, lecturers from the on-campus MBA programme offer to the Ford consortium subjects in Quantitative Analysis for Managers, and Finance and Strategic Management.
Effectiveness of models of flexible provision of higher education

The content is tailored, as far as possible, to suit the specific needs and interests of the various companies involved in the consortium. In reality, any student choices about the content they studied have been limited. As a faculty administrator explained: ‘We are seriously constrained by CAMBS [a consortium of universities offering MBAs by distance education] on what we can offer’.

Of the 25 people who commenced the programme, over 80 per cent have remained. Those who have discontinued have done so for very good reasons that were beyond their control. One person was transferred to Chicago. Another found the pressure of travelling from Melbourne to Geelong to participate too gruelling. From the industry point of view, in the words of the organiser of the consortium: ‘We are pretty happy with the retention rates. It is a big investment by the companies involved and we do not want any wastage’. While wastage has been minimal, there was little anyone could do to prevent the newly appointed CEO of the City of Geelong from deciding not to continue with the programme for budget reasons. Interestingly, mainly individual, non-core-group members who did not have work colleagues in the programme have dropped out.

Admission to the course is flexible. The consortium chooses who participates according to their work experience, the needs of the company/institution and the degree status of the prospective participants. Participants are awarded recognition of prior learning for up to half the total number of units for things like in-house training that they have undertaken; work-based assessment of skills in the workplace and other university accredited courses.

While the timing of tuition is kept as flexible as possible to accommodate the very busy personal and professional lives of participants it is still a very demanding experience. One participant responded to the focus group question about what constituted the worst aspect of the course as follows:

There are three main things in my life: family, work and this course. I would have to say that it has put great strain on my family life. There is just no way you can do all you have to do on the course and at work and maintain a decent family life.

All participants expressed concern about the amount of face-to-face contact they experienced in the programme. The university limits face-to-face contact to four sessions a semester. Course participants considered this to be too few.

The course caters for some difference in the learning preferences of participants as it offers study guides, mentoring and some face-to-face teaching. Participants commented on how they had learned more about their learning styles, as a consequence of the multi-mode style of the delivery of the course. Assessment procedures have no flexibility about them. Examinations are conducted for all subjects as well as assignments. This was again explained as a requirement for participation in the CAMBS consortium.

From the industry viewpoint the course needs to be made more flexible in terms of content, assessment and more on-site delivery. The university feels pressed to make these types of changes. In the words of the consortium organiser:

The lack of seamlessness in the relationship between industry and the university is an ongoing problem. The faculty has a different attitude to running the program to that of Deakin Australia. I sometimes wonder if we should
Another participant described how the senior people at Geelong are ‘very practical people’. ‘They want a very flexible practical course that makes a direct contribution to improving the workplace not a theoretical contribution.’ These people have to be convinced that the MBA programme is going to be practically helpful to their staff before they will agree to their participation and to the company paying for their tuition. Again, Deakin Australia has been very keen to make the program as practical as possible. The final year is less so.

9.3 Flexible delivery and student outcomes

There are participants in the MBA who previously have not been in higher education. They talk about the difficulty of adjusting to the demands of higher education. As one put it:

I had not done tertiary study before and I wasn’t sure what was involved or how difficult it was going to be. It has taken me a while to adjust and I have managed mainly because of the support I find in the group. We all support each other and pretty much work as a team.

Teamwork and other the generic skills of participants seem to be well developed as a consequence of involvement in the programme. One participant suggested that:

‘We have all improved with our skills like teamwork and critical thinking. The course makes you work as a team member and it forces you to critically assess a whole range of things. I’m sure the way we have developed and improved in these areas is very useful for Ford.’

9.4 Flexible delivery and student participation

Motivation for wanting to be involved in the programme includes the development of the participants’ current careers and making oneself more competitive in the overall labour market. The industries involved with the programme, however, see it as a means of staff development and a way of making the company more competitive. The programme coordinator, the Training Manager at Ford also sees the programme contributing to regional development.

‘As part of being a good corporate citizen, Ford tries to contribute to this area (Geelong) and help it grow and develop. One way we do that is by being so forward looking with our training. We are very progressive with our training. We have large numbers in our training program. All of this is contributing to the growth of cultural capital in the region.’
9.5 Cost effectiveness and flexible delivery

The course is a full fee-paying programme. The industries involved pay $1300 per subject for their employees to participate. Currently, there are four tutorials per semester for each subject for which the university bears the cost. Otherwise the course is very much delivered at a distance. The materials are replicated from existing, distance education materials. There are no costs for accommodation. The programme is very cost-effective from the university viewpoint.
10. Griffith University (Logan)

Peter Taylor

The planning and construction of the Logan Campus as a flexible learning environment are, in effect, a significant pilot programme for Griffith University as a whole. This campus enrolled its first students in February 1998. The initiative and the wider institutional practices that support it, represent an innovation in the way that the University uses resources and supports student learning.

At the heart of the Logan Campus learning environments are the students and teachers. Staff are encouraged to utilise innovative, effective learning and teaching strategies, and to integrate formal face-to-face activities (teacher–student, student–student) with a range of more resource-supported independent peer-based and individual learning activities.

The University made a strategic decision to invest heavily in this initiative. This investment is systematically manifested in a number of key features:

- Architectural design provides a new form of physical infrastructure through enhanced linkages between academic buildings and the Information Services Centre.
- The Information Services Centre itself and other buildings include Learning Centres designed specifically to support flexible learning.
- Learning Centres are well equipped with computers (an initial ratio of one computer per six students).
- All subjects use the Web and the Internet.
- The key support unit, Griffith Flexible Learning Services (GFLS) provides expert staff to work with academic staff in designing subjects in flexible mode, and in creating the necessary learning resources.
- Staff of the Griffith Institute for Higher Education (GIHE) undertakes academic staff development in the use of flexible learning for higher education.

This is a case study of a systematic, well-resourced and strategic approach to developing flexible learning. The Logan campus was established as an institutional centre for innovation in flexible learning with the intention of diffusing outcomes, through adaptation, across the university.

10.1 Context: general issues

A founding principle of Griffith University when it took its first students in 1975 was a new approach to teaching and learning. The University’s mission commits it to innovation and bringing disciplines together, to lifelong learning, to equity and social justice, and to developing international perspectives. Innovatory, student-centred teaching combined with cross-disciplinary approaches produced coherent curricula relevant to contemporary problems. The growth and development of
students from diverse backgrounds was supported, and staff and students were
seen as a ‘community of scholars. This extended to the establishment of shared
refectory/cafeteria facilities. There is no separate staff club on any campus’.

More recently these ideas have been developed into the University’s conviction that
quality in teaching is best defined as enabling students to learn, and to continue
learning throughout their lives—to enhance their capacity for lifelong learning.
Students’ experiences of learning should add value to them and to the community
in which they live and work. This view of teaching and learning is a learner-centred
one.

These guiding ideas set the context for Griffith’s development of flexible learning
methods. ‘Flexible learning’ is a combination of an educational philosophy and a
set of techniques for teaching and learning. It describes an approach to education
that increases the learners’ control over learning and enables them to develop and
exercise increased responsibility and independence. This approach recognises that
learning is a lifelong process, and that ‘generic’ lifelong learning skills should be
important attributes of all graduates. Importantly, there is no single, uniform
approach to flexible learning on the University, and no intention to attempt to
develop or to impose one.

10.1.1 Context: Logan-specific issues

Logan campus admitted its first cohort of students in February 1998. It is one of
six campuses of the University. The campus is situated in the middle of the
Brisbane-Logan Gold Coast Corridor—Australia’s fastest growing region currently
at 2.3 percent per annum, compared with the national average of 1.3 percent.
While there are university campuses in Brisbane City and along the Gold Coast
tourist strip, there are no other higher education institutions located in the middle
of the region.

Logan was developed to serve Logan City, the northern Beaudesert Shire, the
Redland Shire and the Beenleigh District in the north of Gold Coast City. The
regional population is 352,000, or over 10 per cent of all Queenslanders. Much of
the region is characterised by socioeconomic disadvantage, high unemployment,
low participation rates in higher education, and well below average of university
graduates in its population profile. The campus heartland—Logan City—is one of
the youngest regions in Australia with an average age of 30 compared with the
national average of 34.

The campus has a clear role in facilitating social change and is concerned with
providing access and opportunities to the regional population in particular. It enjoys
strong support from the local business community and local government. It is a
significant social infrastructure investment in a region where that infrastructure
development has lagged behind population growth. In many senses, it has become
a focal point of aspirations for educational and economic development in this
region.

The University’s approach to the development of the campus academic profile has
been to achieve balance in offering high demand courses, courses of particular
relevance to the region and its development, and innovative courses to offer an
edge to graduates with regard to emerging study areas. The University has avoided
offering ‘popular’ courses where there is a projected oversupply of graduates and where employment prospects are not good. With this approach, it has been intended that the majority of students would come from the campus region and surrounds while students would come from elsewhere to access courses that are offered exclusively at Logan. The student participation data included later in this case study indicates that both intentions have been met. The on-campus flexible delivery mode, with significant choice in attendance in many areas, is also conducive to students from relatively distant areas such as Brisbane North, the Gold Coast tourist strip and the mountain and hinterland areas.

### 10.1.2 Applications to study at Logan

Logan seeks to serve a designated geographic region and enhance access opportunities to higher education. As an important part of this service emphasis and on the basis of substantial research within the regional community, the University established an early admission system specifically for residents of the campus region. Early admission is philosophically different from the standard system-based competitive allocation of places based on the Tertiary Entrance Rank (TER), Overall Position (OP) or other forms of ranking. Early Admission seeks to match prospective students with places using motivation and commitment to the course/field of study and demonstrated skills to successfully undertake university study as the dominant factors.

About a quarter of all campus admissions are through early admission. Because this system operates directly between individuals and the University, data for the majority of cases are not captured through the state-wide admission processes conducted by the Queensland Tertiary Admissions Centre (QTAC).

Application data for undergraduate places at the Logan campus, from its inception in 1998 to the year 2000, are given in Table 10.1. Please note that QTAC reports preferences as ‘First’ and ‘All’ (preferences 1 to 6). Only six preferences are available to applicants for Queensland institutions.

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Admission places*</td>
<td>149</td>
<td>196</td>
<td>211</td>
</tr>
<tr>
<td>QTAC First Preferences</td>
<td>644</td>
<td>710</td>
<td>767</td>
</tr>
<tr>
<td><strong>Total First Preferences</strong></td>
<td><strong>793</strong></td>
<td><strong>906</strong></td>
<td><strong>978</strong></td>
</tr>
<tr>
<td>QTAC Total Prefs (1 – 6)</td>
<td>4380</td>
<td>5207</td>
<td>6855</td>
</tr>
<tr>
<td>Commencing Students</td>
<td>482</td>
<td>835</td>
<td>875</td>
</tr>
<tr>
<td>Number of Commencing Students from Early Admission</td>
<td>151</td>
<td>176</td>
<td>229</td>
</tr>
<tr>
<td>Proportion of Commencing Students from Early Admission</td>
<td>31%</td>
<td>21%</td>
<td>26%</td>
</tr>
</tbody>
</table>

* Not including early admission cases where application had been made to QTAC.

### 10.1.3: Enrolments by age

The following table shows enrolments by age of all students enrolled in award courses for the Griffith Logan campus, all of Griffith University, and for all universities (where available) for 1999 and 2000:
Table 10.2 Enrolments by age in 1999 and 2000

<table>
<thead>
<tr>
<th>Age group</th>
<th>Griffith Logan</th>
<th>Total Griffith University</th>
<th>All Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and under</td>
<td>52%</td>
<td>47%</td>
<td>33%</td>
</tr>
<tr>
<td>20–24</td>
<td>16%</td>
<td>20%</td>
<td>33%</td>
</tr>
<tr>
<td>25–29</td>
<td>10%</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>30 and over</td>
<td>21%</td>
<td>24%</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

This data indicates that Logan students tend, on average, to be younger than the general pattern of Griffith University students, and higher education students more generally. This may reflect the generally younger community that the campus is serving. On the other hand, the age group 20–29 is under-represented.

10.1.4 Enrolments 2000

The Logan Campus 2000 census date HEFA-funded undergraduate course load is 1467 EFTSU. Enrolments by course follow:

Table 10.3 2000 enrolments – Logan campus

<table>
<thead>
<tr>
<th>Bachelor (B) Degree courses</th>
<th>Commencing enrolments</th>
<th>Continuing enrolments</th>
<th>Total enrolments</th>
<th>Proportion (%) of campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Arts</td>
<td>54</td>
<td>30</td>
<td>84</td>
<td>6</td>
</tr>
<tr>
<td>B Communication</td>
<td>47</td>
<td>30</td>
<td>77</td>
<td>5</td>
</tr>
<tr>
<td>B Education – Primary</td>
<td>107</td>
<td>59</td>
<td>166</td>
<td>10</td>
</tr>
<tr>
<td>B Training*</td>
<td>12</td>
<td>-</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>B Photography</td>
<td>27</td>
<td>25</td>
<td>52</td>
<td>3</td>
</tr>
<tr>
<td>B Business Management</td>
<td>99</td>
<td>126</td>
<td>225</td>
<td>14</td>
</tr>
<tr>
<td>B Business Communication</td>
<td>34</td>
<td>47</td>
<td>81</td>
<td>5</td>
</tr>
<tr>
<td>B Enterprise Management</td>
<td>23</td>
<td>21</td>
<td>44</td>
<td>3</td>
</tr>
<tr>
<td>B Commerce in Financial Planning and Investments</td>
<td>56</td>
<td>41</td>
<td>97</td>
<td>6</td>
</tr>
<tr>
<td>B Human Services</td>
<td>97</td>
<td>80</td>
<td>177</td>
<td>11</td>
</tr>
<tr>
<td>B Human Services in Child and Family Studies</td>
<td>71</td>
<td>27</td>
<td>98</td>
<td>6</td>
</tr>
<tr>
<td>B Nursing – Pre-registration</td>
<td>116</td>
<td>154</td>
<td>270</td>
<td>16</td>
</tr>
<tr>
<td>B Science in Environmental Health</td>
<td>51</td>
<td>37</td>
<td>88</td>
<td>5</td>
</tr>
<tr>
<td>B Science</td>
<td>20</td>
<td>21</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>B Food Science and Nutrition</td>
<td>14</td>
<td>12</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>B Internet Computing</td>
<td>47</td>
<td>60</td>
<td>107</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>875</td>
<td>770</td>
<td>1645</td>
<td>100</td>
</tr>
</tbody>
</table>

* Offered by direct admission – not included in application data.

The array of courses allows for considerable ‘shared teaching’, particularly at the first year level. For example, the BSc, BEnvH and BFS&N cohorts are taught as a single group in four of their eight first-year subjects. The ‘business’ programmes extend this sharing into second-year and third-year, allowing increased flexibility in patterns of participation and course outcomes for students.
10.2 Flexible learning: policy, practice and support

10.2.1 Policy

The University’s policy settings related to flexible learning have evolved rapidly. During 2000 the University’s Academic Committee has, for the first time, endorsed a statement on flexible learning. That statement indicates that student-centred learning and flexible learning practices aim to enhance learning and provide the richest learning experience for all students and together they are designed to develop the abilities of the Griffith Graduate. Prior to this endorsement, University policies had focused on providing the resources necessary for its development, particularly on the Logan Campus. In many senses it would have been premature to ‘define’ flexible learning before this, while this policy development has resisted pressure for a ‘tighter definition’.

While the policy statement acknowledges that ‘flexible learning’ means different things to different people, it identifies six common characteristics of flexible learning practices:

- flexibility of participation and access;
- flexibility of progression and assessment;
- flexibility with regard to learner control and choice;
- appropriate use of a range of learning technologies and resources;
- learner support and access to information and services; and
- commitment to academic excellence.

All degree programmes and courses offered in flexible mode include some form of web presence to support student learning. The level of presence varies according to a range of factors, but one way of describing the level of web presence involves the following distinctions:

- web based – where the course is dependent on the content and activities on the web site;
- web enhanced – which improves the learning experience by enrichment and interaction in a way not available through other resources; or
- web supported – where the web site plays a significant role in the course by providing an alternative means of accessing learning materials.

Griffith University is actively developing policy responses in relation to intellectual property, commercialisation of flexible learning resources, and recognising and rewarding staff involved in the development of resources. The latter involves Griffith University leadership of a national project, supported by DETYA, to allow for quality verification of resources through a process of independent peer review.

Earlier sections of this case study have identified the degree programs on offer at the Logan Campus. It is important to acknowledge that one of the initial policy commitments of Griffith University was that no student would be required to travel to any other Griffith campus to complete their degree program. On the other hand, students are able to travel to and attend classes at any of the other five campuses of the University.
10.2.2 Practice

Flexible learning names a new approach to Griffith University’s longstanding commitments to the development of innovative and high quality teaching and learning environments. It entails both an educational philosophy and a set of pedagogic practices. There is a clear intention that flexible learning at Logan campus will maximise:

- students’ choice and independence; and
- the achievement of high quality learning outcomes (including generic skills and capacities for lifelong learning).

The outcome is a form of education that increases learners’ responsibility for and independence in learning indicated by the author’s interactions with students on the campus.

The teaching and learning environments on the Logan campus reflect these intentions. There is a decreased reliance on timetabled face-to-face interaction (Logan is neither a virtual nor a distance campus) and more reliance on the use of flexible learning resources, including the use of Web-based information and learning activities. There are no set contact hours per subject. Subjects tend to involve several contact sessions early in the semester with fewer sessions later.

Independence is encouraged through a number of strategies, including the use of prepared learning resources and group-based learning activities that complement formal face-to-face activities. The development of those resources involves considerable support, primarily provided through the staff of the Griffith Flexible Learning Services (GFLS). This ‘central’ support unit has its headquarters on Logan campus. GFLS staff provides services in educational design and development of the teaching and learning resources, as well as printing and administrative services.

The achievement of independence is attained through careful structuring of activities and resources. In particular, it involves careful use of introductory face-to-face activities, which provide overviews to the learning (and assessment) tasks, the resources, and to the available forms of support. The success of subjects is very dependent on these introductory activities, and on the provision of subsequent individual feedback to students on their progress towards achievement of the learning objectives.

Face-to-face teaching is highly flexible and adaptable, and is an essential part of the Logan learning environments. Teacher-focused (or teacher-centred) formats associated with introducing large amounts of content, are discouraged. Rather, face-to-face activities that involve student-teacher and student-student interaction are encouraged.

The standard features of the Logan Web-interfaces include:

- Standard navigation bar comprising access to GU home page, student support, and navigation between courses, subjects and modules.
- Standard, yet subject-specific information, including an introduction to the teaching team and overview of the subject. The latter includes the subject objectives and teaching methods, assessment schedule and criteria, study chart, and subject resources.
This basic interface and shell is added to according to the needs of particular subjects. Educational designers from GFLS work with the teaching teams to design web-sites that respond to those needs.

Thus the Logan teaching environment includes a range of approaches to flexible learning which reflect the nature of the subjects taught and the learning requirements of the degree programmes offered on the campus.

Support

One of the well-documented necessities for successful flexible learning programmes is ready access to support. This is true of both staff and students. The allocation of resources to support staff through GFLS and GIHE was mentioned previously. The focus here is on student support services.

The University has provided a full range of student support services on the Logan campus. This includes staff with career and personal counselling as well as academics support roles. It is clear that students use the latter service differently from their peers on other campuses. In particular, they make more frequent requests for support, and those seeking support come from the full range of academic achievement. The implication is that students see this service as integral to their engagement in higher education, rather than as an opportunity for ‘remedial’ support. The first cohort has not yet graduated, so there is no data for graduate placements, although informal evidence suggests that graduates from some courses are being sought out by national employers.

The fact that all subjects are taught in ‘flexible mode’ has meant that additional attention has been given to establishing programs to support their transition to university, and orientation to participation. The existence of the early admission scheme has made it possible to develop a Transition to University programme for recipients of these offers—up to 30 per cent of the intake each year (see earlier Application for Admission data). This programme involves three workshops run over three weeks in October—November of the year preceding their first enrolment. The focus of the programme is on helping students to anticipate and prepare for the changes in their lives associated with commencement of university studies. There is also a particular focus on identifying and clarifying/re-setting their expectations about how they will be taught—what flexible learning will mean for them. In a community characterised by unemployment and socioeconomic disadvantage, issues associated with ‘high-tech’ teaching are handled with candor and care. A modified form of this programme is offered as a one-day workshop in early February for students who have received offers of places through the QTAC system. Approximately 40 per cent of each beginning cohort makes use of these programmes.

Orientation Week on at Logan takes a different form to that offered on many other university campuses. The programme is focused on academic as well as social issues. It is highly structured, with a range of specific workshops, such as interpreting timetables, orientation to the library, introduction to the Logan Web resources, making group-work work, offered at set times. All commencing students receive an overview of the programme in a single booklet—*The Logan Plant Guide*—modelled on the Lonely Planet Guide series. The development of the booklet
followed feedback from students that they received too much information, in too many bits, with too little guidance on what was important, and what could be ignored. Activities are rated as ‘essential’, ‘optional’ and ‘social’. Students are provided with a blank timetable for the week, and invited to design the programme of activities that best suits their needs. As a model of self-directed learning, it serves to induct them into the behaviours essential to their successful participation. Feedback to the author on this strategy has been overwhelmingly positive.

**Flexible learning and student outcomes**

Logan campus emphasises team-based independent learning. Because parallel programmes are offered for some of the degree programs available at Logan, direct comparisons between outcomes have been possible. Those comparisons have tended to indicate that student results at Logan tend to be both better and worse than for comparable programmes taught in more traditional ways on other campuses. They are better in that the proportion of students achieving higher grades is greater for those students involved in flexible learning. Retention rates are also higher. However, the proportion of students achieving lower grades tends to be higher at Logan than on other campuses.

A detailed comparative evaluation of student perceptions of their learning outcomes was conducted in 1998. A key finding was that variation between the course groups at Logan was greater than the variation between the Logan combined response and the control response. The control group involved students studying in equivalent programs involving more traditional practices on other Griffith University campuses. Thus, the intention to ensure that flexible learning reflected course needs has been achieved, even if in some cases the outcomes have been less successful than intended. Two general findings warrant mention. Logan students indicated that they were much more satisfied with the level of support provided by the teaching staff than the control group. However, this may reflect the relatively smaller classes, and a Hawthorne Effect resulting from the newness of the Campus. Logan students also indicated a significantly higher sense than their counterparts that the skills learnt during their first semester increased their effectiveness as learners. Thus, there is a strong indication that participation in flexible learning environments has increased their capacities to learn.

**Flexible learning and student participation**

In terms of its social change agenda, the campus has achieved dominant enrolment from the immediate campus region. The contribution of the Early Admission scheme to this outcome is significant. The combination of innovative and niche/exclusive offerings with the flexible learning approach have generated accessibility to a significant proportion of students from surrounding areas, particularly Brisbane South and the Gold Coast.
107

Effectiveness of Models of Flexible Provision of Higher Education

Table 10.4 Logan campus enrolment in 2000, by geographical area

<table>
<thead>
<tr>
<th>Regions</th>
<th>Distance (km)</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logan City</td>
<td>0–14</td>
<td>37</td>
</tr>
<tr>
<td>Redland Shire</td>
<td>14–22</td>
<td>13</td>
</tr>
<tr>
<td>Beenleigh District</td>
<td>6–18</td>
<td>12</td>
</tr>
<tr>
<td>Beaudesert Shire – north</td>
<td>10–40</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sub-total of Campus Regions</strong></td>
<td><strong>65</strong></td>
<td></td>
</tr>
<tr>
<td>Brisbane South</td>
<td>8–24</td>
<td>16</td>
</tr>
<tr>
<td>Gold Coast – southern region</td>
<td>18–67</td>
<td>8</td>
</tr>
<tr>
<td>Brisbane North</td>
<td>24–80</td>
<td>5</td>
</tr>
<tr>
<td>Other Places (most board in region)</td>
<td>&lt;60</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total of Campus Regions</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

Cost effectiveness of flexible learning

The picture provided by a simple cost allocation per EFTSU is problematic in this context for a range of reasons. As indicated earlier, Logan campus has a role as a centre of innovation in flexible learning for the University. Costs per square metre of space may be higher than the average cost across the university though the space allowance per student is no more generous. Any additional costs are seen as an investment in the possibility of developing more effective pedagogical practices and resources in ways similar to the notions of R&D in other industries. From a cost benefit point of view, as with R&D projects, some practices prove less effective than intended, while others provide benefits that make direct comparison with former practices very difficult.

Those benefits accrue to the institution, its staff and its students. There is no doubt that the reputation of Griffith University for innovative high quality teaching has been enhanced by the achievements of Logan campus. It has also benefited from the opportunity to trial new building designs and configurations, and to explore alternative practices in relation to providing ICT infrastructure to support flexible learning. The campus had become a magnet for national and international visitors, and all feedback from them has been positive. Staff have gained opportunities to ‘push the envelope’ of their administrative, service and/or teaching practices through engagement with the development of the campus. For academics there has been expert support in this from the staff of GFLS. Others have gained from the very strong sense of community and camaraderie that was particularly evident during the initial stages of its development. There is a sense that working on the campus is special, reflecting its innovative approach and small size. Students share in these community benefits, and in the learning outcomes associated with their formal studies. However, these intangible benefits are impossible to quantify.

Not surprisingly, there are appreciable tangible and intangible costs for the institution, its staff and students. Flexible learning is more costly than traditional practices in terms of its infrastructure requirements. Those include both start-up and maintenance costs of computer networks and equipment and videoconferencing facilities. There was a time when buildings were built and then repainted every 10 or so years. Now IT infrastructure has a much more limited
‘shelf life’, in part because it is evolving so rapidly, and in part because it is more prone to failure.

Videoconferencing facilities are well developed but the usage is limited. Logan campus tends to be on the receiving end of teaching events on other campuses which limits the popularity of this mode of tuition with students.

Establishment of subjects in flexible learning mode is also costly for the academics involved. In this environment subject and resource development is team-based. Collaboration may lead to higher quality of resources, but it is time-costly. Adaptation to online augmentation of face-to-face teaching requires changes in practices and the development of new skills. This is a cost to the academics. It is also a cost to students. We know that a minority of students are drawn to the campus because of its flexible learning practices. The majority have to develop confidence and skills in order to participate effectively. And many find that they need to acquire additional home-based IT resources in order to take advantage of external access to the Logan Internet teaching and learning resources. While some staff have experienced ‘burnout’ as a result of their involvement on this campus, it is clear that some students have chosen to withdraw from their chosen courses because the costs associated with continued participation were too high. Demands on staff and student time for communicative purposes have been moderated in some subject areas by setting aside a ‘common course time’ of two hours per week during which most staff in any subjects in the course and most students attend campus in a common area to deal with individual and group student concerns.

Actual dollar costs of resource development are available for the GFLS contributions. The number of subjects developed in flexible learning mode, and the average cost to GFLS of development and maintenance for subjects over the last three years are shown in Table 10.5.

Table 10.5  Scale and cost of GFLS subject design and development services

<table>
<thead>
<tr>
<th></th>
<th>1998 Actual</th>
<th>1999 Actual</th>
<th>2000 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing subjects needing to be ‘maintained’</td>
<td>28</td>
<td>57</td>
<td>198</td>
</tr>
<tr>
<td>New subjects developed</td>
<td>131</td>
<td>207</td>
<td>281</td>
</tr>
<tr>
<td>Number of subjects in use by year’s end</td>
<td>57</td>
<td>198</td>
<td>424</td>
</tr>
<tr>
<td>Average cost per new subject</td>
<td>$15 400</td>
<td>$11 650</td>
<td>$10 485</td>
</tr>
<tr>
<td><strong>Total subject (M+D) costs for year</strong></td>
<td><strong>$2 028 417</strong></td>
<td><strong>$2 446 113</strong></td>
<td><strong>$2 589 795</strong></td>
</tr>
</tbody>
</table>

1 ‘Maintenance’ involves substantive modifications to existing resources—between five and ten per cent of the cost of initial development.
11. University of Queensland (Ipswich)

Allison Brown

The University of Queensland’s Ipswich campus has been operating for two years. This campus was purpose-built for flexible learning with a sophisticated technological fit out offering the best student to computer ratio in the country. Despite the emphasis on technology, the campus focus is not on delivering digitised lecture material to students regardless of their location. The goal of the University is on improving learning outcomes through a deliberate and planned approach to flexible learning, where the technology is being used to support and improve learning via increased student interaction and collaboration. The University of Queensland (Ipswich) has taken the lead in adopting the term ‘flexible learning’ in preference to flexible delivery, to emphasise the importance this campus places on an approach that is learning-centred rather than delivery focused.

This campus is not just another regional campus of the University of Queensland offering the same suite of degrees to provide access to regional students. Fourteen new degrees have been developed for the University of Queensland (Ipswich), and these are not available from any other University of Queensland campuses. The degrees have been designed to develop graduates with skills and knowledge relevant to the workplaces of the 21st century. UQ (Ipswich) attracts a high percentage of non-school leavers from all over the Brisbane area who state their main motivation for enrolling at UQ (Ipswich) as ‘preparing them for future employment’.

The development of this campus signifies a deliberate intent by the University of Queensland to improve the quality of teaching and learning by providing a learning environment to facilitate the uptake of more flexible learning-centred approaches. Thus students have access to an array of learning resources across a range of media to support their learning, as well as on campus attendance for small group work to support more collaborative learning.

Evaluation studies to date show evidence of widespread student endorsement of the model of flexible learning in practice at UQ (Ipswich). Students found the collaborative small group work, the easy access to technology and the resource approach beneficial to their learning.

Staff have on the whole responded positively to the approach fostered at this campus, but have concerns about the time intensive nature of learning resource development, and about what this involvement will cost in terms of their careers given that promotion is largely focused on research rather than teaching outcomes.

Community satisfaction with UQ (Ipswich) has been marked. Expressions of satisfaction relate not only to increased economic activity within the community as a result of the campus, but on the substantial level of community input and interaction and the achievement of practical outcomes for diverse community groups by means of social research undertaken by the UQ Ipswich Community Service and Research Centre.
The model of flexibility provided by the University of Queensland at its Ipswich campus has not been driven by economies of scale, or of achieving cost efficiencies. University of Queensland Ipswich is not concerned with whether flexible learning is a more cost efficient way of delivery than traditional methods. The main motivation has been an educational one: to improve the learning outcomes of its graduates.

11.1 A new campus for a new approach

In February 1999, the University of Queensland opened a new ‘Flexible Learning’ campus in Ipswich, a major regional centre just over 40 kilometres west of Brisbane. This was not simply an expansion of a city-based university into a regional area, but a deliberate move into more flexible ways of teaching and learning. The new campus has been purpose-built for flexible teaching and learning, with high-tech facilities and state-of-the-art computer rooms providing one of the highest ratios of student access to computers in Australia, as well as sophisticated library facilities to support online teaching, learning and research.

While there are many positive examples and successful approaches to more flexible practices on other campuses of the University of Queensland, this case study focuses on the University of Queensland Ipswich campus initiative because it is a major commitment to providing for and implementing flexible learning.

The campus is situated on a 25 hectare historical site containing a large number of existing heritage-listed buildings. These buildings have been refurbished to accommodate high-tech facilities yet retain their heritage qualities and the University of Queensland has won architectural awards for the sensitivity of the refurbishment.

University of Queensland Ipswich has the potential to develop into a unique educational facility: a high-tech university in a heritage setting. This is in keeping with the City of Ipswich, itself a heritage city, which has enthusiastically embraced new technologies and boasts community and business facilities with global information links. Ipswich City Council was the first local government to become an Internet service provider, and the first to provide Internet access to all schools within the region. There are expectations that University of Queensland Ipswich will become an important social, cultural and educational resource for the community.

Given the high-tech nature of the campus it would be easy to conclude that the emphasis is all on delivery. This is not the case. One of the features of this campus development is its commitment to learning. University of Queensland Ipswich aims to be a centre of excellence in flexible teaching and learning. The University of Queensland Vice-Chancellor, Professor John Hay, sees the opening of the Ipswich campus as a major event in the University’s history: ‘We have a rare chance to purpose-build an ultra-modern university campus with a systematic, coordinated approach to flexibility in teaching and learning’ (March 1998).

Facilities and services to support this approach were provided at the outset. The University of Queensland initiative is centrally supported and driven. It emerges from policy development matched with appropriate levels of funding. Professor Trevor Grigg, Deputy Vice-Chancellor (International and Development) and Chair
of the University of Queensland Ipswich campus Planning Group, is aiming for the campus to become a leading centre for University-wide flexible teaching, learning and research.

It is also expected that the campus, with its new methodologies, will establish a catalyst for change in other campuses of the University, through the development of academic staff with new teaching skills and heightened understanding of flexible learning, and the development of educationally designed, flexible learning resources which can serve as models in other teaching programmes.

The new campus has allowed the University of Queensland to design, develop and provide the infrastructure for a campus-wide approach solely focused on flexible learning. Entirely new programmes, comprising eleven undergraduate degrees, one graduate level entry degree and two postgraduate certificates have been created that are available only on the Ipswich campus. Table 11.1 shows the percentage of total campus enrolment in each of these degrees for the first two years of operation at the campus. Masters level degrees are now being developed in some programmes. All of these innovative new degrees aim, through a new teaching and learning environment, to develop graduates with skills relevant to the workplaces of the future and to meet student, business and industry needs of the 21st century.

Table 11.1 Percentage of total campus enrolment, by degree, in first two years of operation

<table>
<thead>
<tr>
<th>New Ipswich Degrees</th>
<th>Percentage of Total Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Business</td>
<td>16.0</td>
</tr>
<tr>
<td>Bachelor of Business Communications</td>
<td>9.2</td>
</tr>
<tr>
<td>Bachelor of Electronic Commerce</td>
<td>16.5</td>
</tr>
<tr>
<td>Bachelor of Information Environments</td>
<td>7.3</td>
</tr>
<tr>
<td>Bachelor of Social Science</td>
<td>5.5</td>
</tr>
<tr>
<td>Bachelor of Behavioural Studies</td>
<td>9.5</td>
</tr>
<tr>
<td>Bachelor of Tourism Management</td>
<td>7.0</td>
</tr>
<tr>
<td>Bachelor of Leisure Management</td>
<td>6.2</td>
</tr>
<tr>
<td>Bachelor of Travel Management</td>
<td>8.4</td>
</tr>
<tr>
<td>Bachelor of Hospitality Management</td>
<td>4.5</td>
</tr>
<tr>
<td>Bachelor of Contemporary Studies</td>
<td>3.5</td>
</tr>
<tr>
<td>Bachelor of Education</td>
<td>3.7</td>
</tr>
<tr>
<td>Graduate Certificate Education</td>
<td>1.0</td>
</tr>
<tr>
<td>(Information Environments)</td>
<td></td>
</tr>
<tr>
<td>Graduate Certificate Social Science</td>
<td>1.6</td>
</tr>
<tr>
<td>(Interprofessional Communication)</td>
<td></td>
</tr>
</tbody>
</table>

In a survey of first year students at the campus (Isaacs et al., 2000) students were asked why they had chosen to study the courses they had enrolled in. The theme which arose most frequently in their responses was ‘preparation for future employment’. This seems to accord with the national study of James, Baldwin and McInnis (1999) who found that field of study preferences is a dominant factor in prospective students’ decision making.

While all undergraduate degrees consist of 24 semester-length subjects, there is some variation from programme to programme in relation to compulsory prerequisite pathways of study, major concentrations and cross-disciplinary elective
choice. There is a growing incidence of students choosing electives from areas of study outside of their immediate discipline. Subjects in the Behavioural Studies and Business Communications programmes currently attract the most cross-disciplinary elective enrolment.

Significant government grants to establish the campus have allowed a centrally driven funding model to be implemented so that new courses could be substantially supported during the first few years of operation, rather than being dependent on the EFTSU funding model in place in faculties on other campuses. The campus development, the IT infrastructure, the staffing for academic and support positions and the learning resource development have all been centrally funded and managed by the Deputy Vice-Chancellor (International and Development).

The organisational structure is programme-based rather than faculty-based and each programme has a Program Director. The Deputy Vice-Chancellor (International and Development), the Program Directors and other senior campus staff meet monthly to plan and discuss educational, community and management issues related to the campus. This arrangement is helping to build a strong sense of identification with the campus and positive outcomes, such as stronger collegial relationships and cross-programme collaborative projects are emerging.

11.2 Student profiles

Data gathered in the first year of a longitudinal study of Ipswich students (Smith et al., 2000) show that there are more female undergraduates than males, that there are a significantly greater number of non-school leavers (Table 11.2) and that about one-half of the students are aged 21 years or less, a quarter are 22–30 and the rest are older than 30 years (Table 11.3).

<table>
<thead>
<tr>
<th>Table 11.2 Enrolment profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolments</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Ipswich campus</td>
</tr>
<tr>
<td>Rest of UQ</td>
</tr>
<tr>
<td>National average</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 11.3 Enrolments by age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Ranges</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>18 or less</td>
</tr>
<tr>
<td>19–21</td>
</tr>
<tr>
<td>22–25</td>
</tr>
<tr>
<td>26–30</td>
</tr>
<tr>
<td>31–40</td>
</tr>
<tr>
<td>41–50</td>
</tr>
<tr>
<td>Over 50</td>
</tr>
</tbody>
</table>
The majority of students are living with their parents (Table 11.4), the majority have an end of high school certificate as their highest qualification (Table 11.5), and while a majority are in some paid employment, it is not for a large number of hours per week (Table 11.6).

**Table 11.4 Living situation**

<table>
<thead>
<tr>
<th>Living situation</th>
<th>Total % of Ipswich campus population</th>
</tr>
</thead>
<tbody>
<tr>
<td>With parents</td>
<td>51</td>
</tr>
<tr>
<td>With own family</td>
<td>23</td>
</tr>
<tr>
<td>Shared</td>
<td>16</td>
</tr>
<tr>
<td>No answer or ‘other’</td>
<td>7</td>
</tr>
<tr>
<td>Alone</td>
<td>3</td>
</tr>
</tbody>
</table>

**Table 11.5 Highest educational qualification**

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Total % of Ipswich campus population</th>
</tr>
</thead>
<tbody>
<tr>
<td>No certificate</td>
<td>3</td>
</tr>
<tr>
<td>End of high school certificate</td>
<td>62</td>
</tr>
<tr>
<td>TAFE diploma or certificate</td>
<td>14</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>14</td>
</tr>
<tr>
<td>Higher degree</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
</tbody>
</table>

**Table 11.6 Work patterns**

<table>
<thead>
<tr>
<th>Class of paid work</th>
<th>Total % of Ipswich campus population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>17</td>
</tr>
<tr>
<td>Part-time</td>
<td>25</td>
</tr>
<tr>
<td>Casual</td>
<td>58</td>
</tr>
</tbody>
</table>

The respondents reported learning well in a wide range of learning situations (Table 11.7), but they feel they learn best in an informal group rather than alone or in formal classes.

**Table 11.7 Preferred learning style**

<table>
<thead>
<tr>
<th>Learning style</th>
<th>Total % of Ipswich campus population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studying alone</td>
<td>28</td>
</tr>
<tr>
<td>Studying with an informal group</td>
<td>44</td>
</tr>
<tr>
<td>Formal classes</td>
<td>22</td>
</tr>
</tbody>
</table>

Respondents have access to IT at home (Table 11.8) and some facility in the use of essential software programmes (Table 11.9).
Effectiveness of models of flexible provision of higher education

Table 11.8  Access to IT

<table>
<thead>
<tr>
<th>IT type</th>
<th>% of respondents with access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to internet</td>
<td>84</td>
</tr>
<tr>
<td>Modem</td>
<td>87</td>
</tr>
<tr>
<td>CD–ROM drive</td>
<td>91</td>
</tr>
<tr>
<td>Printer</td>
<td>95</td>
</tr>
</tbody>
</table>

Table 11.9  Levels of confidence in software applications

<table>
<thead>
<tr>
<th>Software Type</th>
<th>Very Confident</th>
<th>Less than Very Confident</th>
<th>Never Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word processing</td>
<td>73</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>Email</td>
<td>66</td>
<td>31</td>
<td>3</td>
</tr>
<tr>
<td>Web browser</td>
<td>66</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Chat programmes</td>
<td>30</td>
<td>49</td>
<td>19</td>
</tr>
<tr>
<td>Spreadsheet</td>
<td>30</td>
<td>58</td>
<td>12</td>
</tr>
<tr>
<td>Presentation graphics</td>
<td>21</td>
<td>52</td>
<td>22</td>
</tr>
<tr>
<td>Databases</td>
<td>12</td>
<td>71</td>
<td>16</td>
</tr>
</tbody>
</table>

For further details of the campus, the support structures incorporated and the rationale for its inception and development see Brown and Grigg, (1998), Chalmers (1999) and the campus web site at <www.uq.edu.au/ipswich>.

11.3 UQ Ipswich at a glance

**Location:** Salisbury Road, Churchill, 1.4km south-west of Ipswich CBD, and 40km west of Brisbane CBD. The site occupies 26 hectares, with 17 heritage-listed buildings.

**Opened:** February 1999 (officially opened in June 1999)

**Degree programmes:** business, business communications, contemporary studies, education, electronic commerce, information environments, social science, behavioural studies, travel, tourism, hospitality and leisure management—expected growth and development of postgraduate degrees in other fields. Currently 14 academic courses on offer.

**Subjects:** 200 and growing.

**Students:** 550 (1999); 1200 (2000); projected 2350 (2001). When completed the campus will be able to support over 5000 students.

**Staff:** Currently 100 academic staff and 40 general staff.

**Capital cost of campus development:** Stage 1, $17m; Stage 2, $23m (in operation from 2000); Stage 3, $5–10m.

**Stage 1 IT:** 300 work stations; 155Mb microwave link to St Lucia campus; 100km underground cabling.

**Stage 2 IT:** an additional 300 work stations; radio local area networks; videoconferencing system.
11.4 University of Queensland policy on flexible learning

The development of a campus that is purpose built for flexible learning is an indicator of the importance the University of Queensland places on improving learning outcomes and its recognition of the potential of IT for improved educational interaction. The University of Queensland Strategic Plan (2000–2004) (The University of Queensland) has, as one of its key operational priorities, to increase the use of flexible learning approaches in the educational programmes of the University. Other key strategic objectives include the delivery of an enhanced student-centred approach to learning and to enhance the learning environment by the provision of high quality IT infrastructure for flexible learning. The operationalisation of these objectives is detailed in the University of Queensland Teaching and Learning Enhancement Plan.

The University of Queensland also has explicit stated policy regarding flexible learning. In 1997 the ‘Flexible Delivery Working Party’ was formed, with reporting lines to the University of Queensland Teaching and Learning Committee and to the Academic Board. The formation of this working party was in recognition of the need to explore ways of providing more flexibility in teaching and learning and to identify how improved learning outcomes might be achieved. It signified a deliberate intent by the university to put in place new ways of operating to ensure that these outcomes were achieved.

The 1997 Report of the Flexible Delivery Working Party made a number of recommendations, one of which was the establishment of a centrally funded unit to support curriculum design and learning resource development for flexible learning. This unit became the Learning Resources Development Unit (LRDU), a new unit in the well established Teaching and Educational Development Institute (TEDI). The LRDU is situated on the Ipswich campus and its brief is to support academic staff in the educational design, development and implementation of flexible learning subjects and to facilitate the development of pedagogically sound learning resources across a range of media.

Flexible delivery was the term used initially by the University to signify the move towards different modes of course delivery. For the purposes of the 1997 Report of the Flexible Delivery Working Party, flexible delivery was defined as the provision of learning and assessment opportunities in a way that did not require the student to be present at a particular place or at set times. The Report focused on the flexible delivery of course materials, which could then be presented in a variety of modes, increasing the degree of student control over when, where, how and at what pace they learn.

In 2000, after two years of operation at the University of Queensland Ipswich campus, a more comprehensive understanding of the process defines flexible learning as the overarching, educational philosophy which allows students greater choice in how, when and where learning takes place. The term ‘flexible learning’ implies a focus on the core activity of education, the learning process of the individual student and student choice regarding the methods employed in that process. Flexible learning places student learning, needs and choices at the centre of educational decision-making. It signifies a shift from formal, whole class, didactic teaching towards individual or group management of learning, through the provision of structured resource materials and the use of IT to facilitate access.
The term flexible delivery has come to signify the means by which a flexible learning philosophy may be implemented. Thus the use of the term ‘flexible learning’ is preferred to ‘flexible delivery’ at the University of Queensland and this significant change reflects the intent of University of Queensland policy in this area to focus on improving learning outcomes, not just to deliver courses in more flexible ways.

Policy development in this area is still active. In 2000 a working party was formed to develop academic guidelines for flexible learning. The report of this working party will set out priorities in the University’s approach to flexible learning, provide an academic rationale for the move to more flexible learning, and develop and describe guidelines, strategies and techniques associated with adopting flexible learning approaches. The draft of The Academic Guidelines for Flexible Learning is currently being circulated for comment and review prior to its presentation to the Academic Board.

These policy documents and initiatives have been influential in the uptake of flexible learning at the University of Queensland, particularly in the development of operational aims and the implementation of strategies such as more collaborative curriculum development, team approaches to educational design and learning resource development, small group teaching and resource-based learning.

These policies are being pursued at the University of Queensland principally to improve the quality of teaching and learning, but also to achieve institutional change in the face of changes to funding in higher education; the competition brought about by the globalisation of education and the impact of the revolution in information and communication technology.

11.5 Providing for flexible learning

The establishment of University of Queensland Ipswich was seen as one way of achieving institutional change, where the quality of teaching and learning could be enhanced through an integrated, coordinated, institution-wide approach to flexible learning, rather than a faculty based one. The Ipswich campus was set up to be a catalyst for change in the University of Queensland as a whole and to provide a model for a coordinated and planned approach to flexible delivery.

In line with its vision of the Ipswich campus as an engine of change within the University, the Uni-versity is providing a learning environment different from that at its other campuses. The campus is purpose-built for flexible, resource-based learning, comprising state-of-the-art high tech facilities, an infrastructure that supports small group teaching and a well-equipped library, all of which contribute to a resource-rich and learning-focused approach to flexible learning. Such an environment allows students access to a wider range of materials and forms of learning than is normally encountered during undergraduate years in more ‘traditional’ campuses. In this way, students are allowed to explore the means of learning that suit them best, widening the accessibility of the subject material and outcomes to benefit a broader range of students.

University of Queensland Ipswich has taken the lead in adopting the term ‘flexible learning’ in preference to flexible delivery to underscore the importance this campus places on an approach that is learning-centred rather than delivery-focused.
Courses are not delivered off-site, but on campus, and there is a three hour face-to-face weekly component for every course which students are required to attend. The University of Queensland recognises the importance of the face-to-face learning environment, particularly for undergraduates, and this component is seen as essential at University of Queensland Ipswich. The face-to-face sessions are not used for lecturing (there are no lecture halls at all on the campus) but for workshops, seminars, small group work and problem solving.

Course content is provided by means of a mixture of learning resources such as comprehensive learning guides, books of readings, published texts, commercial educational CDs and software, and information and interactive sites on the WWW. The learning guides help to structure the learning experiences of the students and are activity-focused. There is also a strong emphasis in the learning guides on reflection, frequent self-assessment of progress and the management of learning. The face-to-face seminars, with their small class sizes and emphasis on small group work, support and extend this approach.

‘The learning guides help you to prepare, so you can study before you go to class and you already know the subject. Not like normal lectures where everyone just sits and listens. Here you can come to class with everything prepared, and you have a discussion about what you think.’

(University of Queensland Ipswich Student 1999)

Providing course content in its entirety at the start of semester through a variety of educationally designed learning resources, is seen as one way of supporting more flexible approaches and some measure of self-access and self direction. At University of Queensland Ipswich, students are no longer bound to the teacher-directed control of and access to course content associated with traditional lecture forms of delivery.

Students have 24-hour online access to the campus—much of their learning interaction is available online—as well as to the resources of the University of Queensland Library, the largest in the state, and its network of databases and online resources. The provision of a generous bandwidth enables quick access to a multitude of sites and resources on the internet, and students are able to easily download sites on the campus machines for later access from home. Student and staff interaction is facilitated via a variety of non-traditional means, including chat sessions, bulletin boards, email and online constructs such as multiple user domains (MUDs). Radio local area networks (LANs) are also in use, allowing students freedom of movement outside classrooms and laboratories as they study online and allowing flexibility in arrangement of furniture and equipment within laboratories. As students’ expertise and skills develop, it is expected that they will find new and different ways of interacting and learning, taking full advantage of the technologies available to them.

University of Queensland Ipswich is attempting to harness the new technologies in ways that will support and improve learning, not just to replace a traditional lecture form of delivery with what is essentially its equivalent in digital form. Simply publishing lecture notes or a great deal of printed material online does not enhance the pedagogy (Oliver, 1998). Learning resources and learning experiences that will foster a deep understanding of the subject content and which encourage analytical and communication skills in students have been designed, building on lessons learned from the early introduction of technology into teaching (Brown, 1997;
McDonald and Postle, 1999) and are being driven by the learning agenda rather than by the technology. Decisions regarding delivery modes are based upon judgements about their appropriateness and usefulness in providing new opportunities for students to learn. Plans for the use of the new technologies are made within a learning context (Bates, 1995), or where, in Shirley Alexander’s words (1995), they can help students ‘to visualise, to understand, to see complex relationships in ways that are not possible using any other media’. The communications technologies at University of Queensland Ipswich are therefore used to provide extended access to fellow learners, to teachers, and to relevant people outside of the immediate learning environment. The resources of the WWW are also integral and students are encouraged to research sites, to critically reflect on them and to incorporate them into their learning. By providing extended access to the WWW and to online interactions via well-provisioned and multiple computer labs as well as email access from home, University of Queensland Ipswich is supporting the access dimension of flexible pedagogy.

Flexible learning is being pursued at the University of Queensland because it is seen as crucial to improving learning outcomes. It promotes a learning environment that encourages learners to be more active in their learning and provides them with greater opportunities to interact in purposeful ways with other students, with their teachers and with their learning resources, rather than the one-way lecturer to student flow of information typical of the more traditional university environment.

The learning-centred focus ensures that course development and student learning are facilitated rather than dominated by technology. The use of the technology is aimed at increasing dialogue, so that learners can clarify, challenge and build on ideas and concepts, and see the relationships between them—a process crucial to effective learning. Problem-solving and case-based approaches are enhanced by an array of media and hypermedia, including Internet-based material and these are supported with the communications technologies to promote collaboration, communication and learning.

As well helping students to learn discipline-specific knowledge in more effective ways, a major goal of the campus is to improve graduate outcomes. Thus, a common thread among all of the programmes is a focus on graduate attributes. Programmes aim for their students to develop their critical faculties and problem solving abilities; to become competent in the use of IT; to be comfortable working in groups; and to develop skills in lifelong learning. University of Queensland Ipswich graduates will be able to use IT to open up new worlds of learning over their lifetimes in a more self-directed way and will understand that IT can be used to build knowledge, not just access information.

### 11.6 Accommodating learner needs, preferences and choices

University of Queensland Ipswich was purpose-built with the intention of developing a new model of student learning—one that offered an immersive and resource-rich experience, that was capable of meeting the learning needs of a broadly diverse group of students, and one that leveraged technology to allow students to extend themselves and their learning beyond traditional classrooms and
lecture halls. Such accessibility and choice are important, as they recognise the wide diversity of backgrounds and learning experiences students bring with them to the campus.

‘We are trying to provide students at the University with an opportunity for them to learn and study in a way that aligns much more with their learning style and preferences than would otherwise had been the case under a fixed model of delivery.’

(Professor Trevor Grigg, Deputy Vice-Chancellor (International and Development), 2000)

University of Queensland Ipswich is not concerned to provide flexible entry or exit at times of the learners’ choosing. There are set semester times that follow traditional university timetables at other campuses. The model of flexible learning adopted at University of Queensland Ipswich recognises the importance of the social aspects of learning, particularly for undergraduate students, and is one which places a great deal of emphasis on the importance of collaborative learning. Flexible entry and exit does not sit comfortably with this model, and tends to reinforce a ‘teaching as delivery’ concept of university education, where content is ‘delivered on demand’ and students ‘go away and learn it’. This is in direct contrast to the University of Queensland Ipswich philosophy of flexible learning.

University of Queensland Ipswich supports the access dimension of flexible pedagogy by providing extended access to the WWW and to online interactions via well provisioned and multiple computer laboratories as well as email access from home. Students do not have to be in the same place all of the time for learning to occur. The communications technologies, and the provision of educationally designed learning resources, provide students with some flexibility about when, where and what time they will study. The learning that begins in face-to-face sessions for example, can be extended over time and place with the use of email, and the online course sites. The printed learning guides and other learning resources such as CD-Roms also provide portability, and increased learner choice about access. They allow for variations in learning pace and learning styles:

‘I really like it because if you are one of those people who can't sit in a lecture room and take things in—if you are like me and you like to read, it's a lot better because you can get into your subjects more fully ... what you are interested in ... what you really want to know. It helps with your assignments.’

University of Queensland Ipswich student 2000

‘Because the assignments are there (in the Learning Guide) we could start now. We could have done our entire essay if we wished to. So that's very helpful if you wanted to skip ahead a bit. That's your choice, you can do that.’

University of Queensland Ipswich student 2000

While the undergraduate degrees have fixed on-campus requirements, the growing number of postgraduate course offerings at University of Queensland Ipswich have different models of access all based on stated student need. The Graduate Education Program offers a summer school semester to enable students to fast track; the Graduate Certificate in Social Sciences (Interprofessional Leadership) has a combination of self access print and electronic resources, electronic communications and some intensive weekend workshops; the developing Masters
Effectiveness of models of flexible provision of higher education

of Online Health will be totally available in an online capacity to meet the very different access needs of its student base, and the Graduate Certificate in Education (Information Environments) has a choice of access through its modular structure. Students in all postgraduate degrees at University of Queensland Ipswich have extended access to on-campus IT facilities.

The provision of greater access to higher education for any specific group or groups has never been on the agenda for University of Queensland Ipswich. It is not just another campus of the university, offering the same suite of courses at a different location. The courses offered at University of Queensland Ipswich are distinctive and are not available at any other campus and they are attracting students from all over Brisbane, from regional Queensland, from interstate and from overseas (Table 11.10). They were not designed to provide access to higher education primarily for the Ipswich community. About one third of the students come from the Ipswich community and almost all the remainder come from nearby Brisbane.

Table 11.10 Home location of enrollees in 1999

<table>
<thead>
<tr>
<th></th>
<th>Ipswich</th>
<th>Brisbane</th>
<th>Regional Qld</th>
<th>Interstate</th>
<th>Overseas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>116</td>
<td>220</td>
<td>13</td>
<td>3</td>
<td>7</td>
<td>359</td>
</tr>
<tr>
<td>Percentage</td>
<td>32</td>
<td>61</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>

Isaacs, Smith and Holzl (Isaacs et al., 2000) found that influential in students’ choosing the Ipswich campus were perceptions of the special characteristics of the campus, particularly the use of technology-based flexible learning and the availability of new courses which would prepare them for the jobs of the future. This contrasts with the national study of James, Baldwin and McInnis (James et al., 1999), who found that institutional characteristics beyond the specific qualities of particular courses, such as opportunities for flexible study and the use of information technology in teaching are not strong influences. These factors did feature in the themes identified in the University of Queensland Ipswich study as being influential in enrolment and these early findings would seem to suggest that University of Queensland Ipswich is developing its own distinctive mission and that the public is responding to this positively.

However, University of Queensland Ipswich is concerned with being responsive to the wider needs of the regional and local community in which it is based, and the community recognises that there are significant non-educational benefits from having a campus in the region.

‘The University of Queensland is helping establish a new identity for Ipswich, moving from the small, urban, tight-knit mining and manufacturing place to a geographically larger and socially more diverse city. The campus has raised the strong belief and hope that other developments, which broaden the social and economic base of Ipswich, will now also occur.’

Carolyn Anderson, former Principal of Ipswich Girls Grammar School and Chair, Friends of University of Queensland Ipswich

The key imperatives in determining what degree programmes and associated research should be undertaken at University of Queensland Ipswich were
influenced by University strategic requirements as well as by expressed community need. Through targeting programmes at a range of different groups within the community; by strengthening pathways between schools, the VET sector and university; and by offering degree and research programmes within Ipswich itself, the University of Queensland Ipswich campus inherently is broadening community participation in higher education.

The community link is also very strong in the design of the degrees as this is seen to benefit both the community and the learners, who are involved in real learning activities. Most programmes at University of Queensland Ipswich require that students undertake industry or community projects as part of their courses—and many of those focus on local businesses, community groups and organisations. For example, the Contemporary Studies programme is negotiating with Global Arts Link, the Ipswich City Council’s innovative high-tech gallery, for some of their students, to undertake some curatorial work to contribute to their course requirements. Third-year project work being considered for Information Environments students includes creating a virtual museum which would interact within the physical space of the Ipswich Global Arts Link, and generating and managing an online community space. Business students have undertaken a range of community activities, including event management for the Queensland Netball Association, involving small business managers in classes, and developing business plans for local not-for-profit associations. Tourism students worked on a Tourism Plan for Ipswich as one of their major projects and made a public presentation of their final reports to Ipswich Tourism and city councillors.

'I was very impressed with the creative and imaginative ideas, and also the quality of the students’ information and presentations. This year, I will invite the Minister for Tourism and Racing to attend the presentation evening. Students will outline their plans for the redevelopment of the Ipswich railway yards.’

Ms Neoni Payne, General Manager, Tourism Ipswich

The community has benefited economically from the development and the community-related research stemming from projects undertaken by the University of Queensland Ipswich Community Services and Research Centre (CSRC). The CSRC is a unique concept for Australian universities and demonstrates an innovative and practical approach to community participation in higher education. The CSRC brokers opportunities for learning through community-based service. Economic and community development programmes, interdisciplinary research projects, training programmes, inter-professional courses, staff skills and interests, and student placements are matched to community needs.

‘Our intention is to show through the [CSRC] our commitment to collaboration and so build links in a way that supports and informs local community activity and the delivery of local community services.’

Professor Trevor Grigg, Deputy Vice-Chancellor (International and Development)

The CSRC sees its role as building community capacity through skill development and building effective processes for service delivery within the Ipswich region. New models of service provision involving collaborative and interdisciplinary community partnerships are introduced and supported through the CSRC.
Interaction between the CSRC and the local community takes many forms. Most sections of the Ipswich region have used the CSRC for education or training:

- 140 active partnerships have been developed with local community organisations and agencies
- 650 community partnerships or interactions with the CSRC in over 20 projects
- funding of more than $1.4m has been generated in 15 months

These indicators demonstrate the extent of the awareness of the educational and learning services offered by the CSRC in the Ipswich region.

### 11.7 Effectiveness of the model

As the campus is only in its second year of operation there is not sufficient statistical or other data available to determine at this stage the overall effectiveness of the model. However there are some indicators emerging from a range of sources that allow some tentative judgements to be made.

Drop out rates vary from programme to programme and tend to be slightly lower than average. In fact some programmes have experienced significant recruitment of students mid-course from other campuses of the University and students have cited as reasons for their transfer to Ipswich, ‘better staff to student ratios, easy access to IT (don’t have to queue for access to a computer) and better learning resources’.

Experienced teaching staff have reported that students with lower entry scores appear to be achieving better grade outcomes on criterion-referenced assessment tasks than similar students on more traditional campuses. They attribute this to the flexible learning approach taken at University of Queensland Ipswich.

The high-tech nature of the campus, the refurbished heritage listed buildings and the small group model of teaching appear to be influential in attracting students to the campus. The innovative degrees have also been a factor with some students being recruited from interstate to study at University of Queensland Ipswich because of the degrees on offer.

#### 11.7.1 Student satisfaction with the model

Research studies have been undertaken across the campus to begin to track and evaluate the effect of this campus wide innovation. The major finding of these studies to date was a widespread endorsement of the pedagogical approach of the campus by Andrews and Ferman (2000). Many students found flexible learning to their advantage. They liked in particular the emphasis on collaborative small group work, the access to technology and the resource-rich approach fostered at University of Queensland Ipswich. Students felt that the resources complemented each other, allowed them to focus more on topics that really interested them and enabled more learner choice in relation to access. Some students commented on feeling more ‘empowered’ by the choices open to them in this approach:

> With the emphasis on project activity you’re actually doing stuff, instead of just lectures then cramming at the end, and saying ‘yes I’ve passed’ and then in three weeks time you forget what you’ve just learnt anyway.’

University of Queensland Ipswich student 2000
With this new style of learning out here we’re a lot more proactive, feeling “I’m here to learn”, not “I’m here to be taught”.

University of Queensland Ipswich student 2000

‘Flexible learning is a better approach than flexible delivery because you get the experience, you not only get the information from your lecturers you also get it from your peers. If you’re just going to sit there on the internet you’re just not going to get that input.’

University of Queensland Ipswich student 2000

‘[The Learning Guides are] easy to read by the way they are laid out. They can help you to prepare a lot better. If you are not a very organised person, you’ve got this learning guide, which pretty much sets out what you have to do in the class. It’s really good because you can just look and go “That’s what I’ll have to do by a class” and you just go and do it.’

University of Queensland Ipswich student 2000

Well I like the small classes. That’s one of the things I like, the fact that you can pipe up and say “Hey, what about this?”

University of Queensland Ipswich student 2000.

The most common difficulty learners (and some teachers) had was with conceptualising the model of flexible learning implemented at University of Queensland Ipswich, which was deemed by some survey respondents to be ‘inflexible’. While there are many dimensions to flexibility (Brown, 1999), most people focus only on the access dimension. Thus ‘flexible learning’ is most commonly thought of as ‘flexible delivery’, where the emphasis is on anytime, any place, remote access to course content. This is reflected in some of the following student responses to the question ‘What is your understanding of flexible learning?’:

‘That you could study what you want when you want and where you want. This is not the case in many classes.’

University of Queensland Ipswich Student 1999

‘I thought ‘flexible learning’ meant we did not have to turn up very much, but it really meant turning up more to work on computers.’

University of Queensland Ipswich Student 1999

‘We aren’t really any more self-paced than anywhere else.’

University of Queensland Ipswich Student 1999

‘The flexible delivery ‘thing’ was different from what I expected but when it was explained I got the picture.’

University of Queensland Ipswich Student 1999.

Other negative comments related to what students perceived to be ‘bad teaching’. Some felt that lecturers were not very understanding when students were having difficulty with the subject material and felt that they were passing all of the responsibility for learning to the students:

‘I mean that they give the impression that they expect you to know it, and if you read the textbook and do all the quiz questions you’ll understand it and you will do fine. You don’t...you can’t.’

University of Queensland Ipswich student 2000
‘But also, with the resources and stuff – it’s find it yourself, do it yourself, read this, read that and you don’t know if you’re reading it right, understanding it the right way, so you’re answering all these questions and when it comes to the exam you might have learnt it one way and that’s not the right way.’
University of Queensland Ipswich student 2000

Less work for lecturers, more work for me
University of Queensland Ipswich student 2000.

These findings reinforce the importance of dialogue and support in flexible learning approaches. It is not enough to produce and provide learning resources to students which they simply self access individually at a time and place to suit themselves.

The learning needs to be fostered in an ongoing way in a learning environment that is responsive to students’ learning needs.

Despite some early problems with logging on to web sites, students found the technology-based resources a help to their learning. They particularly liked the convenience of access and the fostering of collaboration:

‘Two weeks ago we had a module for XXXX. I put a message on the bulletin board and just said if anyone is having as much trouble as I am, meet me in the library. We had 10–11 people! People we hadn’t seen before, they were just willing to come because they were having as much trouble as we were ... we kind of mused over our confusions together.’
University of Queensland Ipswich student 2000

‘I think (the technology) is really good for handing in assignments. I love to be at home finishing an assignment and being able to send it off there and then.’
University of Queensland Ipswich student 2000

‘I like having the modules there (on the web). They are excellent because you can always find the link. If you accidentally copy down the web address - it’s like this long, you can’t find it because you have missed a dot or something and having a link it takes you straight to the page.’
University of Queensland Ipswich student 2000

‘You would look up at the bulletin board and instead of you having to go and ask the question somebody else has already asked it. Then you say I hadn’t thought of doing that.’
University of Queensland Ipswich student 2000

‘It’s really great. You get ideas from students who you don’t see or don’t see very often and they still have got heaps to contribute so it’s great.’
University of Queensland Ipswich student 2000

In terms of media preferences, students indicated strong support for the printed learning guides which were seen as a key resource. Printed books of readings were less popular. The web learning software employed, WebCT, was seen overall as very useful and user friendly. Bulletin boards and email were viewed positively but there was little enthusiasm for real-time chat (Andrews and Ferman, 2000).
11.7.2 Staff satisfaction with the model

There have been no formal research studies undertaken to date in relation to staff satisfaction with the model. However some indicators of satisfaction have been gauged through informal liaison, through collaborative work with educational designers and through unsolicited comments arising at various University of Queensland Ipswich committees.

Staff have, on the whole, responded positively to the campus model with its collaborative style, particularly since they have been consulted and engaged at all levels in policy development and in planning entirely new degrees and they have been encouraged and financially supported to be innovative in their teaching approaches and in the development of learning resources to support their programmes. They are also happy to have been given an opportunity early in their careers to be able to make a major contribution to the development of significant academic programmes at the University. However they are concerned about what their involvement has cost in terms of their academic careers, given that decisions about promotion are based primarily on research, not on achievements in teaching. Developing whole new programmes and an array of learning resources is time intensive and for many staff this has impacted negatively on the time they have available for advancing their research interests. The University is currently looking at ways of measuring and valuing their contribution and at the same time addressing their career aspirations.

Teaching in this new learning environment has also required significant adjustment on the part of academic staff. Course development has shifted from an individualistic, private model, with academics writing and delivering their own lectures, to a collaborative and more public model, where courses are developed in collaboration with educational and technical experts and the resulting resources are open to public view. This environment also requires a shift in thinking from just delivering content, to helping students to learn.

‘The important thing for me has been the focus on learning and the focus on the students. I think it puts teaching right back where it should be instead of putting a spotlight on the academic.’

University of Queensland Ipswich academic, 2000

‘Some academics have found this transition difficult. The major difficulty has been in adjusting to the time and forward planning required in the development of pedagogically sound learning resources to support flexible learning. A lead time of six months is allowed for development of courses, still staff have commented, “developing learning resources takes up too much of my time. I’m overworked”.

University of Queensland Ipswich academic, 2000

The face-to-face contact per subject is three hours per week. There has been an attempt to soften time demands on staff by limiting the range of subjects for which they are responsible. The typical class size is 20 students and maximum class size is about 40 students. Others have found the collaborative model an enriching experience where their understanding of flexible pedagogy has grown significantly and where they have developed new skills in creating active and interactive learning
experiences for students, in contrast to just focusing on delivering a body of content.

"What it does for me is it opens up the possibility of students learning to engage critically, first with their own positions and ideas and then with those of other people."

University of Queensland Ipswich academic, 2000

Their knowledge of the educational use of information and communication technologies has also been enriched through the learning resource design and development process and a number of University of Queensland Ipswich staff were nominated by students for Teaching Excellence Awards.

University of Queensland Ipswich academic staff are now writing and presenting papers at national and international higher education conferences (see for example, HERDSA/ASET Conference 2000) and publishing in education journals. A recently assembled bibliography of scholarship and research into flexible learning by University of Queensland Ipswich academics totalled over 100 publications. This is constantly growing. Formerly these academics did not step out of their immediate disciplines for publication. Academics are also regular contributors to The Network which is a monthly in-house publication designed to share experiences and foster understanding of flexible teaching and learning at the Ipswich campus.

11.7.3 Community satisfaction with the model

Community satisfaction with what has been achieved to date at University of Queensland Ipswich has been marked.

"This is an innovative course. It links our needs and desires with the experience and interests of the University. I am already using the material in my school."

Student in Graduate Certificate of Education (Information Environments)

The Graduate Certificate of Education (Information Environments) was created in partnership with teachers in schools in the Ipswich area expressly to address their needs in relation to the use of technology to improve their teaching practice. No existing course in Australia was able to address their specific learning needs, to be available in flexible mode or to provide the hands-on training at times to fit the working patterns of teachers.

Expressions of satisfaction focus not merely on the campus’s existence, or its stunning environment and high-tech facilities, but on the level of community input and the scope for further input into its development and direction.

"The biggest impact of the University on Ipswich has been the community-University partnership. The University of Queensland has been very open in welcoming the involvement of the community and vice-versa. A good relationship has been built in a short period, and the network is already beginning to expand."

Mr. Neil McPhillips, Economic Development Manager, Ipswich City Council.

Community satisfaction with the Community Service and Research Centre projects has also been very high. For many community groups, this has been the first time they have had interaction with a University, and these interactions have resulted in very positive and practical outcomes for diverse community groups.
‘For too long the people of Lowood and its surrounding districts have found themselves isolated from even the most basic of services, abandoned with little hope and even less opportunity to improve their situation. With this project comes the chance for individuals to work together to create a powerful community voice and a sustainable plan for the future.’

Ms Sue Burnup, Community Representative, Lowood and Community Interagency Collaborative Project, University of Queensland Ipswich

Youth-focused programmes offered at the CSRC aim to provide services for youth at risk in response to identified community needs. Families and local agencies alike have been enthusiastic with the results. From comments given to staff, it is anticipated that the University will benefit from future enrolments of non-traditional students through their exposure to the University environment.

‘It is a cool thing to do, hanging around at Uni. It has been a good new experience, better than sitting at home watching TV.’

Youth participant. University of Queensland Ipswich After School Youth Program for 13-15 year olds.

‘Academics are part of Ipswich, not isolated on a hill. This has been a blue-collar town. Now that traditional industries have gone, the young men are looking for alternatives. We provide opportunities for them to interact with the campus, so that they can feel comfortable coming here in the future.’

Ms Traci Burke, Senior Project Officer, Positive Links between Universities and Schools (PLUS) Program University of Queensland Ipswich

‘This project has provided service providers with a new framework for their work with young people. Before we focused on the young people as the identified client, but we have learned that we really need to involve the family in a more holistic approach.’

Mr Ignacio Jimenez, Youth Worker, University of Queensland Ipswich Access Ability Project.

11.7.4 Cost effectiveness of the model

The model of flexible provision provided by University of Queensland Ipswich has not been driven by economies of scale. $40 million has been spent to date on building, and a further $12 million on technological and other infrastructure and staffing. Once the physical infrastructure has been completed in Stage 3, the main cost drivers will be staff salaries.

It could be argued that University of Queensland Ipswich is presently suffering ‘diseconomies of scale’ because of the innovative and experimental nature of the educational context. New courses are being developed, staff are learning new skills and to work in different ways, new ways of teaching are being piloted, and it is very much a learning experience for staff and students alike.

Initial course development has cost less than the course development budgeted for. Instructional design costs, however, are separately budgeted and are not charged to particular courses.

Elaborate multimedia production has been avoided. University of Queensland Ipswich is not concerned with providing an electronic distance model of delivery
or a way of dealing with increased student numbers, or of being more cost effective than traditional face-to-face learning. Its primary objective has been to improve the quality of teaching and learning, and to provide a catalyst for change on other campuses of the University.

‘It has nothing to do with economics. The reason we’re moving to flexible learning is that we want to produce learning outcomes that students deserve. There is a recognition that one has to be deliberate in what one does at an institution to ensure those outcomes are achieved rather than hoping that those outcomes are achieved.’

Professor Trevor Grigg, Deputy Vice-Chancellor (International and Development), 2000

The University of Queensland is motivated by the belief that improved learning outcomes will be achieved through flexible learning, and is not pursuing this to achieve cost savings. Those that argue that flexible delivery is a means of becoming more cost effective, tend to focus only on the delivery aspects and to lose sight of improving learning outcomes. Inherent in this argument is the view that one set of lectures can be ‘delivered’ at any time and place to any number of people and this can be repeated any number of times, thus significantly reducing staffing costs.

Surveys seeking student feedback conducted by a number of the programmes on campus indicate students appreciate the degree of personal attention they receive, the interaction with other students, and the facilities. Despite the workload the mode of learning imposes on students, they appreciate the benefits of the learning environment—they are confident they are better prepared than their peers on other campuses, and at other universities.

11.8 Conclusion

The campus is attracting national and international interest and has many visitors from Australian universities as well as from China, Vietnam, Singapore, Thailand, Sweden, England, Scotland, Ireland, North America, South America, Spain, New Zealand, Japan, Canada and Eastern Europe. What visitors find most interesting is the primary focus that University of Queensland Ipswich has on improving learning through flexible approaches as opposed to just flexible delivery of course content.

In terms of providing an impetus for change in the rest of the University, there is evidence that this is taking place. Numerous faculties are now addressing issues involving flexibility more systematically, and are working collaboratively with the staff of the Learning Resources Development Unit to design programmes and courses based on flexible learning principles. There is also increased collaboration with other staff of the Teaching and Educational Development Institute on projects such as the development of educational technology resources and the design of learning spaces, particularly for increasing computer access.

‘The University of Queensland Ipswich campus has highlighted issues for the rest of the University related to the development of a resource-rich approach to flexible learning. They are now exploring new staffing formulae, new staffing roles, and ways of recognising for promotional purposes, the skills and contribution of staff teaching to enhance flexible learning.’

Ms Denise Chalmers, Director, Teaching and Educational Development Institute, 2000
The Dubbo campus of Charles Sturt University was established in 1997 as a node campus of the University. It was intended to provide access to local higher education for the western region of New South Wales, an area long under-represented in the higher education sector. Students of Dubbo learn through a combination of conventional distance education, face-to-face teaching, interactive video teaching and information technology-based strategies. The University is currently located in leased premises at the Western Institute of TAFE, Dubbo. On its completion in 2001 the Interactive Learning Centre will form the focus of the university's presence in Dubbo.

With the exception of the students studying the Graduate Certificate in Applied Science (Captive Vertebrate Management), most students studying at the Dubbo campus come from the local geographic area. Students studying at the Dubbo campus have been attracted by the opportunity to study a university course without the necessity to travel outside their region. At this stage only small numbers of university staff are located in Dubbo, most of these are staff in the Faculty of Health Sciences teaching in the Bachelor of Nursing and Bachelor of Health Sciences courses.

Students entering Dubbo courses expect conventional approaches to teaching and learning in higher education. Their experiences in the courses expose them to a wider variety of media and delivery modes, although the underpinning teaching and learning approaches are generally conventional. In the main, student satisfaction with courses is very high, local students appreciate the opportunity to study university courses in or close to their home towns. However, in the past where courses have attracted students from beyond the local region, there have been higher levels of dissatisfaction, particularly directed at the lack of resources and a conventional university campus. This has been resolved by the provision of more detailed information and changes to the way in which this course is offered. The developing Dubbo campus has been well received by students and the local community who have recognised the University’s willingness to respond to local needs. For the University the Dubbo campus continues its tradition of service to the local regional community of New South Wales.

The provision of courses to and at Dubbo undoubtedly entails higher levels of costs than the provision of courses to the hub campuses. Direct costs include the microwave link and interactive videoconferencing facilities, travel costs for site visits, additional training and preparation time, and the production of additional resources for Dubbo students. Staff from hub campuses who teach Dubbo students perceive this approach to be more time consuming and challenging than either traditional face-to-face teaching or distance education delivery.
12.1 Context

12.1.1 The campus

A major concern of the western New South Wales region has been the absence of direct, local higher education. The rate of access to university education of rural students is markedly lower than that of urban counterparts. In 1995, a working party established by the Minister for Education and Youth Affairs recommended that Charles Sturt University should become the focus of higher education provision in the western New South Wales region. It was decided that the University would establish a node campus at Dubbo, the major centre in western New South Wales, in order to provide access to higher education for the residents of this region who previously had lacked convenient and viable access to higher education. This region provided a valuable potential market for the university and another opportunity for the University to strengthen its links with the local regional community. A node campus is conceived as providing a restricted version of the facilities, services and courses offered at regular, main university campuses.

The city of Dubbo is the largest inland city in western New South Wales and has been identified as Australia's fastest growing inland city. Geographically located near the centre of the state, Dubbo services a population of 130,000 with an extensive range of facilities and transport links. The Dubbo City Development Council has worked to establish the city as the major retail and service centre west of the Blue Mountains. Agriculture is the region's predominant industry producing wheat, cotton, sheep and cattle and associated manufacturing industries are developing steadily. The Western Plains Zoo located in Dubbo provides the focus of a growing tourism industry and has close links with the University.

To date the Dubbo node campus has been situated in leased premises within the Western Institute of TAFE located close to the city. Students have access to traditional teaching rooms and a specially equipped computer laboratory, which also contains videoconferencing facilities. The clinical facilities of the local Orana Region Health Centre are used to support teaching in the health courses. Approximately 20 full-time and part-time staff are located in the premises and these include a full-time Teaching and Learning Coordinator and seven full-time health sciences teaching staff. In 2001 the first stage of the University's campus will be completed on a 46 hectare site which forms part of an educational precinct, close to the Dubbo High School, the Dubbo Distance Education School, the Orana Community College and the existing Health precinct of the city. The first stage of the University development, the Interactive Learning Centre, has been designed to accommodate and encourage flexible approaches to learning and delivery, incorporating flexible workspaces, communications technologies and resource provision.

Since 1996 an advisory committee including members of the Dubbo community has advised the Vice-Chancellor of the University on the development of the Dubbo campus. The Dubbo campus is the responsibility of the Pro Vice-Chancellor (Public Affairs) and Head of Bathurst campus, who is located in Bathurst. He maintains a strong physical presence at Dubbo visiting regularly, taking a leading role in the Dubbo Advisory Committee and liaising with the local Dubbo community.
The University campus at Dubbo exemplifies the notion of a node campus of the University characterised by the following:

- limited academic and administrative staff on site;
- access to academic and administrative staff provided through information and communications technologies;
- limited library facilities; provision of onsite study and learning skills support; provision of a broad rather than comprehensive range of courses; and
- the provision of an on-campus student association.

The original intention was that most of the teaching of Dubbo students would be performed by academic staff from the major or hub campuses of the University utilising information and communications technologies to create an interactive environment. What has emerged has been described as a hybrid mode where students studying courses offered at Dubbo receive regular distance education subject materials with supplementary face-to-face or videoconference interactions.

While there is no formal University policy statement, which articulates the teaching approach that should typify Dubbo, the educational brief for the Interactive Learning Centre describes a student-centred approach. This approach is based on the proposition that students will increasingly be required to take more responsibility for their learning and that this will be achieved through access to a range of learning resources. Public statements about the Dubbo approach describe it as challenging, traditional teaching and learning practice and embodying a new, student-focused approach to education in an environment where the focus is on student choice, flexibility and independence with readily available support.

The Dubbo campus has attracted students mainly from the local area including the city of Dubbo and adjacent regions of Parkes, Coonamble, Coonabarabran, Wellington and Gilgandra. Students report selecting the Dubbo campus for a number of reasons which include: finance and costs; family commitments; a desire to study in a face-to-face rather than distance education setting. Approximately 20 per cent of the student population, comprising mainly recent school leavers, have indicated that because of financial constraints or personal commitments studying at Dubbo is their only viable alternative University choice. The Dubbo courses have also attracted Aboriginal students (14 per cent) from the region who report that they would not have considered another higher education option, preferring to remain in a rural location.

Dubbo is not identified or managed as an identifiable administrative cohort. Consequently, the University has little information that directly or explicitly describes the students and composition of the Dubbo courses. Because students enrol in school-based courses the statistics relate to courses rather than identifying Dubbo as a discrete group. Some courses include place specifically allocated to ‘Dubbo’ students while other courses are offered only in Dubbo.

### 12.1.2 Staffing

Dubbo courses are taught by staff located in the Faculties of Education, Commerce, and Science and Agriculture, located on the Bathurst campus, by Faculty of Arts staff located in Wagga Wagga, and by tutors and lecturers based in
Dubbo. While the number of Bathurst staff teaching Dubbo students varies from one semester to another, approximately 35 different academics teach to Dubbo. The Faculty of Health Sciences has a staff of seven full-time academic staff and the Faculty of Arts has one full-time and four fractional academic staff located in Dubbo. The Faculty of Education supports Dubbo students through a fractional appointment academic administrator who facilitates tutorials and liaises with local schools. One full-time learning and teaching coordinator provides on-site learning and study skills support for all students and assists with technology-related aspects of the courses and further support is available from a full-time administrator/learning coordinator. Additional counselling, careers advice and learning skills support are provided through Student Services at Bathurst campus via videoconference, online tutorials and onsite visits to Dubbo.

12.1.3 Courses and enrolments

The Bachelor of Business was the first course to be offered at Dubbo in 1997. Since then, each of the five faculties of the University has introduced courses bringing the total number of courses offered to six. In 2000 the Dubbo campus was the principal point of contact for 316 students, and an additional 700 students who were enrolled in conventional distance-education courses accessed and made irregular use of the Dubbo facilities.

<table>
<thead>
<tr>
<th>Course</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Business</td>
<td>11</td>
<td>27</td>
<td>44</td>
<td>83</td>
</tr>
<tr>
<td>Bachelor of Nursing</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Health Science (Community and Public Health)</td>
<td>15</td>
<td>46</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Social Science (Social Welfare)</td>
<td>46</td>
<td>98</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>Graduate Certificate (Captive Vertebrate Management)</td>
<td>19</td>
<td>20</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Education</td>
<td>19</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Health Sciences (Nursing)</td>
<td></td>
<td></td>
<td>35</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>137</strong></td>
<td><strong>258</strong></td>
<td><strong>316</strong></td>
</tr>
</tbody>
</table>

The University aims to achieve 1000 EFTSU in Dubbo by the year 2010.

Retention rates for the 1999 intake range from 47 per cent in Education to 84 percent in Business and 90 per cent in Health Science (Community and Public Health). The one-year Graduate Certificate in Applied Science (Captive Vertebrate Management) (taught in distance education mode with Dubbo residential components) has a completion rate of 92 per cent. In general, these figures confirm staff perceptions that the retention rate among the students studying at Dubbo is high and higher than equivalent courses taught in other modes. The Bachelor of Education shows a retention rate of 47 per cent from 1999 to 2000. This was the first year that this course was offered to students of Dubbo and at this time only the first year of the course was to be offered at the Dubbo campus. Second and subsequent years were offered at the Bathurst campus. Consequently many students made the decision not to relocate to Bathurst in order to complete
the course. Instead they chose to remain in Dubbo and hope that the University would eventually offer additional years of the course through Dubbo. This student action was vindicated when in 2000 the University agreed to offer the first two years of the course in Dubbo. It is anticipated that retention rates from 2000 to 2001 will be higher as students will be able to remain in the town to continue their studies. An accountancy traineeship programme supported by local business has attracted students to the Bachelor of Business course. Students report that the cooperative nature of this course, and its close links to the workplace, have contributed to their motivation to continue.

12.1.4 Flexible teaching–learning approaches

It was the University's intention that a distinguishing feature of the Dubbo node campus would be a move to a more student-driven mode of study in which the individual student was offered flexible ways in which to access higher education. This was presented in contrast to the necessity of attending one of the major campuses to study face-to-face or to pursue study through traditional distance education.

In the educational brief for the Interactive Learning Centre this was described as follows:

*Although still far from being clearly defined there is emerging a new mode of study in which the University is seeking to meet the needs of students in the best possible way within the constraints that they face. For the time being this might be best described as the “Hybrid Mode”. This is emerging as a full or part time attendance at a Node campus such as Dubbo in which students study through normal distance education materials supplemented by occasional face-to-face and regular video or online interaction with lecturers… [This is based on] the proposition that students will increasingly be required to take more responsibility for their learning and that this will be achieved through access to a range of learning resources.*

Hodgson, 1998

The Interactive Learning Centre is being described as Dubbo’s ‘clever’ campus, identifying its innovative design as providing the means for students to gain access to academic staff, lectures, learning materials, tutorial discussions at times and in ways that the individual student’s particular needs. Such an approach will require the development and support of specialised ways of teaching and learning.

Teaching of courses at Dubbo is performed by academic staff appointed to and located at Dubbo, and by staff located at the Bathurst campus. While it has not been explicitly stated that staff appointed to Dubbo will be teaching-only positions to date there has been little support for research and there is no research infrastructure. Those staff who are based at the Bathurst campus occupy traditional academic positions with the associated expectations that they will engage in teaching and research. No single, identifiable teaching mode characterises the teaching that relates to courses offered at the Dubbo campus. Different faculties have approached the challenge differently and there is variation among subjects within courses. The following brief descriptions summarise the dominant approaches that have been adopted by each faculty.
The Faculty of Commerce was the first to introduce a course in Dubbo and pioneered the use of interactive video for teaching at Charles Sturt. In 1999 a sophisticated videoconference system supported by a microwave link was established between Bathurst and Dubbo replacing the limited and often unreliable original system. This new technology has allowed higher levels of interactivity and supports activities such as inter-campus discussions and debates, and concurrent tutorial sessions run with Bathurst and Dubbo students. In subjects with small enrolments interactive video classes are supplemented by regular distance education materials.

The Faculty of Health Studies has been an enthusiastic participant in the Dubbo development and has introduced two courses centred on the Dubbo campus. While the Bachelor of Health Science (Community and Public Health) and the Bachelor of Nursing for enrolled nurses are open to students from throughout Australia they are focused on the needs of students in the western region of the New South Wales. Both courses were originally offered using distance education materials. The Bachelor of Health Science has a high aboriginal enrolment and regional placements. Students in this program attend two five-day, residential sessions twice a semester at the Dubbo campus. From 2000 the Bachelor of Nursing is offered in a face-to-face internal mode. Associated with such an approach is the appointment of a number of staff in Dubbo. Consequently, the Faculty of Health has the largest number of teaching staff on-site. Close cooperation between the University and the Macquarie Health Service and the Dubbo Base Hospital underpins this course. In the teaching of Human Bioscience subjects use is made of CD-ROM, the Internet and local community resources, including the Western Plains Zoo for dissection specimens and the local hospital for agar plates. As this course progresses the need for specialised facilities for practical and clinical teaching will pose a challenge for the University.

The Bachelor Social Science (Social Welfare) was introduced with the collaboration of the Department of Community Services (DOCS), which has a major regional office in Dubbo. The initial presentation of this course involved the use of the approach used at the University’s Broken Hill access campus. This involves the provision of standard distance education materials associated with the subject, supported by videotapes of Wagga Wagga subject lectures. This is enhanced with on-site tutorial support and part-time administrative support. A course coordinator (based on Wagga Wagga campus) is available at the Dubbo campus for two days each week. In 2000, the Faculty of Arts moved its entire full-time internal quota for this course to the Dubbo campus. Students in this course may now choose to study as distance education students or internal students with on-site tutorials and assistance. They may also choose between attending residential schools in Wagga Wagga or a version of residential school instruction in Dubbo. Regional placements are a feature of this course, requiring supervision and close liaison with local agencies, particularly DOCS. Placement supervision is handled by a Senior Lecturer, a joint CSU–DOCS appointment. In the early years this course attracted significant interest through the UAC process from throughout the state. Students from outside the Western region seeking to pursue this course at Charles Sturt could study the course at Dubbo only. At this time, attrition from this course was high as students reported disappointment at the lack of adequate resources and facilities, particularly the lack of University accommodation for students from
outside the region. Students have also been dissatisfied at the University’s lack of acknowledgment of them as a discrete cohort and the practice of managing the group as part of the Wagga Wagga cohort. Staff involved in teaching this course have been committed to resolving the issues that have concerned students. In future, the expanded videoconferencing system will be used to teach Dubbo classes in this course and greater use will be made of online communications to facilitate interaction.

Surveys of potential student interest in the region had identified significant interest in both nursing and education courses. An initial offering of a Graduate Certificate in Primary Education for teachers of Aboriginal Children did not attract viable enrolments. However, in 1999 the first year of a Bachelor of Education (Primary) course was offered with no guarantee that the second year of the course would be offered in Dubbo. Students were informed that they would have to complete the award at Bathurst or another university campus. This course attracted 20 students in its first year. Following the announcement in 2000 that the second year of the course would be offered in 2001, a further 27 students entered the course.

In 1999, this course was taught by a combination of interactive video teaching from Bathurst supported by a visiting Bathurst academic running tutorials and overseeing the video sessions. In some subjects, students viewed videotaped Bathurst campus lectures followed by facilitated discussions. Distance Education materials are provided to support students. In 2000, a part-time on-site tutor facilitates tutorials and supports interactive video teaching. Bathurst staff who teach by videoconference make at least two site visits per semester to meet with students and conduct practical session. In several subjects staff make extensive use of the online teaching environment and attempt to integrate student groups from Bathurst and Dubbo in online learning activities.

The Graduate Certificate in Applied Science (Captive Vertebrate Management), a course for practising zoo or animal park workers is a collaborative venture between the Environmental Studies Unit in Bathurst and the Western Plains Zoo. This course is taught in the conventional distance education mode using the Western Plains Zoo and the Dubbo campus for residential schools. Specialist staff from the Zoo teach subjects in the course and there is a strong sense of collaboration between Zoo staff and the University. Recently, residential schools have been held on the Bathurst campus because of the lack of adequate computing facilities at Dubbo. This course attracts students from throughout Australia and is highly regarded. While this course is clearly associated with Dubbo its links with the Dubbo campus itself are less clearly identified and few students in the course are from the local region. While community links through the association with the Zoo are strong this course is less directed at meeting the educational needs of the local regional community.

It can be seen that each faculty has developed its own approach to teaching the courses that are available to Dubbo students. What has evolved includes conventional distance education practices, face-to-face or on-campus approaches to teaching, distance education materials supported by additional technology enhanced interactions and a combination of distance education materials, on campus teaching and supplementary resources. Dubbo students may be taught by academic staff from Dubbo, Bathurst or Wagga Wagga campuses of the University. As a consequence of the University’s approach to developing the Dubbo campus as
a node, it has not been identified as a campus in its own right and hence it has no administrative identity. Students do not officially enrol as Dubbo students and courses are not clearly allocated to Dubbo. Some students are enrolled as distance education students while students in other courses are enrolled as internal students, although they may receive the same type of teaching–learning activities. Those University staff based in Bathurst and Wagga Wagga who teach Dubbo courses and students, have offices on those campuses and the large proportion of their teaching responsibilities relate to teaching students based at Bathurst and Wagga Wagga.

12.2 Resourcing

Flexible delivery to Dubbo has been seen to challenge the university’s existing policies and practices. Students are classified and managed as distance education or internal; Dubbo students do not necessarily fit neatly into any one category and do not see themselves in this way. In addition, students who have enrolled in a distance education course are allocated a home campus and courses are managed on a campus basis. Dubbo students are understandably confused when their home campus is identified as somewhere other than Dubbo. While students have been encouraged to use distance education packages and to attend tutorials or lectures at Dubbo the university doesn’t have a model of delivery that encompasses this combination.

In the current Dubbo context, there has been an emerging tension between the desire to develop a sense of campus identity and the pragmatics of delivering courses flexibly and from other locations. Teaching staff members who have been involved in teaching Dubbo courses express concern about the lack of adequate resources to support the development of new approaches to teaching and learning: ‘We’ve done this without any acknowledgment of the extra time that’s required to adapt our Bathurst teaching approach for teaching these students by video’; ‘We’ve had lots of support for learning how to use the technology—now we need assistance to develop our pedagogy’; ‘It’s really tough teaching these [Dubbo] students without any library resources’.

There is no formal University policy on the provision of ‘flexible learning’ to Dubbo. University policy documents refer to the University’s commitment to providing flexible delivery of subjects but the approach that is emerging in relation to Dubbo has yet to be formally identified. Perhaps because of the University’s long standing involvement in distance education practices, discourses of flexible learning have been noticeably absent. The University has a tradition of utilising flexible delivery methods to provide opportunities for students to engage in learning without space or time constraints. Recently, traditional distance education approaches have been enhanced using the online environment to improve communications between students and the University. While there has been no formal policy articulating the delivery approach that will be used in relation to Dubbo, there has been an expectation that the existing resources and methods will be used and adapted to meet student needs and the demands of the Dubbo context. The design of the University campus signals a clear intention that the teaching and learning that will occur in the Interactive Learning Centre will have a
focus on flexibility of access, media, time and learning style, and will demand that students work independently of a traditional classroom structure.

Staff perceive that teaching Dubbo students whether they are located at Dubbo or are receiving mainly distance education materials as being more time consuming and challenging than teaching either conventional face-to-face students or conventional distance education students. Where distance education materials are enhanced by videoconference or face-to-face tutorials or interaction, this is additional to the usual time allocated to teaching a distance education subject. For all staff involved in video teaching there has been a substantial learning curve involving time spent learning to use the technology effectively and time devoted to developing sound pedagogical uses of the technology. Face-to-face visits involve approximately six hours car travel between Bathurst and Dubbo and often an overnight stay. This places direct financial costs on the schools and faculties involved, and places additional demands on the busy work life of an academic.

The provision of courses to, and at, Dubbo undoubtedly entails higher levels of costs than the provision of courses to the hub campuses. Direct costs include the microwave link and interactive videoconferencing facilities, travel costs for site visits, additional training and preparation time, and the production of additional resources for Dubbo students. Staff from hub campuses who teach Dubbo students perceive this approach to be more time consuming and challenging than either traditional face-to-face teaching or distance education delivery.

12.3 Staff experiences

The predominant approach to teaching the courses offered at Dubbo is the use of the subject materials that are associated with conventional distance education offerings supplemented by interactive videoconferencing, or face-to-face teaching. In some cases, interactive videoconferencing is supported by on-site facilitation or tutorials. In other cases videotapes of lectures presented at hub campuses are sent to Dubbo for students to view followed by some form of tutorial or interaction.

Staff perceives that students would not enrol as students if their only option was distance education mode and to some extent this is confirmed by students. Certainly, the distance education literature and the students’ experience supports the positive effect of providing personal and local support for students. Consequently, staff focus on attempting to provide an educational experience that is different from, and enhances the conventional distance education experience.

In general, there has been little modification of existing programmes in response to Dubbo. The pace of instruction and the structuring of the semester is the same for Dubbo as it is for other campuses, some subjects offer a choice of assessment model—a choice between the assessment used for distance education or that used with the internal model of teaching the subject.

Staff and students involved in the Bathurst–Dubbo courses acknowledge the importance of face-to-face meetings at the commencement of subjects to establish personal connections and rapport. It appears that academic staff and students prefer face-to-face as the instructional medium and conceive of teaching in terms
of face-to-face techniques. This has implications for the ways in which staff and students perceive opportunities and the quality of interactions and consultations.

There has been variation between courses and, over time, variations in the way in which commitments to teaching at Dubbo have been considered in the calculation of workloads for Bathurst and Wagga Wagga staff. Staff express concern about the means by which contact hours are calculated for Dubbo. At present the formula for approaches, such as interactive videoconference teaching are allocated as for face-to-face teaching. Staff involved in teaching via video believe that it is more time consuming for them but also that it doesn’t equate with face-to-face contact hours for students. Academic staff acknowledge there has been a tendency to employ traditional approaches but explain this with reference to the lack of provision of dedicated preparation or development time to explore new approaches. There has also been considerable variation between the level of support provided for site visits across different courses. While workload allocations remain the responsibility of individual schools there is no University or faculty policy relating to financial support for the supplementation of Dubbo course provision.

Staff is strongly committed to the use of interactive videoconference teaching and has exercised creativity in developing innovative uses of the technology to facilitate interaction between campuses and among students. In the Faculties of Business and Education staff has implemented joint Bathurst - Dubbo tutorials using videoconference facilities. While this has been a challenging exercise for the staff involved it has been well received by the Dubbo students who appreciate the opportunity to interact with a larger student group. Because many students in the health and business courses are already in the workforce, substantial use is made of project-based learning activities that align closely with the workplace.

Charles Sturt University prides itself on the level of online support provided to distance education students. All distance education subjects across the University include not only print study guides and readings but an online subject outline, links to electronic resources and the library, email, and an online subject associated discussion forum that allows for asynchronous communication among all students enrolled in the subject. In general the use of these facilities varies dramatically between staff, but it is interesting to note that at this stage, these online resources and communication tools are used less by the staff who teach Dubbo students and subjects than would be expected.

While staff teaching from Bathurst to Dubbo have been challenged by the circumstances they have also gained much from the experience, many describing the professional growth that has accompanied the experience. ‘It was more enjoyable and satisfying teaching a group of 25 in Dubbo than the equivalent large class of 100 in Bathurst’. Academic staff valued the specialised facilities that support teaching to Dubbo, whether they compared what was possible with face-to-face teaching: ‘The new Interactive Studies provides a range of teaching aids and facilities which are not available in a normal tutorial room’. The same applies to distance education: ‘the facilities overcome the lack of face-to-face contact and instant feedback that is usual in normal distance education teaching’.

There is considerable concern among staff and students about students’ preparedness for university study. The small scale of Dubbo allows for personalised attention, particularly in those courses where much of the teaching occurs face-to-
face, and staff is physically on campus. Students in Nursing refer to the campus and their group as a big family, where their needs are identified and addressed and they support each other in their learning. Staff in the Health Studies courses has constructed learning and assessment activities through the curriculum in order to support students’ learning and has sequenced the academic demands made on students. However, where courses are taught using technological support from the Bathurst campus there is a sense of remoteness seems that an academic dilemma about constructing ways of following-up and interacting with students at a ‘distance’ has limited the development of some teacher–student relationships. The provision of support and complementary instruction from tutors at Dubbo constitutes a valuable dimension of the Dubbo experience. The commitment and engagement of the learning coordinators at Dubbo also contributes significantly to the student experience.

As a result of Faculties determining the approach that best meets their needs and conditions considerable variation now exists in relation to the nature and extent of flexibility in courses and subjects. This may be an appropriate outcome if it reflects the needs of particular disciplines and teaching approaches and is responsive to student needs. However, it may be that this is simply a reflection of the economic position of individual schools and faculties and the importance they place on the Dubbo campus.

The learning and teaching coordinator located in Dubbo travels to Bathurst to participate in training sessions and provides ongoing support to Bathurst staff from the Dubbo location and for Dubbo staff. To date the videoconference facilities are available only between Bathurst and Dubbo, consequently the training and resources provided are directed at a small proportion of the University’s staff and are concentrated on and from one campus. This concentration on Bathurst campus has ameliorated some of the effects of a multi-campus university, allowing staff development to be focused on the one location, and providing a central point for staff development and training for Dubbo teaching. It has also assisted the development of an identifiable group of staff, which is involved in the Dubbo venture.

Staff development is provided for academic staff by the Centre for Enhancing Learning and Teaching (CELT), a central unit of the University. This includes the provision of training and assistance in using the online technologies and developing teaching and learning approaches for online teaching. In addition, regular training sessions are conducted for the use of the videoconferencing facilities at Dubbo and Bathurst. Assistance is provided for initial teaching experiences using these technologies and ongoing support is available including the provision of support resources, case studies and teaching tips. As teaching staff have become more comfortable with the technologies involved, there has been an increase in interest in exploring new pedagogies using the available tools.

12.4 Student experiences

Students are attracted to studying at the Dubbo campus because it provides a means of participating in higher education without the inconvenience or expense of leaving the local area, and studying on-campus is perceived as more motivating
and attractive than studying by distance education. Students view the small and personal nature of the campus positively and they appreciate the support and efforts of the academic and support staff. They clearly expect and want face-to-face contact and the idea of a physical university presence. While there are limited facilities and resources available, students are prepared to accept this feature of the developing campus and this is seen as less important than the personal interaction and physical presence. In general, those students who have travelled to Dubbo from neighbouring areas value the educational access that is now possible. A number of these students also point out that it is less expensive to travel to Dubbo to study than to a larger or capital city. Students from areas more distant from Dubbo who had travelled for the course were less forgiving and expressed disappointment at the lack of facilities, resources and a ‘real’ university campus. The lack of adequate student accommodation has been a negative factor. The new campus site will include provision for student accommodation.

Students studying subjects that are taught from hub campuses expressed frustration at the lack of access to academic staff and the difficulties of consulting with staff at a distance. They argued strongly in support of site visits from teaching staff. In particular they found the lack of on-site resources frustrating, the provision of resources to support courses on multiple campuses is a particular challenge confronting the library.

In general, students are not made aware of the notions of learning styles nor is attention paid to providing for different learning styles. The exception to this is in the Nursing course where students report discussions that refer to learning styles and that their lecturers had paid some attention to individual learning styles at the beginning of the course.

The students do not perceive that they have any real choices in relation to the nature of their education. Their decision making appeared to end at choosing to study at Dubbo. They do not see that they have choice in what they learn or the ways by which they learn the subject content. Students in some subjects indicated that they had some choice in the assessment tasks associated with their subject. There is a strongly expressed desire for structure and guidance in what is required of them as university students.

While students identify some of the shortcomings of current approaches, particularly the lack of library resources, they recognise that this approach has given them access to higher education that had not previously been available: ‘It’s really opened doors for me’; ‘I’d never have gone to university if it meant I had to leave my family and move away’.

Staff have explicitly attempted to develop greater levels of student independence as the course progresses. In many cases, this has been met by resistance from students who want the levels of support maintained. Staff in the Nursing programme have developed a structured approach to developing students’ skills and autonomy which they report has been successful in encouraging increasing student independence. Students report that they feel they need substantial support in the early stages to assist them in gaining and understanding of what it means to be a university students and developing confidence in their own abilities. They perceive that they are developing as learners and becoming more confident and independent. From the student perspective the support of peers has been important as they learn together and share the experience of studying.
12.5 Summary

Staff and students associated with Dubbo are conscious of, and take pride in their role as pioneers in new ways of teaching, experimenting with new technologies and working together.

This project has been well received by the local community and local employers. The courses have established and developed strong local community links and there is a strong sense of collaboration and partnership. Clearly students and potential students appreciate the educational opportunities that have been made available through the establishment of the campus. What is clear is that there is no real Dubbo approach to teaching. Quite different models have developed in each of the courses offered, reflecting the priorities and values of the Faculties concerned.

Perhaps because of the strong distance education tradition of the University teaching approaches have centred on the enhancement of distance education subjects. To date there has not been systematic identification of staff who are interested in or committed to innovative teaching approaches to teach in Dubbo courses. Staff are allocated to teach Dubbo subjects because the subjects that are offered and require staffing constitute their area of expertise.

The Dubbo campus is still clearly in a developmental stage. What has been described here is very much an interim measure, awaiting the completion of the purpose-built Interactive Learning Centre. However, the four years’ of experience at Dubbo so far has established a clear pattern of teaching and learning in each course, which is likely to continue, albeit with modification when the University takes up residence in its new building.

It is important to note that the primary purpose of the establishment of the Dubbo node was to increase students’ access to higher education. This has been achieved for the students of western New South Wales in a manner that has also allowed greater flexibility in some areas. As with all flexible learning initiatives the gaining of greater flexibility and choice in some areas is accompanied by loss of flexibility in others.
13. University of Southern Queensland (Distance Education Centre)

USQ Distance Education Centre

The University of Southern Queensland (USQ) has considerable experience in the provision of distance education. It offers on-campus and off-campus programmes. USQ provides students with the option of on-campus, off-campus or mixed modes of study for various components of their programmes. USQ is the third-largest distance education provider in Australia. Three-quarters of USQ enrolments are in distance education. In 1999, the Executive Committee of the International Council for Open and Distance Learning (ICDE) awarded USQ the Institutional Prize of Excellence for a dual mode institution. USQ was joint winner of the Australian Good Universities Guides University of the Year for 2000–2001. USQ makes a substantial contribution to the regional provision of higher education in Australia. Fifty-three per cent of its enrolments are from rural and geographically isolated areas.

USQ employs a range of techniques and technologies for the delivery of learning materials and for interactive and communicative aspects of the tuition. These include face-to-face on-campus tuition, the use of regional liaison officers and remote study centres, print materials, audio tape/teletape, video tape, teleconferencing (audio, audiographic, video), computer managed assessment/computer-based exercises, CD-ROM multimedia presentation, computer-mediated conferencing, and Internet material.

Evaluation of students and reports from regional liaison officers indicates a high level of satisfaction with the distance education programme and with technical advice available. Changes in preferred methods of communication for educational purposes are becoming apparent. Those involving fixed times, such as teletutorials, are becoming less popular. The use of email and online discussion are becoming more popular.

Course design and development are facilitated by a Distance Education Centre which provides expertise in instructional design, graphic design, audio-visual and multimedia design and development, print and online materials publication, and telecommunications. Course design and development are included in the calculation of staff workloads.

USQ has been able to take advantage of economies of scale derived from wide use of developed tuition materials. On the other hand increasing student use of email and online discussion is placing demands on academic staff time.
13.1 Context

The University of Southern Queensland (USQ) was joint winner of the Australian Good Universities Guides University of the Year for 2000–2001. The University has positioned itself at the forefront of modern delivery methodologies. It is committed to offering choice to its students: on-campus, off-campus and online.

In 1999, the Executive Committee of the International Council for Open and Distance Learning (ICDE) awarded USQ the Institutional Prize of Excellence for a dual mode institution in recognition of the University’s very significant contribution to providing education at a distance, and in recognition of its leadership and innovation in the field of distance learning, while at the same time maintaining a traditional on-campus operation. The Director of USQ’s Distance Education Centre, Professor Jim Taylor, was awarded the Individual Prize of Excellence for his active role in ICDE and USQ’s distance education programme over many years.

The ICDE has membership in 130 countries and is officially recognised by the United Nations as the global non-governmental organisation responsible for the field of open and distance learning, and is affiliated with the United Nations through UNESCO.

Established in 1967 to provide on-campus higher education opportunities primarily for residents of the Darling Downs region of Southern Queensland, USQ became a dual mode institution when it initiated distance education delivery in 1977. Twenty years later, USQ has over 14 000 distance education students studying off-campus in over 60 countries, and over 5000 students studying on-campus in Toowoomba. The successful transition to dual mode operations and USQ’s commitment to provision of higher education to non-metropolitan regions is evident in the current student profile (Table 13.1) and the overview of the geographical location of USQ’s Australian students (Table 13.2).

<table>
<thead>
<tr>
<th>Table 13.1</th>
<th>Student profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studying externally</td>
<td>74%</td>
</tr>
<tr>
<td>From rural and geographically isolated areas</td>
<td>53%</td>
</tr>
<tr>
<td>International students</td>
<td>19%</td>
</tr>
<tr>
<td>Socioeconomically disadvantaged</td>
<td>28%</td>
</tr>
<tr>
<td>Over 25 years of age</td>
<td>63%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 13.2</th>
<th>Location/number of USQ’s Australian distance education students in 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td>1998 Enrolments</td>
</tr>
<tr>
<td>Queensland</td>
<td>8343</td>
</tr>
<tr>
<td>New South Wales and ACT</td>
<td>1462</td>
</tr>
<tr>
<td>Victoria</td>
<td>315</td>
</tr>
<tr>
<td>Western Australia</td>
<td>126</td>
</tr>
<tr>
<td>South Australia</td>
<td>121</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>108</td>
</tr>
<tr>
<td>Tasmania</td>
<td>70</td>
</tr>
<tr>
<td>Australians living overseas</td>
<td>338</td>
</tr>
<tr>
<td>Total</td>
<td>10 883</td>
</tr>
</tbody>
</table>
Immediate school-leavers form a small proportion of the off-campus student population of USQ (Table 13.3).

**Table 13.3 Nature of USQ’s off-campus student population**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Australian-based</th>
<th>Temporary visa</th>
<th>Resident offshore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 20</td>
<td>3%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>20-24</td>
<td>16%</td>
<td>57%</td>
<td>39%</td>
<td>21%</td>
</tr>
<tr>
<td>25-29</td>
<td>23%</td>
<td>32%</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td>30-34</td>
<td>19%</td>
<td>7%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>35-39</td>
<td>17%</td>
<td>1%</td>
<td>8%</td>
<td>15%</td>
</tr>
<tr>
<td>40-49</td>
<td>18%</td>
<td>2%</td>
<td>8%</td>
<td>16%</td>
</tr>
<tr>
<td>50-59</td>
<td>4%</td>
<td>0%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Over 59</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Australian-based</th>
<th>Temporary visa</th>
<th>Resident offshore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>49%</td>
<td>52%</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>Male</td>
<td>51%</td>
<td>48%</td>
<td>51%</td>
<td>51%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The initial transition to dual mode status in 1967 was stimulated by a move to provide professional upgrading opportunities for teachers. However, the relatively rapid transition to dual mode is now reflected in the wide range of accredited courses available via distance education by all six faculties of the University (Table 13.4).

### 13.2 Flexible provision policy

The University has adopted a ‘flexible delivery approach’. The vision of the University of Southern Queensland is:

- to be highly regarded for excellence in teaching;
- to be a leader in distance and international education;
- to pursue high-level scholarship and research;
- to be sensitive and responsive to regional and community needs.

What USQ means by ‘flexible’ according to Vice-Chancellor, Peter Swannell, is to give people ‘WHAT they want, WHERE they want it, WHEN they want it’.

The USQ policy of ‘flexible delivery’ means each unit/team aims to provide educational materials independent of place and time and in a medium suited to the students. The range of media incorporated include:

- print
- audiotape/teletape
- videotape
- teleconferencing (audio, audiographic and video)
USQ has implemented flexible delivery approaches in academic programmes for all students. Students can combine the attendance and distance modes of study (mixed mode study) to suit their lifestyles. For example, students can start their course by distance education at home, come on campus to continue their studies and then return home to complete their course by distance education. Enrolled students also have the option of studying in semester three (November–February) so that they can finish their course faster. However, subjects that are offered in semester three are available only in a distance education mode. Therefore the range of subjects offered is limited.

Within USQ, the flexible delivery initiative aims to provide better teaching and learning opportunities, at a time and place convenient to students and staff, through a variety of techniques and media. Flexible delivery at USQ incorporates not only traditional face-to-face and print-based delivery, but also uses a variety of electronic technologies to enhance student and teacher access to people and other learning resources.

Most recently, USQ has used new techniques in several units across the faculties of the University. Such techniques include:

- Computer-mediated assessment (CMA) which uses computer-based communications (electronic mail and computer conferencing) to provide an environment for discussion, collaboration, information sharing and networking.

- Telecommunications, such as teleconferencing, audiographic conferencing, and desktop videoconferencing. Telephone tutorials use the telephone system for direct personal contact between groups of students at regional study centres, and the lecturer on campus or at another location. The audiographic tutorial system has the added benefit of allowing students and lecturers to interact using voice and graphics. Desktop videoconferencing allows regional students and lecturers with suitably equipped personal computers, to interact with voice and video.

- Computer-assisted learning is another way to deliver instruction tailored to the individual’s needs. The key strength is the provision of immediate feedback and scope for remediation.

- Interactive multimedia (IMM) allows the use of interlinked text, pictures, sound and video within highly interactive computer-based environments. This may be achieved by using floppy disk, CD-ROM or Internet delivery.

- Unit materials delivered via the Internet to take advantage of the hypertext linking and multimedia capabilities of the World Wide Web.
13.3 Flexible provision practice

At the USQ, the electronic teaching and learning environment supports a learning process that is interactive, nonlinear and collaborative. These features include the use of an interactive study chart as a basic navigational tool, which sets the broad parameters of the subject matter content to be investigated, and lists a number of exemplary references. References are electronic and hot-linked via specific URLs. Additionally, the students are free to surf the Net for supplementary teaching–learning resources that meet their specific needs. They are also able to download assignments, with those of sufficient quality being added to the teaching-learning resources database for reference by future students. Interaction with other students, teaching staff and other experts, who act as mentors, is achieved through the use of CMC, using a web-based conferencing system. Students are encouraged to communicate through various electronic conferences, established for specific content areas as well as for informal social interaction.

USQ tuition materials and processes are designed by multi-disciplinary teams of distance education specialists working in conjunction with academics (Figure 13.1).

Figure 13.1 Unit team model – the USQ approach to courseware design and development

Most units of study have three items in each learning package: an introductory book, a study book and a book of selected readings. Many learning packages also have computer-managed assessment, audio or videotapes, books of worked solutions, diskettes etc.

The Instructional Designer (ID) works with the subject matter specialists to ensure effective teaching and learning strategies are utilised in the distance education packages. Workshops for writers/developers of distance learning materials are conducted by IDs to familiarise subject matter specialists with the range of
Effectiveness of models of flexible provision of higher education

technologies applicable to distance education and the most effective strategies to enhance achievement of the learning objectives. Materials Development Officers (MDOs) are responsible for the facilitation of distance education materials through the production process from initial writing to dispatch to distance students. Electronic Publishing Services is responsible for publishing study materials and examinations for external students. Interactive Learning Services (ILS) provides media and multimedia services and facilities to support the academic programme, research projects, promotional and marketing activities for the university and external clients. The Interactive Multimedia section of the Distance Education Centre is responsible for the development of multimedia courseware and interactive learning objects. A video production team specialises in designing and producing teaching, training and promotional material and consultation and advice on the effective use of media.

The Outreach Services, located in the Distance Education Centre, provide support for external students. The telephone and audiographic tutorials are available through Open Learning Centres, set up as a network to support Open Learning throughout Queensland. In addition, USQ has study centres in Brisbane and Ipswich. External students have the opportunity to attend campus for face-to-face lectures and tutorials, use of the facilities and to meet staff and other students. A residential school book is included in the study package and provides all the information students require to attend, such as timetables, unit information, registration, and accommodation.

A regional support network provides administrative and pastoral support to students in regional areas. When students enrol with the University, they have the opportunity to list their names for Learning Circles that are student self-help groups. Students can make contact with others in their region who are studying the same unit. This helps to lessen the feeling of isolation.

All USQ unit leaders may request an electronic discussion group for their print-based units; discussion groups and other forms of electronic communication are standard elements in online units, and some unit leaders also incorporate virtual chat sessions as part of their teaching.

A survey of instructional designers and unit leaders was conducted at USQ focusing on the concepts: choice for learners; flexible learning techniques and technologies; and flexible learning policies. Only one unit among those reporting had neither electronic discussion groups, nor teleconferencing (or videoconferencing) incorporated into the unit. There were, however, for this unit, opportunities for students to make contact by phone or email, or letter. Several units in the sample incorporated more than one form of group communication (that is, telephone tutorials and electronic discussion groups, for instance, to accommodate different access issues).

A number of units offer great flexibility across the number of offers per year, the mode in which students can study, and the extra choices or resources available to them. For instance, one of the sciences units is offered three times per year; it is offered in print for day and external students; is offered online; is available in print with optional WEB CT elements; has an electronic discussion group; telephone tutorials, has ancillary Website materials; and also has telephone tutorials. Another unit offers students the choice of studying via print, CD-ROM, or from a Web version of the unit, enhanced with interactive elements.
Other forms of flexibility are provided through Education units in the Further Education and Training (FET) programmes, where students may study totally online, they have an automatic option for an extra two-week extension on assignment due dates, and may extend their studies an extra semester if necessary. Often, in the FET online units, students become co-generators of unit content, and may often work in learning groups during the semester. They may also have opportunities to negotiate assignments within the unit guidelines.

On the variable of ‘place’ (under the heading of choices for learners), there was seen to be great flexibility particularly in relation to print materials. For online materials, this was seen as conditional dependent on access to the necessary technology to interact with the unit materials.

It appeared that it was in the ‘policies’ category that people perceived the lowest levels of flexibility. In the USQ Online units, there are no formal prerequisites, so this might be seen as ‘open entry’. For both the USQ Online and other USQ units, a unit specification is included in unit materials, outlining the expectations of requirements in each case. Students and staff have access to these through the respective student and staff intranets.

Other combinations of technologies and delivery approaches were identified in the survey information, and it became clear (even in the small sample employed) that there were varying interpretations of the terms used in the survey. For instance, the reference to ‘print materials’ (under the Techniques and Technologies heading, raised the question as to whether or not this should be limited only to print materials supplied by the institution, or if it could be applied where students had the opportunity (and choice) to print off copies of online or CD-ROM materials.

Further, the term ‘face-to-face’ generated questions as to whether or not other environments could offer some of the benefits of face-to-face interaction, without the participants actually being in the same room at the same time. For instance, synchronous communication, such as in videoconferencing, or in virtual chat sessions, offers the opportunity for immediate responses in student–student, or student–teacher–student interaction. Thus, the question of importance from this point of view was whether or not current terminology is discriminating enough to identify the issues that contribute to success or failure in flexible teaching/learning environments.

Responses received have highlighted the need to investigate further not only how staff are interpreting and responding to issues relating to flexible delivery at USQ, but also how these decisions and choices are being translated for students. The outcomes of such a survey would ideally be incorporated in updates to existing staff development resources and strategies.

### 13.4 Flexible learning and student outcomes

Evaluations of subjects have indicated generally positive responses to questions about:

- Ability to use the web facilities, especially asynchronous discussion.
- Whether the online element of the distance education programmes was meeting the student’s particular needs.
- Whether the online element of the distance education programmes was an environment in which students felt comfortable.
Students reporting negatively on specific aspects of their online study experience were nevertheless typically quite positive about the experience overall.

Students commented positively about the flexibility of the programme. Some frustration has, however, been expressed about time constraints imposed by administrative and assessment regulations. In some cases, to add flexibility, enrolments have been allowed to extend beyond one semester.

Students commented on a sense of interaction, social presence and collaborative learning developed through discussion, noting the critical role of the lecturer in making an effort to get to know the students, in providing encouragement and in facilitating group interaction.

On the negative side, students typically found workloads heavy and time consuming. In part, students associated this with coming to grips with online learning. They also associated it with competing time demands and failure to set aside adequate study time. Students found, as intended, that they were expected to read and research areas for themselves beyond the provided materials. The guidance incorporated in the tuition material to support this was well regarded.

The online environment can be intimidating to students who lack confidence. Some reported that, though they felt they were gaining from passive participation, seeing the extent of the experience of members of the group dissuaded them from contributing. This may not differ from the role these students play in face-to-face classes.

Some students reported negatively on their experiences with real-time chat. This facility was used more for the sake of providing the experience of chat as part of a study of communications rather than as a means of educational communication. Some students indicated that they enjoy chat as it gives a greater sense of participating in a group.

The USQ Equity Report 2000 indicates average or better than average retention and success rates for the equity categories: women in higher degrees; students with a disability; rural students; isolated students; low-SES students under 25 years; and low-SES students over 25 years. Non-English-speaking background students had a retention ratio of 0.91 and a success ratio of 0.88 in 1999.

13.5 Flexible learning and student participation

USQ has five studios equipped for teleconferencing. Audio, audiographic and video tutorials provide direct contact between groups of students in regional study centres and the lecturer on campus. Student attendance at the tutorials is voluntary and all costs are incurred by the DEC.

Reports from Regional Liaison Officers (RLOs) suggest that participation in teletutorials is decreasing, though in some cases demand for tapes of the tutorials has remained high. The tapes however depend on the tutorials occurring. In some cases they were cancelled for want of interest.

Audiographic services include Peer Assisted Learning Sessions (PALS) for some subjects using former students who had done well in a subject to assist current students. These services have been well received by participants, however some RLOs report declining popularity for PALS.
The use of email and online discussion on the other hand has increased significantly. Some RLOs expressed concern that the future of teletutorials might be threatened, disadvantaging those students who did not have ready access to Internet discussion or who preferred not to use it.

Outreach Services records indicate that total communications with students have steadily increased over the past six years. The number of letters and faxes has decreased, telephone calls have varied and the number of emails has steadily increased (Figure 13.2).

13.6 Flexible learning and cost effectiveness

Some of the characteristics of the various models of distance education that are relevant to the quality of teaching and learning (Taylor, 1999) are summarised in Table 13.4, along with an indicator of institutional variable costs (Taylor, Kemp and Burgess, 1993). Variable costs tend to increase or decrease directly (often linearly) with fluctuations in the volume of activity. In traditional distance education delivery, the distribution of packages of self-instructional materials (printed study guides, audiotapes, videotapes, etc.) is a variable cost, which varies in direct proportion to the number of students enrolled. Internet-based delivery, however, changes significantly the institutional costs associated with students gaining access to learning experiences. For example, the use of an automated response system can reduce the variable cost of computer-mediated communication.
13.7 Conclusion

Over time, USQ has shifted the focus of its activities from the traditional correspondence model to multimedia models supported by time flexible communication systems. Potential for economies of scale apply with interactive multimedia (IMM) as with print but the design and development costs of IMM are likely to be much greater than for print. The use of computer-mediated communication limits the scope for economies of scale except in so far as peer interaction can be substituted for teacher–student interaction and common response system—such as posting responses to frequently asked questions (FAQs) or drawing response from answer banks—are employed. USQ is working towards automated answers to student queries drawing from a database. This has the potential to reduce labour costs, affording economies of scale.

With regard to current demands on academic staff time, flexible provision represents the major activity of USQ and has been built into the calculation of academic workloads. The development of print or online materials for instance can attract a credit of half of the face-to-face workload credit for the subject. The area in which academic workload is increasing, with increasing student use of email and online discussion, is in communications rather than in materials design.
### Table 13.4 Models of distance education – a conceptual framework

<table>
<thead>
<tr>
<th>Models of Distance Education and Associated Delivery Technologies</th>
<th>Flexibility</th>
<th>Characteristics of Delivery Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Generation: The Correspondence Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Print</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Second Generation: The Multimedia Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Print</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Audiotape</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Videotape</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Computer-based learning (e.g. CML/CAL/IMM)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Interactive video (disk and tape)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Third Generation: The Telelearning Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Audio teleconferencing</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>• Videoconferencing</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>• Audiographic Communication</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>• Broadcast TV/Radio and audio-teleconferencing</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Fourth Generation: The Flexible Learning Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Interactive multimedia (IMM) online</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Internet-based access to WWW resources</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Computer-mediated communication</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fifth Generation: The Intelligent Flexible Learning Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Interactive multimedia (IMM) online</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Internet-based access to WWW resources</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Computer-mediated communication, using automated response systems</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Campus portal access to institutional processes and resources</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
14. University of Ballarat (Graduate Certificates)

Kate Brass, Allan Donnelly, Lyn Roberts, Natalie Radomski and Colleen O’Hara

This case comprises three courses that exemplify the ways in which the University of Ballarat seeks to cater for the diverse learning needs of its student population by developing flexible approaches to programme provision. The selected courses are: the Graduate Certificate of Nursing (Oncology/Palliative Care); the Graduate Certificate of Information Technology (Online), and the Graduate Certificate of Education (Tertiary Education). In keeping with the University’s curriculum design models and guidelines, all three courses are built around learning experiences that enable participants to develop generic and transferable knowledge skills and values, in addition to those that are discipline/content specific. These courses are based on a commitment to a flexible learning and teaching strategy that focuses on meeting the needs of learners, developing learning communities and fostering lifelong learning.

14.1 Context

The University of Ballarat is a dual sector, multi-campus, and tertiary education institution situated in central and western Victoria. The University is made up of a TAFE Division and a higher education Division and results from the amalgamation in 1998 of three antecedent institutions: the former University of Ballarat located in Mt Helen, a suburb of Ballarat; the School of Mines and Industries (SMB) located in central Ballarat, and the Wimmera Institute of TAFE (WIT) with campuses located in Horsham, Stawell and Ararat. To cater for the diverse learning needs of its student population both within, and across its constituent higher education and TAFE Divisions, it was clear that the University needed to develop flexible approaches to programme provision. To facilitate this, a joint working party of the Board of Technical Studies (TAFE Division) and Academic Board (higher education Division) worked throughout 1998 to develop a ‘Flexible Learning and Teaching Statement’. This statement was the first piece of joint policy development by the Boards following amalgamation and sets out the principles that underpin the University’s approach to the provision of flexible learning and teaching experiences. Underpinning this approach is a commitment to a flexible learning and teaching strategy that focuses on meeting the needs of learners, developing learning communities and fostering lifelong learning.
14.2 Flexible provision: policy and practice

14.2.1 Policy

The University’s Learning and Teaching Statement, which underpins subsequent development of related policy, describes the view of ‘flexible learning and teaching’ adopted by the University as follows:

Flexible learning and teaching is an approach to education and training that allows for the adoption of a range of learning strategies in a variety of learning environments to cater for differences in learning styles, learning interests, needs and variations in learning opportunities and/or circumstances.

University of Ballarat, 2000

The fundamental tenet of the University of Ballarat flexible learning and teaching strategy is that the focus be on the learner. All planning and decision making will be based on meeting the needs of learners and enhancing the learning process by developing what the University has to offer into a form which makes it more accessible and useable by learners.

University of Ballarat, 2000

The Flexible Learning and Teaching Statement goes on to identify aspects of ‘flexible’ programme provision about which coordinated decisions have to be made. These are (University of Ballarat, 2000):

- **Learning strategies and teaching pedagogies** that have as their focus the needs of learners and that empower learners to take increasing responsibility for their own learning.

- **Learning environments** that provide quick and convenient access to expert tuition and support that will motivate, guide and instruct; that provide access to peers for mutual support and group activities and that provide regular feedback about learning progress. Such environments may be actual or virtual and usually a combination of both.

- **Assessment procedures and practices** that are valid, reliable, fair and feasible; that grant credit for prior learning or current competencies through convenient processes; that encourage ‘fast tracking’ and opportunities for reassessment; acknowledge different levels of achievement in terms of clearly defined criteria and incorporate equitable and fair appeals procedures.

- **Support systems** that will enable learners to have recourse to good advice in setting their learning goals, time lines and study method; that allow them to learn at times of their choice, at a place of their choice; to progress at their own rate and that accommodate the learner’s preferred learning style.

- **Access to appropriate learning resources** and support in the application of appropriate learning technologies, including information technologies and communication systems, in a manner that is both valuable and worthwhile according to established criteria.

- **Information systems** that provide clear, accurate and prompt information and advice about program availability, delivery, access, modes, services, resources and all costs.
• **Administrative systems** that facilitate students enrolling at a time that is convenient to them, and on completion, provide prompt notification of results and testimonies to that effect.

Clearly, not all programmes are flexible in all of the ways inherent in each of the aspects described above. The Statement goes on to say that:

> The critical component of the University of Ballarat's flexible learning and teaching strategy is the adoption of any of these aspects, based on the establishment of the needs of a particular group of learners and/or on the particular type of program, its learning outcomes and the methods of assessment.

University of Ballarat, 2000

### 14.2.2 Practice

The ways in which this model of flexible learning and teaching is actually implemented varies across the University’s programmes in response to the learning imperatives inherent in the program and the contextual features in which the program is embedded. Three examples of flexible provision have been selected to illustrate the various practices that occur. These are: The Graduate Certificate of Nursing (Oncology/Palliative Care); The Graduate Certificate of Information Technology (Online); and the Graduate Certificate of Education (Tertiary Education).

#### Graduate Certificate of Nursing (Oncology/Palliative Care)

The Graduate Certificate of Nursing (Oncology/Palliative Care) (GCNOPC) is a collaborative programme offered by the School of Nursing at the University of Ballarat and St John of God Health Care, Ballarat. This course, based on a program previously offered by St John of God Health Care alone, provides educational experiences that promote the development of advanced knowledge and skills in cancer nursing. The course contains three theory units: ‘Oncology and Palliative Care Nursing in Context’; ‘Oncology and Palliative Care Nursing 1’ and ‘Oncology and Palliative Care Nursing 2’, and one fieldwork unit entitled ‘Fieldwork in Oncology and Palliative Care Nursing’.

Learning in this course is centred on a series of detailed and carefully structured Study Guides and is supported by the use of the web-based platform, LearningSpace, as a source of information and means of communication. The design of the Study Guides is very much based on adult learning principles so that the focus is clearly on content and learning tasks that are relevant to the participants’ practice. Given the ever-advancing nature of knowledge in the area of cancer nursing, the Internet is widely used as a source of contemporary information. Reputable web sites in this area are well in advance of textbooks in terms of recent developments in oncology and palliative care and so are an important resource that supports learning.

The course is flexible from several perspectives. To accommodate the needs of participants, all of whom are practising nurses with demanding work schedules, there is considerable flexibility in terms of the pace at which learning takes place.
Whereas there are published due dates for completion of assessment tasks, in reality almost all participants take far longer to complete them and extensions are commonplace. Flexibility is also provided in that participants may choose to do one or more units per semester depending on their motivation and other commitments. The range of content includes professional, ethical and legal issues and allows the participants to take a more academic and theoretical perspective in comparison with the skills driven, hospital-based course from which the present course developed. Nevertheless, the knowledge and skills that are required by nurses practising in this area are quite prescribed, and there is little flexibility in terms of the content that participants are required to learn within the three theory units. However the fieldwork unit is linked to the participants’ own practice in their workplace and within that unit there is far more flexibility with respect to the content. In fact many of the participants meet the requirements of this unit by getting credit for knowledge and skills developed during recognised workplace practice outside of the course. For participants not meeting the requirements for credit, the content to be learned is negotiated with the course team through a learning contract.

There is also flexibility in terms of when the learning begins in the sense that participants’ prior learning is recognised and built on. In terms of when the learning ends within the units, participants are not bound by rigid due dates for learning tasks and assessment. Given that learning in the fieldwork unit, in particular, is very much linked to the participants’ own practice and encourages reflection on that practice, the aim is that the learning would not in fact end, but the extent to which it continues beyond the course is entirely the participants’ choice. Most participants use the flexible arrangements to enable them to ‘see out’ the course.

---

**Graduate Certificate of Information Technology (Online)**

The Graduate Certificate of Information Technology (Online) (GCIT) is a four-unit Graduate Certificate. It was originally designed for students who had a first degree in a non-information technology area of specialisation. However, in addition to the target postgraduate audience, highly motivated undergraduate students now complete these units as part of their first degree.

The Graduate Certificate of Information Technology (Online) is offered as an online course precisely because participants find it very difficult to attend on a regular basis. The course was originally designed to appeal to teachers in western Victoria who wanted to complete a postgraduate qualification in information technology. In fact a broader range of participants located across a much wider geographical area was attracted by the course. Attendance for many participants was problematic for a variety of reasons including:

- geographical location;
- work demands;
- pressures associated with home duties; and
- pressures for participants who have been out of the workforce for varying periods of time and are seeking qualifications in IT to re-enter the workplace.
The online mode of delivery seeks to accommodate the needs and preferences of those participants with respect to where the learning takes place. Essentially students can now participate in the course from any location provided that they have access to a computer, appropriate software and an Internet connection. Off-campus participants are provided with the appropriate software to enable them to complete the course online.

The course is flexible in a variety of ways. In terms of when the learning takes place, many off-campus participants found it difficult to sustain engagement with the course across the 13–15 week university semester. These participants prefer to complete each module in a more intensive mode, and so each unit is offered as an eight-week module.

While LearningSpace does enable asynchronous threaded discussions to take place, having weekly, synchronous/real time discussion groups has enabled the participants’ preferences for real time interaction and collaboration to be accommodated. This weekly class uses LearnLink software that allows the transmission of both voice and screen data, and shared applications such as MS Paint and MS Excel. This enables real time communication between teacher and student in a structured virtual classroom environment. These discussion groups take place every Monday evening. Sessional staff members, trained by the course coordinator, facilitate these discussions. Participants have identified these opportunities for discussions as a real strength of the course. Unlike the asynchronous discussions, they really engage the students and support elements of the learning tasks that require interaction.

Although the participants do not have a choice about the timing of these interactions, there is flexibility in terms of location; participants do not have to be on campus. They do need access to an Internet connection and a computer. An important aspect of meeting the students’ choice with respect to real time on line discussions is the provision of the required software to the students. This is done using a CD-ROM that is sent to each student before the course begins. The CD-ROM contains all the necessary software required to run LearnLink along with a range of media files too large to be downloaded via an Internet connection.

Although the course includes a number of different kinds of assessment tasks, such as, participation in discussions, online multiple choice and short answer questions and in some cases an online exam, participants are required to complete all tasks and there is not much flexibility in terms of student choice with respect to how assessment tasks are completed.

**Graduate Certificate of Education (Tertiary Education)**

The Graduate Certificate of Education (Tertiary Education) (GCETE) has been specifically designed to meet the learning needs of University staff and external participants, who have differing levels of experience and qualifications, teach in differing contexts and, who are at different stages in their careers. It is built on collaborative, workplace-based action research/action learning approaches. The GCETE has been developed to provide participants with relevant, sustained and engaging professional development opportunities. To provide effective learning opportunities for all participants the course has to have flexibility in the ways it
provides choices for learners. The course design has a number of overlapping features, which together contribute to the provision of effective flexible learning opportunities.

Course members can participate individually, and as part of informal groups, in a variety of learning activities during facilitated formal sessions. These sessions are facilitated at two different locations chosen to limit the travelling time of participants. These sessions are scheduled as far as possible to coincide with the least busy times in the university calendar.

In addition, learning is facilitated between these sessions in small ‘Learning Groups’. In previous years, each participant was allocated a Learning Group facilitator, who worked with him or her individually and in small groups. Increasingly, the participants chose to work individually with the Learning Group facilitator at times that are mutually agreed rather than in small groups. This is perhaps partly a response to increasingly demanding work schedules, and the geographic spread of participants across five campuses since amalgamation. Networks now tend to develop among participants that are based on informal connections around areas of common interest, rather than around Learning Groups facilitated by members of the course team.

The course is made up of four integrated units: Teaching and Learning; Curriculum Design; Assessment; and Information Technology. To meet the needs of participants a number of delivery modes are used. The course is resource based using both printed materials and online materials that can be accessed through the course web page. In addition, aspects of the course are now being developed so that LearningSpace can be used as an additional mode of learning provision. Interactions among participants and members of the course team may take place in person and via email or telephone.

In combination these features of the course design and delivery provide flexibility in terms of the participants’ preferred learning style and when that learning occurs. Although attendance at the formal sessions is not compulsory in a formal sense, participants do need to attend the majority of sessions to actively engage with the complex, practice-related issues that the course addresses. This means that there is not total flexibility in terms of when the learning takes place. However, most of the participants actively choose to attend in any case, as these sessions provide an opportunity to discuss learning and teaching concerns rather than administrative matters, and is in contrast to the relatively isolated practice of many teachers.

The course offers considerable flexibility in terms of the pace at which learning takes place within the participants’ action research/action learning projects since participants are not required to finish this work within the academic year and can negotiate extensions of up to one year. With respect to the Introductory Activities there is less flexibility in reality because the completed tasks form the basis of discussions in the scheduled sessions and so participants really need to complete the tasks before the relevant session to participate fully. However, participants are free to participate and learn from the exchange of ideas whether they have completed the appropriate learning tasks and assessment or not.

Informed by the relevant literature the GCETE is built on collaborative, workplace-based action research/learning approaches. This provides a mechanism whereby
participants can further develop their understandings of their own practice and the context in which it takes place, and change and develop that practice. Learning is facilitated by a series of introductory activities that address aspects of the participants’ own practice with respect to Teaching and Learning, Curriculum Design, Information Technology and Assessment. In addition, based on a view of ‘Curriculum’ that conceptualises it as being about the teacher, the learner, the content and the learning environment, the learning objectives of the course are addressed using action research/action learning projects that are collaborative in nature and are intrinsically located in the complexity of the participants’ own practice. This allows the participants to focus on issues that are of concern to them while achieving the learning objectives of the course and so provide for flexibility in terms of the content aspects of the course.

Flexibility in terms of the assessment aspects of curriculum is provided because, while assessment criteria are provided for each learning task, they are written to provide scaffolding for completion of the task and allow participants considerable flexibility in the approach taken. For example, issues and dilemmas associated with assessment of student learning are addressed within the course using an individual scenario writing task. Participants write scenarios based on an aspect of their own experience. Discussion of these scenarios form the basis of subsequent discussions where participants and the course team share their perspectives and possible approaches to the issues/problems raised. An important aspect of flexibility in terms of how learning is assessed within the course relates to the fact that learning and assessment are not regarded as separate processes. Rather, they are integrated and both are facilitated by the same range of tasks, all of which draw on and facilitate reflection on the participants’ own practice, as described above.

Flexibility in terms of participants’ needs and preferences about where learning starts is built into the course because the first learning activity (participants developing and sharing metaphors for learning in their classroom) inherently focuses the beginning of learning within the course for each participant on the conceptions of learning and teaching that they have developed over their life experiences thus far. This provides a launching point from which individual participants go on to develop and reflect on their learning during the course. Since the course is designed to provide sustained professional development opportunities and is focused on the participants’ own practice, it is built on the idea that the learning does not in fact end either at the close of any particular activity or at the conclusion of the course itself. The extent to which the learning continues beyond the course in practice of course varies enormously among participants, and is dependent on a variety of personal and professional factors.

Given that the GCETE is designed to be a professional development opportunity based on collaborative ways of working, participants are required to work with others in a collaborative way within their workplaces. However, there is flexibility in terms of with whom the learning takes place in the sense that participants can choose which area of practice to focus on and therefore which colleagues and groups of students to learn with. All formal sessions are facilitated by more than one member of the course team so that multiple voices are always represented, which expands choices around with whom the participants can learn. While each participant is assigned to a particular learning group facilitator, this is not constructed so that participants do not feel free to discuss their projects and other
aspects of the course with other members of the course team even though, realistically, each team member can only interact very closely on a sustained basis with members of their own learning group.

14.3 Flexible learning and student learning outcomes

Across all three courses, participants develop a range of generic skills apart from the specific content to be learned in each course. For instance, while many participants come to the nursing course with nursing practice experience, not many have well developed skills such as information literacy/academic writing skills. Providing opportunities for participants to learn those skills, rather than exclude them from the course or allow them to flounder, is an important way in which the course is flexible in terms of both entry to the course and how learning takes place within it. Staff members emphasise interactions with students and the provision of detailed feedback to participants as important ways in which this learning is facilitated throughout the course. Feedback from students indicates that these strategies contribute to their learning. For example, in the qualitative section of a formal unit evaluation questionnaire, students commented positively on being able to ring or email staff to seek clarification about learning tasks and assessment. One student referred to the support that was available more broadly when he commented:

‘I was always comfortable with the idea that the teachers were there when I needed anything and of course, as I moved through the course I found my needs lessened.’

These views are borne out in student responses to quantitative evaluation items. When completing formal unit evaluation questionnaires, students consistently strongly agree with statements that: ‘student assignments are marked and returned promptly’, and that ‘there is adequate and useful feedback to students on their progress’. In addition, formal evaluation using written questionnaires indicate that the majority of students agree that:

• teaching staff are prepared to be flexible to meet student learning needs;
• the study materials are designed to make students think critically; and
• the study materials are designed to make students active learners.

Feedback from participants indicates that although many of them were extremely nervous about the use of information technology within the course, they have found that their skill and confidence with respect to word processing, use of email, use of library databases, and use of the LearningSpace platform has increased enormously. One of the ways in which the course tries to foster the development of those skills is to set learning tasks which requires students to use the technology to obtain information that they require but that is not readily available in print form. Accessing the various Acts that pertain to the legal aspects of controversial issues such as ‘refusal of treatment’ in the various states in Australia is an example of this approach.

Generic skill development is also a goal of the online information technology course. Being able to collaborate and interact using both synchronous and
asynchronous modes is one of the most important things that staff want students to learn in this course. For example, within the Interactive Multimedia unit, participants who are geographically far apart are able to interact and collaborate to develop and present multimedia material to meet the requirements of client briefs, in ways that they would be required to if they were in the workplace. The processes used in industry to achieve those outcomes are reflected in those used within the course itself. To teach those processes the course models, and engages students in, the ways of interacting that the students are required to learn.

Feedback from course participants, obtained using focus group interviews indicates that participants are well satisfied with the flexible provision of learning opportunities in the tertiary education course. In many ways it is problematic to separate generic skills and discipline specific skills in the context of teaching as a discipline. Accordingly, the mode of flexible delivery used in this course has been designed to facilitate a range of interconnected learning priorities so that participants and the course teaching team develop their abilities to: engage in sustained reflective practice, inform their practice by relevant literature and link the theoretical and practical aspects of contemporary teaching practice; engage in collaborative ways of working that are respectful of others, and develop genuinely student centred approaches to teaching and course design.

Feedback from past participants, obtained using focus group interviews, indicates that participants share the views of staff with respect to the learning outcomes of the course, and are well satisfied with the flexible provision of learning opportunities that the course provides. In particular, they commented positively on a wide range of aspects that contributed to their learning including: the relaxed non-threatening atmosphere; the opportunity to reflect on their own practice and bring about change, the opportunity to link theoretical and practical aspects of teaching and learning; the opportunity to interact with others which boosts confidence and highlights common experiences; and the mentoring experiences that the course provides.

A comment from one participant sums up points made by many with respect to the model of flexible provision used in this course and the learning outcomes that it facilitates:

'The learning outcomes have a strong focus in what teaching and learning means to each student. The student is encouraged to question and develop his/her own teaching philosophy and be reflective about the importance of learning. The GCE/TE student develops and upgrades an array of skills which includes a seamless assimilation of educational technology skills and creates confidence in working in a variety of classroom situations.'

'From my point of view, the GCE/TE course is truly flexible. The workshops and discussion times are regular, well presented and well documented. Students are reminded well in advance and know in detail what will be presented in those workshops. The support is generous and apparent, without hampering the student's progress, and allows the student to gain confidence and skill in a self-directed learning environment. The presence of a facilitator and the overseeing of small groups by a facilitator is supportive and encourages an easier confidence to ask for help when it is needed.'
14.4 Flexible learning and student participation

The nursing course is concerned with providing greater access to learning opportunities for registered nurses whose access had previously been limited by geographic location and demanding professional and personal lives. Another aspect of the course that is important in terms of access is flexibility around entry requirements. Participants do not have to hold a first degree to be admitted, their total life experiences are recognised when entry to the course is negotiated. In particular it is designed to provide access to a learning environment that integrates practical and technical knowledge and skills, and more theoretical, academic and critical ways of knowing.

With regard to any reduction of student ‘drop out’ and course failure rates, it is difficult to make meaningful comments about this aspect of the course. The course has not run before and thus there is no useful basis for comparison. However it is clear from student feedback that many students at least regard the priority that staff place on maintaining interactions with students and providing them with timely feedback as vitally important. For example, in a letter to the course coordinator thanking him for his assistance one student wrote:

‘I really appreciated your availability and help during my first semester. There is no doubt I would have withdrawn without it. I was very pleased with my essay result. Again thank you for your prompt response to my request to know how I am progressing. Now that the pressure is off I am attempting to master some further computer skills and have even read a book on grammar!’

While no formal feedback has been sought from participants as to why they chose this particular course it is clear from anecdotal evidence that positive, enthusiastic word-of-mouth publicity about their experience of the course, by present participants in their workplace, has influenced others, and played an important role in their decision to enrol in this course.

In the case of the tertiary education course, both formal and informal feedback suggests that several aspects of this course encourage university staff and others to participate in professional development at postgraduate level. The aspects of the course that encourage that increased participation include the fact that it is an award program of the University which is also a teaching qualification, rather than a series of disconnected, workshop-like activities.

Another aspect of the course that is important in terms of access is flexibility around entry requirements. Participants do not have to hold a first degree to be admitted; their total life experiences are recognised when entry to the course is negotiated. In addition, the focus is very much on collaborative enquiry, which makes the course less threatening than it might otherwise be. This is important because many teachers have a conception of learning and teaching that leads them to feel that they have to ‘know everything’ and can not express doubts about aspects of their own practice. Since the amalgamation, which led to the dual sector structure of the University, many more TAFE staff are participating in the course. This participation has created a pathway to postgraduate study that was previously not necessarily apparent to staff at the antecedent TAFE institutions.

Both the course entry requirements and the ways in which the learning tasks and assessment are linked to the participants own practice in facilitating learning has also increased the participation of many staff members who would not otherwise
participate in a postgraduate teaching qualification. For example, staff working in
the library and information services area, in technical support roles in schools and
in diverse roles such as counselling, have successfully participated in the course.
This is recognised as an important way in which the course is flexible in meeting
the needs of a broad range of participants. As one course team member put it:

"In most other universities a lot of courses did not recognise early enough that
there was a shift in the roles of support staff who worked in, for example, the
library or information services, a shift that was bringing them in to a much
closer association with staff and students in a variety of different ways, and
breaking down the divide between academic staff and general staff in higher
education and teachers and support staff in TAFE."

The importance of the flexibility of the GCETE with respect to encouraging those
engaged in roles not traditionally regarded as being ‘relevant’ to participate in
postgraduate tertiary education is underlined by the following feedback from a
participant:

"The Graduate Certificate in Education/Tertiary Teaching allowed me to
consider my work practices in a more meaningful way. To reflect on my teaching
delivery and journal the ‘good’ and the ‘not so good’ outcomes as a way of
continually changing and improving the way I teach.

Researching a contemporary issue within my work environment was for me a
first and quite an exciting learning experience in itself. The result has brought
about some valuable changes already within my workplace. The course structure
was suitably flexible to allow me to make choices in my line of study that were
very relevant to my current work situation and therefore very valuable to our
organisation. I wasn’t sure this would be possible when I first began the course
being from a non-teaching (traditionally) background (libraries)."

The information technology course was originally designed to provide greater
access to postgraduate education for teachers in western Victoria who wanted to
complete a postgraduate qualification in information technology. Not as many of
that group as the School of Education expected have enrolled in the course but it
has improved access to postgraduate qualifications for other groups, including
many for whom attendance at the University was problematic for a variety of
reasons. These reasons include remote geographical location across regional/rural
Victoria; work demands; pressures associated with home duties; and pressures
associated with being out of the workforce for varying periods of time and needing
to retrain. Some undergraduate students took the option of enrolling in units
offered for this online course concurrently with on-campus undergraduate study.
However, many of them have chosen to change to the on-campus version of those
units. They found that without scheduled classes and participation and interaction
with others their motivation to complete within the set time lines diminished, due
to clashes with the on-campus learning and assessment schedules. Some highly
motivated on-campus students have managed these intensive workloads.

### 14.5 Cost effectiveness

In the case of the nursing course, the main cost drivers, that is, the things that most
money is spent on, are preparation of materials to facilitate learning, and resources
to support the online aspects of the course. For example, the cost of the staff to
facilitate the development of the course to incorporate use of the LearningSpace platform is a significant 'additional cost' with this form of flexible delivery. It is the view of staff that this model is not more cost efficient than traditional face-to-face teaching particularly in the short term. Perhaps once the initial materials have been developed they can be redeveloped and used in different ways so this approach may become more cost-effective in the longer term.

Significant costs with respect to the information technology course relate to technical and hardware provision including the maintenance of a Domino server. Staffing costs relating to the development of online materials are significantly higher at this stage, than they are for traditional face-to-face modes.

One staff member summed up the concerns of many at the University who are engaged in flexible delivery of courses, particularly courses with a significant online component, when she said:

‘With respect to 'economies of scale' they really are fooling themselves because it [online delivery] is harder on staff, it is more time consuming than face-to-face. Not only that, if that is all you do it alters you way of working. It has to if you want to do it well. You have to be, to do much more of real mentoring. I don’t know if everyone is equipped to do it, because I know that some academics are glad to close the door on the students. In the online situation they will have to open their door much wider than they have now... The queue is now on the machine, and it takes a lot longer to answer a question by email if you want to do it properly, than it is to answer it face-to-face. Even more so if it is a technical question, it is much easier to show them how to do it face-to-face in front of a computer than to describe what to do. If you want to do it properly in an online environment you have to learn to do it visually in that medium, not just use text. On line delivery will cost a lot in terms of professional development, not just equipment costs, and that professional development will have to be ongoing because the technology is changing rapidly all the time.’

Aspects of these sentiments are reflected by the comments of staff teaching in other courses that have a large online or distance component, including those of staff and students in the nursing course referred to above.

With respect to the tertiary education course, the main cost driver is salaries for the course team, who prepare resources, facilitate formal sessions, play the role of project/research supervisors, have sustained collaborative interactions with participants and provide an administrative framework to support the course.

The numbers in all three courses are such that no economies of scale are being provided at present. Given the nature of the courses it is difficult to envisage how the numbers could be increased to the levels where economies of scale would come into play while providing the kind of learning environment that is required to meet the learning needs of participants.

14.6 Conclusion

This paper has focused on three courses that represent three different ways in which the principles that underpin the University’s Flexible Learning and Teaching Statement of Policy have been played out in practice. Staff and participants’ reactions to the learning experiences provided, indicate that each of the following
aspects of the learning environment (identified in the Flexible Learning and Teaching Statement) needs to be accommodated in the design and delivery of programmes if learners’ needs are to be met. In other words, flexible provision needs to encompass, to varying degrees, flexibility in terms of: learning strategies and teaching pedagogies; learning environments; and assessment procedures and practices. This needs to be supported by access to appropriate learning resources and appropriate learning technologies, including information technologies and communication systems, and appropriate and flexible administrative systems.
Part Three

Conclusions

The final part of this report summarizes the findings from the case studies and presents conclusions based up the survey of Australian universities, the findings from the case studies and literature in the area. Some possibilities for the furthering of effective and cost effective of flexible provision of higher education are identified.
15. Summaries of findings from case studies

The cases were selected to cover the identified models of flexible provision of higher education. In keeping with the focus of the study on the regional provision of higher education the cases were drawn from non-metropolitan regions. The selection of the cases is described in Section 3.7.

15.1 Depictograms of case findings

Case study findings are summarised below employing depictograms. The depictogram is a tool for providing a graphic summary of an interpretation of data derived from case studies. It depicts one or more functions against one or more criteria for each case investigated. The methodology is described in Section 3.9.

In the case of the evaluation and investigation of the effectiveness of models of flexible provision of higher education a set of depictograms is used as a tool for depicting flexibility, effectiveness and cost effectiveness (effectiveness + costliness).

15.1.1 Depiction of flexibility

The bars for the function flexibility of provision of higher education represent the models of flexible provision in Section 1.2.4:

- moving time and place to suit the learner;
- offering time and place flexibility;
- open entry;
- offering choice of learning style, pace and collaboration;
- offering alternative entry and exit points; and
- providing choices of content and assessment.

15.1.2 Depiction of effectiveness

The bars for the function effectiveness represent the indicators of effectiveness defined in Section 1.2.5:

- access to higher education for those in non-metropolitan regions and for those with work and social commitments;
- learning outcomes;
- student satisfaction;
- staff satisfaction;
- retention of students/completion of students; and
- criteria defined by the major aim(s) of the education provider in relation to the case.
15.1.3 Depiction of cost effectiveness

The cost effectiveness for the particular case is represented by considering concurrently the function effectiveness and the function costliness. The bars for the function costliness represent a comparison with traditional approaches in terms of:

- long term costs of infrastructure and equipment;
- the level of operating expenses;
- the provision of specialist additional support to students or staff;
- demands on academic staff time; and
- the operation of economies of scale.

Staff time is one measure of the resources applied to (that is, the costliness of) flexible provision of higher education. Staffing costs are incorporated in operating expenses but demands on staff time are represented separately to operating expenses as cases reported increased devotion of staff time to teaching with the introduction of flexible provision of higher education unrelated to changes in expenditure on staffing.

High costliness is plotted to the left of centre and low costliness to the right of centre; the opposite to the arrangement for effectiveness. A cost-effective case is represented by entries for costliness and for effectiveness biased to the right-hand end of the bars. An ineffective and costly provision is represented entries at the left-hand end of the bars. Various combinations and gradations of cost effectiveness may be represented.

15.1.4 Descriptors

Text descriptors represent evidence of outcomes apparent from the case study (as distinct from descriptions in the case study of intent or design).

Text descriptors are:

- short text descriptions of findings of the selected case study in relation to the particular function and criteria;
- located (left-hand justified) on a scale graded from one to eight;
- from low on the left to high on the right for the function – flexibility;
- from low on the left to high on the right for the function – effectiveness;
- from high on the left to low on the right for the function – costliness;

[producing a series of right-hand-biased entries for a flexible, effective and cost-effective case.]

- located according to the reviewer’s interpretation of the case, bearing in mind the type of evidence which would lead the reviewer to locate the descriptors for the particular criteria at either end of or at the mid point of the scale.

15.1.5 Bands

Bands represent the range of outcomes of a case against the particular criteria.

Bands are:

- shaded areas covering one or more cells either contiguously or discretely
- located on a scale graded from 1 to 8
- from low on the left to high on the right for the function – flexibility
from low on the left to high on the right for the function – effectiveness
from high on the left to low on the right for the function – costliness
[producing a series of right-hand-biased entries for a flexible, effective and cost-effective case.]
located according to the reviewer’s interpretation of the case, bearing in mind the type of evidence which would lead the reviewer to locate the band to either end of the scale or to locate it at the mid point of the scale.

Figure 15.1 indicates that in this simulated case:

- there is some flexibility in provision in that there is an attempt to suit the time and place of tuition to the learners’ needs and to offer some choice of time and place of learning, together with some choice of mode of learning and of content. Traditional academic constraints on entry and pace of learning and assessment requirements remain.
- the provision is reasonably effective both against its own objectives and against the criteria for effectiveness used in this study.
- the provision is costly in that it requires extra computer laboratory facilities, special project funding, additional support and in that it places high demand on academic staff time. The case could be described in summary as ‘effective but costly’.

Figure 15.1 Depictogram example (simulated)
15.2 Depiction of Swinburne University of Technology (Lilydale) findings

The findings from this case are summarised and depicted below:

- Flexibility is offered through the regional location of the campus and the multi-modal approach that allows students to choose combinations of face-to-face, online, print and video-on-demand tuition modes. The multi-modal approach accommodates individual learning style preferences. Flexibility is limited by course requirements and in content and assessment choices in some subjects.

- The provision is effective in terms of regional enrolments, accommodation of work commitments, development of generic learning skills, attainment of intended learning outcomes, and retention and completion rates. There is a high level of student satisfaction generally though there are some concerns with constraints on flexibility. Staff indicate enthusiasm for the approach and commitment to it but express concerns about workload and limited opportunities to engage in research. The provision satisfies the commitment of the university to flexible provision of higher education on its Lilydale campus though the face-to-face component is greater than originally envisaged.

- Equipment and infrastructure costs are marginally more expensive than for traditional provision. There are some additional support costs but the operating costs are low for the number of students enrolled. The operation places high demands on academic staff time.

- The case could be described in summary as highly flexible and as effective but as somewhat demanding on resources though not on operating funds.
Figure 15.2 Swinburne University of Technology (Lilydale)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving Time Place</td>
<td>Flexibility Low</td>
<td>Flexibility High</td>
</tr>
<tr>
<td>Time Place Flexibility</td>
<td>regional location of campus</td>
<td>face-to-face multi-modal options</td>
</tr>
<tr>
<td>Open Entry</td>
<td>low tertiary entrance ranking</td>
<td></td>
</tr>
<tr>
<td>Style Collaboration Pace flexibility</td>
<td>accommodates individual learning styles</td>
<td>MML offers some pace flexibilities</td>
</tr>
<tr>
<td>Alternative Entry points Exit points</td>
<td>standard UG programs</td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment Choice</td>
<td>limited choice of content &amp; assessment</td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Regional participation</td>
<td>80% regional enrolment</td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td>generic &amp; learning skills development</td>
<td>work-based learning employer satisfaction</td>
</tr>
<tr>
<td>Student satisfaction</td>
<td>access problems some time/place/content restraints</td>
<td>sense of community</td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td>high preparation time at cost of research high staff/student ratio</td>
<td>high commitment sense of community</td>
</tr>
<tr>
<td>Retention / completion</td>
<td>satisfactory retention rates</td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td>more on-campus provision than intended</td>
<td>commitment to flexible &amp; multi-discipline learning</td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Equipment Infrastructure Operating expenses</td>
<td>high cost of introducing MML ITC costs multi-media PC lab</td>
<td>building &amp; equipment costs marginally higher high student-staff ratio over enrolment</td>
</tr>
<tr>
<td>Additional support Academic time</td>
<td>learning &amp; teaching support presence</td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td>small but scalable</td>
<td></td>
</tr>
</tbody>
</table>

Effectiveness of Models of Flexible Provision of Higher Education
15.3 Depiction of University of South Australia (Bachelor of Nursing – Whyalla) findings

The findings from this case are summarised and depicted below:

- Time and place flexibility are provided through use of printed materials and online learning together with locally provided workshops. A mix of media accommodates different learning styles. There is some flexibility in entry requirements and some choice of subjects.

- The programme effectively provides for regional participation, accommodates work commitments and produces the intended learning outcomes with a satisfactory rate of student retention and completion. There is a high level of student and staff satisfaction with the programme. The programme meets the university’s intentions of providing student centred flexible learning to regional students.

- Infrastructure costs appear marginally higher than for traditional programmes, there are additional operating and support costs and demands on academic staff time. The programme economises by using existing communication systems.

- The case could be described in summary as flexible and effective but incurring some costs additional to traditional approaches.
### Figure 15.3 University of South Australia (Bachelor of Nursing – Whyalla)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Flexibility</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>Effectiveness</td>
<td>High</td>
</tr>
<tr>
<td>Regional participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Costliness</td>
<td>Low</td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Effectiveness Low vs. High
- **Regional participation**: Low for rural & remote students, high for skilled regional & rural health services workers.
- **Learning outcomes**: Low for resource-intensive workshops, high for flexible learning opportunities.
- **Student satisfaction**: Low for unsatisfactory retention rates, high for student satisfaction with course.
- **Staff satisfaction**: Low for unsatisfactory retention rates, high for staff satisfied with course.
- **Retention / completion**: Low for unsatisfactory retention rates, high for satisfactory retention rates.
- **Provider intent objective(s)**: Low for student-centred flexible learning resources, high for student-centred flexible learning resources.

#### Costliness Low vs. High
- **Equipment Infrastructure**: High for purpose-built accommodation, low for existing building.
- **Operating expenses**: High for cost of South East Institute professional development, low for use of existing administration systems.
- **Additional support**: High for student support services, low for existing building.
- **Academic time**: High for professional development time, low for study time.
- **Scale**: High for small scale - 50 students, low for large scale.
15.4 Depiction of University of Tasmania (BAVE programme) findings

The findings from this case are summarised and depicted below:

• Convenient access is provided for students in northern Tasmania and the use of print and electronic materials provides some time and place flexibility and caters to some extent for differing learning styles. There is some flexibility in entry arrangements. The course, particularly through assessment tasks, is tailored to student interests.

• The course reaches rural and regional students with work and social commitments. The course has been more effective in retaining part-time than full-time students. It has been effective both in the development of learning skills and in the attainment of intended learning outcomes. Students are generally well satisfied with the programme though they express some concerns about university requirements and some delivery hitches. Staff would like to see more resources devoted to the programme, but express satisfaction with the time flexibility that it offers them. The programme meets the objectives of the university to provide flexibly for the learning needs of current and aspiring teachers and training professionals.

• There are some establishment infrastructure costs, and design and development of multimedia materials have been expensive. Otherwise the programme has not been expensive to support and the time flexibility afforded to academic staff has allowed them to pursue research interests.

• The case could be described in summary as a programme that offers some time and place flexibility, which is effective in educational and provisional terms, and which is not costly.
### Figure 15.4 University of Tasmania (BAVE programme)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moving</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Open</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Style</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace flexibility</td>
<td>restricted by academic calendar</td>
<td>collaboration encouraged</td>
</tr>
<tr>
<td><strong>Alternative</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit points</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Content &amp; Assessment Choice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effectiveness</strong></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Regional participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Equipment Infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Effectiveness Low**
  - 29% intake of rural students
  - limited subject choice
  - high full-time lapse rate

- **Effectiveness High**
  - 72% of students accepted with non-traditional entry qualifications
  - flexible time & place
  - low part-time lapse rate

- **Flexibility Low**
  - access to IT services a problem for some remote students
  - student driven mode of study - to fit around full-time work

- **Flexibility High**
  - facilities on 3 campuses
  - electronic materials & online delivery

- **Costliness High**
  - significant initial development costs
  - use of existing level of funds

- **Costliness Low**
  - limited resource allocation to administrative & teaching structures
  - print materials replaced by electronic sources

- **Costliness Low**
  - budgetary constraints on support services

- **Costliness Low**
  - greater time flexibility

- **Scale**
  - small scale - applies to BAVE programme
15.5 Depiction of Victoria University (Nyerna Studies – Echuca) findings

The findings from this case are summarised and depicted below:

• The programme is located in the students’ community and supported by materials and communications giving time and place flexibility. The programme offers flexibility in entry, in participation and in exit points. Content and assessment are negotiated. The teaching approach has been developed to meet students’ preferred learning styles.

• The programme draws its participants from the region. It is negotiated around student community commitments. It has achieved high retention rates and has been successful in developing generic learning skills and in producing its intended learning outcomes. Students and staff are well satisfied with the programme, though staff class it as labour intensive. The programme satisfies the University’s intention of providing a culturally specific programme to students in the region.

• The programme involves some costs beyond the usual in terms of equipment, staff travel and programme support. It involves high demands on staff in terms of travel, teaching and student communication.

• The case could be described in summary as highly flexible and effective but somewhat demanding on resources.
### Effectiveness of Models of Flexible Provision of Higher Education

#### Figure 15.5 Victoria University (Nyerna Studies – Echuca)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style Collaboration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative entry points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Regional participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Equipment infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Partnership between Uni & Koori community (Echuca)
- Flexible participation available at end of each year
- 100% regional presence
- 80% continuing students
- Community specific cognitive flexibility
- Very labour intensive
- 100% satisfied with progress to date
- Witnessing student excitement
- 1:5 computer ratio
- IT equipment costs
- Travel & accommodation costs
- General Uni funds
- Koori Support Unit fund coordinator
- Increased staff time commitment
- Staff provided Koori lecturer
- Small - 47 students
15.6 Depiction of Deakin University and Ford Australia findings

The findings from this case are summarised and depicted below:

- The programme offers a high level of time and place convenience for students being offered in the workplace and using distance education materials. This combination also caters for learning style preferences. Flexibility is provided in both entry and exit points. There is some subject choice exercised by the consortium and to a lesser extent the students. Normal academic calendar requirements apply.

- The programme is highly effective in attracting students from the region, in student retention and in achieving desired learning outcomes both generic and professional. Students have a mixed reaction to the programme, valuing the outcomes and teamwork but feeling isolated from academic staff. Likewise staff have mixed responses feeling some pressure from industry but valuing the experience as professional development. The programme satisfies the intentions of the consortium to provide tailored and convenient professional development. It also widens the University’s market.

- Apart from the costs of some workplace-based tutorials funded by the university the course runs very economically using already available tuition materials and workplace facilities. It has low operating costs and does not put undue pressure on staff time.

- The case could be described in summary as highly flexible, substantially effective (though not enthusiastically supported by participants) and economical to conduct.
**Effectiveness of Models of Flexible Provision of Higher Education**

### Figure 15.6 Deakin University and Ford Australia

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Flexibility</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving</td>
<td></td>
<td>Time</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td>Place</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td>Flexibility</td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>Entry</td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td>Style</td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td>Collaboration</td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td>Pace flexibility</td>
<td></td>
</tr>
<tr>
<td>Pace flexibility</td>
<td></td>
<td>Alternative</td>
<td></td>
</tr>
<tr>
<td>Alternative</td>
<td></td>
<td>Entry points</td>
<td></td>
</tr>
<tr>
<td>Entry points</td>
<td></td>
<td>Exit points</td>
<td></td>
</tr>
<tr>
<td>Exit points</td>
<td></td>
<td>Content &amp; Assessment Choice</td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment Choice</td>
<td></td>
<td>Effectiveness</td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td></td>
<td>Low</td>
<td>Effectiveness Low</td>
</tr>
<tr>
<td>Regional participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Costliness</td>
<td>Low</td>
</tr>
<tr>
<td>Equipment Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Effective models of flexible higher education**

- **Low Flexibility**
  - Time based learning
  - Place program
  - Time and place fixed
  - Open entry
  - Limited accommodation of individual learning styles

- **High Flexibility**
  - Work based learning
  - Combination of face-to-face and distance education models
  - Professional recognition
  - Collaboration encouraged
  - Flexibility in timing of learning
  - Place based education

**Effectiveness**

- **Low Effectiveness**
  - Links with local industries
  - 80% retention rate

- **High Effectiveness**
  - 100% retention rate
  - 100% regional development students
  - Student confidence in generic skills

**Costliness**

- **High Costliness**
  - replication of existing materials
  - Deakin bears the full cost of tutorials
  - Unlock limited admin support staff

- **Low Costliness**
  - Full-time paying programs
  - Limited tutorial costs
  - Junior staff generally used

**Scale**

- **Small scale**
  - 25 students
15.7 Depiction of Griffith University (Logan) findings

The findings from this case are summarised and depicted below:

- The campus provides the opportunity for regional participation. Making use of a mixture of print materials, online and video materials and communications and face-to-face activities, it provides time and place flexibility and caters for alternative learning styles. It offers some entry flexibility. It encourages collaborative learning. Usual course requirements apply.

- The campus is effective in attracting regional enrolment, in recruiting underrepresented groups and in student retention rates. Students acquire generic learning skills. Students grades attained tend to the upper and lower ends of the spectrum rather than toward the mid-point. There is a high level of student and staff satisfaction with the approach adopted at the campus, though it is unusually demanding on staff. The campus activities satisfy the university’s intention of taking an innovative approach to regional provision of higher education.

- The campus involves innovative architecture and more than average in electronic infrastructure. It attracts additional student and teaching support and places high demands on academic staff time. Means of economising on staff time are being developed.

- The case could be described in summary as highly flexible, substantially effective but tending to be costly, particularly in the initial phase.
**Figure 15.7 Griffith University (Logan)**

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Moving</th>
<th>a regional campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Place</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td>Place</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td>Flexibility</td>
<td>web-based information &amp; learning activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility</td>
<td>print materials, group based learning &amp; face-to-face activities</td>
</tr>
<tr>
<td>Open Entry</td>
<td></td>
<td></td>
<td>early admission system</td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td>Collaboration</td>
<td>multiple mode</td>
</tr>
<tr>
<td>Pace</td>
<td></td>
<td>flexibility</td>
<td>team-based independent learning</td>
</tr>
<tr>
<td>Alternative</td>
<td></td>
<td>Entry points</td>
<td></td>
</tr>
<tr>
<td>Exit points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment Choice</td>
<td>Low</td>
<td>normal course requirements apply</td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>Regional participation</td>
<td>regional ‘early admission system’ 25% of admissions students not required to travel to other campuses 65% regional enrolment</td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td>high % attain low grades</td>
<td>high % of attain high grades student confidence in generic skills</td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td>sense of community</td>
<td>high satisfaction with staff support</td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td>high demand on staff &amp; incidence of burnout</td>
<td>sense of community collaborative activity</td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
<td>high retention rates</td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td></td>
<td>innovative approaches innovation evaluated</td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Equipment Infrastructure</td>
<td>electronic infrastructure costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>innovative architecture</td>
<td>1:6 computer student ratio</td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td>ITC costs for students</td>
<td>frequent use of student support services orientation to flexible learning</td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td>Griffith Flexible Learning Services (GFLS)</td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td>resource development time collaboration</td>
<td>skill development</td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td>small but scalable</td>
<td></td>
</tr>
</tbody>
</table>

Effectiveness of Models of Flexible Provision of Higher Education
15.8 Depiction of University of Queensland (Ipswich) findings

The findings from this case are summarised and depicted below:

• The Ipswich campus provides time and place flexibility for students, particularly those coming from the region. Using a combination of face-to-face sessions, printed, online and CD materials, and online communications it provides for alternative learning styles. The programmes offered involve normal university entry and progress requirements but provide some course choices.

• The campus has local community links but the majority of students are not drawn from the region. Retention rates and learning outcomes are satisfactory and better than might be expected for those who enter with scores lower than usual for the University of Queensland. Students and staff are generally enthusiastic about the approach to learning and teaching, though some students would like more choice than is provided and staff express concern about demands on time. The campus satisfies the university’s intent, taking a learning centred approach to flexible provision of higher education.

• The campus has involved high establishment costs in infrastructure, buildings and equipment. Some programme development funding above normal operating funds is provided along with a learning resource development unit. There are high demands on staff time though course development time is provided for.

• The case could be described in summary as highly flexible, substantially effective but involving some costs additional to the usual.
Figure 15.8 University of Queensland (Ipswich)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Flexibility</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Entry</td>
<td>Low</td>
<td>Flexibility</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td>Low</td>
<td>Flexibility</td>
<td>High</td>
</tr>
<tr>
<td>Exit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>Flexibility</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention /</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>completion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>objective(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Flexibility</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15.9 Depiction of Charles Sturt University (Dubbo) findings

The findings from this case are summarised and depicted below:

- The place of provision is designed to suit the needs of students resident in Dubbo and surrounding areas. The format involving limited face-to-face and video teaching supported by distance education materials and online communications provides time and place flexibility, though some students appear unaware of their choices. Normal entry and course structure requirements apply but there is some choice offered in assessment tasks and some peer interaction employed.

- The initiative is effective as a regional provision drawing most students from the local area and attracting a high proportion of aboriginal enrolments. Students meet normal course requirements with a high retention/completion rate. Students and staff have a mixed response to the educational arrangements. Local students appreciate the local provision and its connections to the community. Non-local students are more critical of the limitations on the university facilities provided on site. Staff are also concerned about resource limitations and their preparation to provide the forms of tuition expected. There is however a high level of staff commitment. The provision is effective in terms of the university’s intention of making local provision in the area, and adopting an interactive approach utilising a range of educational resources.

- There were some unusual infrastructure costs, including microwave infrastructure, operating costs, including travel and educational materials development, and support costs. The basic operating budget however is as for other campuses and some use is made of community facilities. The arrangement places unusual demands on academic staff time though the number of visits to the campus is limited.

- The case could be described in summary as a flexible form of regional provision, which produces intended results, but at the expense of some additional demands on resources.
Figure 15.9  Charles Sturt University (Dubbo)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Flexibility</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving Time Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td>local node campus</td>
<td></td>
</tr>
<tr>
<td>Time Place</td>
<td></td>
<td>combines distance education, face to face &amp; video teaching, &amp; IT based strategies</td>
<td></td>
</tr>
<tr>
<td>Open Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style Collaboration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative Entry points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment Choice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td>Effectiveness</td>
<td>High</td>
</tr>
<tr>
<td>Regional participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
<td>course requirements met</td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td>resources limitations limited access to staff</td>
<td>local facilities &amp; provision sense of community relevant to workplace</td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td>resources limitations increased workload limited research need for pedagogical assistance</td>
<td>professional growth commitment to interactive teaching</td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
<td>retention/completion &gt; 80%</td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td>focus on student-centred interactive environment combines distance ed., RBL &amp; face-to-face provides local access</td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td>Costliness</td>
<td>Low</td>
</tr>
<tr>
<td>Equipment Infrastructure</td>
<td></td>
<td>computer lab, video-conference &amp; microwave costs</td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td>travel costs for site visits production of resources</td>
<td>use of Orana Region Health Centre budget as for other campuses</td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td>Interactive Learning Centre student support services</td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td>additional training &amp; preparation time higher teaching time demands limited research time travel time professional development time</td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td>small but scalable</td>
<td></td>
</tr>
</tbody>
</table>
15.10 Depiction of University of Southern Queensland (Distance Education Centre) findings

The findings from this case are summarised and depicted below:

- The University of Southern Queensland offers a high level of time and place flexibility to students providing the option of on-campus, off-campus and mixed studies. Regional and remote students are provided with local liaison support and outreach support. The use of print and online materials in conjunction with online, video and audiographic communications together with opportunities for collaboration provides for a range of learning styles. There is some flexibility with entry requirements and assessment arrangements but students are constrained by normal course requirements.

- The provision is highly effective in attracting regional and remote students though it also attracts students from metropolitan areas. The format allows access for people with work and social commitments. Formal learning outcomes are satisfactory indicated by high retention/completion rates and students acquire generic learning skills. Students express a high level of general satisfaction with the provision but some find the workload high. There is a high level of staff commitment but the workload generated by online communication can become burdensome. The provision meets the University’s expectations and has been nationally and internationally acclaimed.

- Use of the established Distance Education Centre means that the infrastructure requirements are in place. Some multimedia materials are expensive to produce but the University attains multiple uses of tuition materials. There is an elaborate support mechanism for distance study. Communications are demanding on staff time but, on the other hand, course design and development time is built into workloads and face-to-face contact with distance students is limited. The distance programme operates on a large scale. Further economies of scale in communication are envisaged through the use of automated responses to standard student queries.

- The case could be described in summary as a highly flexible and highly effective economical provision.
## Figure 15.10: University of Southern Queensland (Distance Education Centre)

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Flexibility</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving Time Place Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Place Flexibility</td>
<td>some fixed times: eg</td>
<td>on &amp; off-campus,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tele-tutorials,</td>
<td>&amp; mixed mode study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>residential schools</td>
<td>print &amp; online materials,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>online &amp; video communications</td>
<td></td>
</tr>
<tr>
<td>Open Entry</td>
<td></td>
<td>Special entry arrangements</td>
<td></td>
</tr>
<tr>
<td>Style Collaboration Pace flexibility</td>
<td></td>
<td>enrolment extensions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>collaborative options</td>
<td></td>
</tr>
<tr>
<td>Alternative Entry points Exit points</td>
<td></td>
<td>mixed mode study</td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment Choice</td>
<td></td>
<td>interactive study chart</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>negotiated assignments</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>computer managed assessment (CMA)</td>
<td></td>
</tr>
</tbody>
</table>

### Effectiveness

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Effectiveness</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional participation</td>
<td></td>
<td>80% of students from Queensland</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>53% of students rural or isolated</td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td>the ability to use web facilities &amp; learn collaboratively</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>increase communication skills &amp; participation in discussions</td>
<td></td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td>heavy workload</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>adapting to online learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>problems with 'real-time' chat</td>
<td></td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td>increased staff workload generated by</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>online communications with students</td>
<td></td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td>high retention &amp; success rates for students in</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>equity categories</td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td>commitment to flexible delivery &amp; offering 'choice'</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>international recognition as distance provider</td>
<td></td>
</tr>
</tbody>
</table>

### Costliness

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Costliness</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Infrastructure</td>
<td>costs of interactive multi-media</td>
<td>equipment of DEC &amp; study centre</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>less face-to-face teaching</td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td>ITC costs</td>
<td>use of existing tuition materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>teleconferencing studio costs</td>
<td>use of scalable technologies</td>
<td></td>
</tr>
<tr>
<td>Additional support</td>
<td>distance education centre instructional design</td>
<td>outreach services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>media development &amp; production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td>student online communication rising demands on academic staff time</td>
<td>design &amp; development time allowed</td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td>limited by computer-mediated communication</td>
<td>large scale distance programme</td>
<td></td>
</tr>
</tbody>
</table>
15.11 Depiction of University of Ballarat (Graduate Certificates) findings

The findings from this case are summarised and depicted below:

- The programmes offer time and place flexibility to students in the Ballarat region being offered locally and supported by print and online materials and online communications. The format provides for alternative learning styles. There is some flexibility in entry requirements and in assessment arrangements. Normal program and academic calendar requirements apply.

- Two of the three programs attract local students. The work situation of students is accommodated. There are indications that students acquire generic learning and communications skills. It is too early to comment on retention/completion rates. Students and staff express general satisfaction with the arrangements though there are some technical limitations and a few students choose to take up the off-campus option. The arrangement satisfies the University’s intention to provide a learner-centred flexible approach.

- The provision has involved some additional infrastructure, materials development and support costs. The provision also places some additional demands on staff time for materials development and communications. The programs are currently small scale.

- The case could be described in summary as an effective and flexible regional provision of higher education that involves some marginal additional cost.

15.12 Summary of case study findings

The findings from the individual case studies can be agglomerated to give an overall picture of the flexibility, effectiveness and cost effectiveness of the cases investigated. This is taken up in Chapter 16.
<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Low</th>
<th>Flexibility</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exit points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content &amp; Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Low</td>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retention / completion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider intent objective(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costliness</td>
<td>High</td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Equipment Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 15.11 University of Ballarat (Graduate Certificates)

- Moving: Low-flexible campus, High-moving regional campus
- Time: Low-flexibility, High-print materials & the web-based platform
- Place: Low-flexibility, High-LearningSpace offer
- Flexibility: Low-flexibility, High-time/place flexibility
- Open: Low-flexibility, High-no degree prerequisite
- Entry: Low-flexibility, High-life experience recognised
- Style: Low-flexibility, High-networks of Learning Groups
- Collaboration: Low-flexibility, High-sensitive to students' work demands
- Pace: Low-flexibility, High-open no degree prerequisite
- Flexibility: Low-flexibility, High-entry life experience recognised
- Content & Assessment: Low-flexibility, High-learning tasks linked to students' practice
- Choice: Low-flexibility, High-open no degree prerequisite
- Effectiveness: Low-flexibility, High-choice in assessment tasks
- Regional participation: Low-flexibility, High-GCIT recruits nationally
- Learning outcomes: Low-flexibility, High-students confident with IT
- Student satisfaction: Low-flexibility, High-limited access to learning space platform
- Staff satisfaction: Low-flexibility, High-limited access to IT services
- Retention / completion: Low-flexibility, High-student satisfaction limited
- Provider intent objective(s): Low-flexibility, High-commitment to flexible learning approach
- Costliness: Low-flexibility, High-technical & hardware provision
- Scale: Low-flexibility, High-small but scalable
16. Conclusion

16.1 The topic and research question

This study investigated the effectiveness of models of flexible provision of higher education in Australia, where flexibility refers to provision of supported choice for learners. The study was conducted with particular reference to provision of higher education in non-metropolitan regions. The research question was subdivided into two broad questions:

- Are different models of flexible provision of higher education apparent in Australia?
- Are the models identified effective in the provision of higher education?

To obtain answers to these questions the following questions were employed to guide the investigation:

Are different models of flexible provision of higher education apparent in Australia?
1. What approaches to the flexible provision of courses can be identified in Australian higher education?

Are the models identified effective in the provision of higher education?
2. What choices do the approaches offer to students in terms of time, pace, place, content, entry points, exit points, learning styles and interaction with teachers and other learners?
3. How effective are the various selected models in terms of the quality of teaching and learning processes/learning outcomes?
4. How effective are the various selected models in terms of student demand and participation?

Are the models identified effective in the provision of higher education in their own terms?
5. Why have the various approaches been developed by the institutions in which they are offered and do they serve the purposes intended?

Are the models identified cost-effective?
6. What resources are applied to flexible provision of higher education?

For the purposes of this conclusion findings derived from these questions have been clustered under the following headings:

1. Models of flexible provision of courses in Australian higher education. (incorporating investigative questions 1 and 2 above)
2. The effectiveness of models of flexible provision of higher education against project criteria and in their own terms. (incorporating investigative questions 3, 4 and 5 above)
3. The cost effectiveness of models of flexible provision of higher education. (incorporating investigative question 6 above)
16.2 Models of flexible provision of courses in Australian higher education

Flexible provision of higher education was defined for this study (see Section 1.2) as providing choices to learners. The choices offered to learners relate to the time, pace, place of study, the entry and exit points for courses, content, approaches to assessment and the option to study individually or collaboratively. Such choices are afforded through the employment of various strategies or practices, including the use of learning and teaching techniques and technologies, and the adoption of policies effecting choices for learners such as recognition of prior learning.

Working from literature and web searches, experience in the field and preliminary data, the researchers proposed a typology of models of flexible provision of higher education which distinguished approaches designed to provide for access or convenience from those designed to accommodate a variety of learning needs. The typology was used to provide a means of defining and categorising models of flexible provision and as a basis for ensuring that the cases selected for detailed study represented a variety of models. The following categorisation of models of flexible provision of higher education was employed:

**Provision Affording Access and Convenience:**
- Moving time and place of study to suit the learner.
- Removing fixed time and place constraints.
- Removing entry requirements.

**Provision Accommodating Learning Preferences:**
- Providing alternative entry and exit points.
- Accommodating learning style, pace and collaboration preferences.
- Accommodating content and assessment preferences.

As the models represent notional types it was not expected that particular cases would conform to a single model but, for the typology to be useful, it was expected that the cases could reasonably be associated with the essential features of one or two the models.

The survey of universities reported in Chapter Four unearthed a complexity of principles and practice. Three major themes emerged from the data provided or available. Many universities defined flexible provision of higher education in terms of offering choices to learners. Of these there were universities who understood flexibility to be directed at access, the first of the broad approaches used in the typology adopted here. There were also universities who understood flexibility as being about accommodating a range of learning needs and preferences, the second of the broad approaches identified in the typology.

The third common response referred to the use of new learning technologies to address the quality of learning. The data provided along this latter line is incorporated in the report of the survey as it constituted a response to survey questions about flexible provision. In this study this purpose does not come within the definition of flexible provision though the practices which arise from it may provide flexibility. New learning technologies may both enhance the quality of provision for learning and its flexibility. If they are adopted for the purpose of
improving quality and do not provide flexibility the policy and practice are not the subject of this study, however laudable they may be.

The survey of universities indicated a wide range of approaches to the flexible provision of higher education not readily reducible to a set of models. In fact for many universities several approaches co-existed, for example Swinburne offers traditional face-to-face programmes, multi-modal programmes and distance programmes, Deakin offers on-campus programmes, off-campus programmes and workplace-based programmes, and Southern Queensland offers on-campus programmes, off-campus programmes and mixed programmes. The typology proposed does, however, offer a means of categorising approaches into models, evidence of which may be found in the policies and practices of the universities surveyed. The relationship of the approaches of universities surveyed to the typology of flexible provision of higher education is tabulated in Table 16.1.

Table 16.1 The typology and instances of flexible provision

<table>
<thead>
<tr>
<th>Type of Flexible Provision</th>
<th>Example</th>
<th>Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision oriented to access and convenience for learners:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Moving time and/or place to suit the learner</td>
<td>Provision in the workplace; offering programs at regional or multiple campuses; provision of distributed study centres; and the offering of summer schools.</td>
<td>Workplace-based learning – Deakin (Ford). Summer semester – Swinburne. Regional campuses of – Swinburne, Griffith, LaTrobe, and Queensland. Study centres – Southern Queensland and Charles Sturt.</td>
</tr>
<tr>
<td>2. Removing fixed time and place constraints</td>
<td>Off-campus programmes utilising print or digital tuition materials.</td>
<td>Off-campus programmes of Deakin, Southern Queensland, and Central Queensland.</td>
</tr>
<tr>
<td>3. Removing entry requirements</td>
<td>Open access university programmes, which have no academic entry requirement such as those, offered through Open Learning Australia; or programs, which recognise and give credit for prior learning.</td>
<td>Open entry – Victoria. Recognition of prior learning – Victoria and Deakin.</td>
</tr>
<tr>
<td>Those oriented to accommodating learning preferences:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Providing alternative entry and exit points appropriate to the learner</td>
<td>Courses that articulate with TAFE studies providing advanced standing in the higher education course; programs that provide alternate exit points such as Graduate Certificate, Graduate Diploma and Masters Degree.</td>
<td>TAFE to higher education articulation – Swinburne, RMIT, and Victoria. Programmes with alternative exit points – common particularly at postgraduate level.</td>
</tr>
<tr>
<td>5. Accommodating learning style, pace and collaboration preferences</td>
<td>Programmes offered in full or in part in more than one mode; programmes with flexible time schedules; course that permits but does not require collaboration.</td>
<td>Multi-modal programmes – Swinburne (Lilydale). Programmes offered in dual (on-campus and off-campus) mode – Deakin, and Southern Queensland. Programmes with flexible time schedules – Ballarat. Course that permits collaboration – Ballarat, and Victoria (Nyerna studies).</td>
</tr>
<tr>
<td>6. Accommodating content and assessment preferences</td>
<td>Modularised content allowing choice in construction of a programme; problem-based learning allowing some selection of content; alternative assessment tasks.</td>
<td>Choice of content and/or assessment – Victoria (Nyerna studies).</td>
</tr>
</tbody>
</table>
16.3 The effectiveness of models of flexible provision of higher education against project criteria and in their own terms

The effectiveness of models of flexible provision of higher education was explored in this investigation through case studies. The case study reports constitute descriptions of the context of the case, policies relevant to the case, practices, student participation, learning outcomes and cost effectiveness. The ten case descriptions are reported in Chapters 5 to 14. A summary of the findings of each case is provided in Chapter 15 along with a graphic depiction of the findings of each case.

As a descriptive/interpretive approach is taken and as each case differs substantially from other cases, it is not appropriate to make generalised conclusions. Nevertheless a picture emerges represented by Figure 16.1. The purpose of Figure 16.1 is to convey a summary impression of the findings in a format consistent with the research approach and the fact that each case differs. In the figure the summary findings of each case (see Chapter 15) are presented as an ellipse which represents the range of flexibility and the range of effectiveness apparent in the case. (Rather than using intersecting lines or shapes that might imply an inappropriate degree of precision about the findings, an ellipse is used as a means of giving a general impression of the findings.)

Figure 16.1 indicates that:

• The cases of flexible provision of higher education investigated were indeed flexible, that is they offered choices to students
• The cases could be classed as effective against the criteria of effectiveness adopted for the study as well as in terms of the intent of the universities in offering flexible arrangements.

It should be noted that the studies were largely self-reporting. To enhance consistency and veracity, however:

• A framework for reporting was provided by the investigators.
• Supporting evidence for assertions made was requested where it was not initially provided.
• All but one of the case sites was visited by a member of the research team to further aspects of the investigation.

In terms of the typology of models of flexible provision of higher education referred to in Figure 1.3, the cases tend to fit the classification ‘Effective highly flexible provision’. In other words the answer to the research question ‘Are the models identified effective in the provision of higher education?’ appears to be ‘yes’, both in terms of the flexibility and the effectiveness criteria adopted for the investigation and in terms of the intent of the universities. This finding on flexible provision is in accord with the conclusion of the Web-based Education Commission (2000) with regard to online learning in the United States: ‘The question is no longer if the Internet can be used to transform learning in new and powerful ways. The Commission has found that it can.’
Figure 16.1  The flexibility and effectiveness of models of flexible provision of higher education

Key
Swinburne
South Australia
Tasmania
Victoria
Deakin
Griffith
Queensland
Charles Sturt
Southern Queensland
Ballarat
16.4 The cost effectiveness of models of flexible provision of higher education

Cost effectiveness was addressed in this investigation by separately considering effectiveness and costliness. As for flexibility and effectiveness a picture of cost effectiveness of flexible provision of higher education emerges from the case studies represented by Figure 16.2. In the figure the summary findings of each case (see Chapter 15) are presented as ellipses which represent the range of effectiveness and the range of costliness apparent in the case.

Figure 16.2 suggests that:

- As indicated in Section 16.3, the cases could be classified as effective against the criteria of effectiveness adopted for the study as well as in terms of the intent of the universities in offering flexible arrangements.

- Flexible provision tends to make marginal additional demands on infrastructure costs. In most cases it makes additional demands on support services and academic staff time. The additional demands on the resource academic staff time are not usually reflected in additional budget allocations. The demands on academic staff time are satisfied in part at the cost of time spent on research and in part by staff working longer hours.

It may be that the costliness of most of the cases studied is due in part to their innovative status involving establishment costs and small scale of operation. There may be opportunities for adoption of more economical procedures.

In terms of the typology of the cost effectiveness of flexible provision of higher education referred to in Figure 1.4, most cases tend to fit the classification ‘High cost, effective provision’; some span this category and the classification ‘Cost-effective provision’. The answer, then, to the research question ‘How cost effective are the various identified models?’ appears to be that they are effective but demanding on resources. For institutions with established off-campus or multi-modal arrangements and which make allowance for design and development demands, flexible provision is not costly, though communication with students is increasingly demanding on academic staff time. It might be noted here that the Web-based Education Commission (2000) concludes, in reference to online education in the United States, that the question is no longer ‘should we invest the time, the energy, and the money necessary to fulfill its promise in defining and shaping new learning opportunity. The Commission believes that we should’.

16.5 Possibilities suggested by the findings

Each case is individual, reflecting institutional responses to their own histories, needs and environments and the research approach adopted does not lead to generalisable conclusions. Nevertheless, a review of the findings of the cases in conjunction with the literature does suggest some possibilities for effective and cost-effective flexible provision of higher education:

- If tuition materials can be used for both on-campus and off-campus tuition and in combinations of the two, then provision can be both economical and flexible in terms of students’ time, place and learning style preferences.
Figure 16.2 The cost effectiveness of models of flexible provision of higher education
• Design and development of materials can be a considerable cost. Schemes for spreading design and development costs could include collaboration between institutions, voluntary or commercial pooling of learning resources using metadata tagging, and the purchase of commercially available materials.

• The introduction of electronic learning materials and online communications as additions to traditional provision are bound to add to demands on resources, particularly academic staff time. This can limit the opportunity of academics for engagement in other academic work such as research. If, on the other hand, arrangements for learning are redesigned to take account of both the educational possibilities of available media and resource constraints then flexible provision of higher education can give time flexibility to academic staff that facilitates participation in a range of academic activities.

• If use can be made of infrastructure outside of the higher education sector at no cost to the education provider (as in the case of some workplace-based courses) flexible provision can be conducted cost effectively for the provider and conveniently for learners.
Appendix

Evaluations and Investigations Program – The Effectiveness of the Flexible Provision of Learning in Australian higher education

Request

As part of the EIP project ‘The Effectiveness of the Flexible Provision of Learning in Australian higher education’, we write to request information about the policies and practices of your university pertaining to flexibility in the provision of higher education. The material will be used to map and report flexible provision of higher in Australia. The mapping exercise will be used to identify cases to be studied in detail.

Background

Swinburne University of Technology, in conjunction with Charles Sturt University, has been commissioned by DETYA to undertake a study of approaches to the flexible provision of learning in Australian higher education with particular reference to provision outside of metropolitan areas.

Meaning of flexible provision

For the purposes of the study the flexible provision of learning means giving the learner choices about one or more of the following:

- The **time** at which the learning occurs
- The **pace** at which the learning proceeds
- The **place** in which the study is done
- The **content** that is studied, which includes the concept of flexible entry and exit points within a program
- The **learning style** adopted by the learner
- The extent to which **collaboration** is used in the learning process, either in the sense of inter-institutional collaboration or students engaging collaborative learning processes.
- The form of **assessment** adopted.

The study will focus on cases displaying more than one of these forms of flexibility. Different learning and teaching strategies afford different elements of
flexibility. For example: Print based study guides offer flexibility about time, pace and place, by themselves they provide no flexibility in learning style; the use of online real-time chat provides opportunities for collaborative learning and some flexibility in place of learning.

Various models for flexible provision of learning have been developed by Australian higher education Institutions. Often they employ combinations of techniques, technologies and policies for flexible provision. For example:

- Off campus delivery may use print and online materials together with online communications.
- Resource based learning on campus may use print and online materials together with online communications and some face-to-face sessions.
- Various learning techniques and technologies may be used in conjunction with policies which provide wider choice for learners such as RPL or assessment options.

Initial Part of the Study

The first part of the study involves mapping the policies and practices of the flexible provision of learning within Australian higher education. We will use the data gathered by the mapping exercise to select case studies of exemplary practice. The cases will be constructed in a later phase of the study.

We have made provision in the rest of this document for your institution to provide details about its policies and practices regarding the provision of flexible learning. You may use these headings as a proforma or you wish to send copies of relevant material to:

Dr P Ling
Project Director
Flexible Provision of higher education
Learning and Teaching Support
Mail 56
Swinburne University of Technology
PO Box 218
Hawthorn VIC 3122
Pling@swin.edu.au

Peter Ling
Project Director
Institution's Policies about the Flexible Provision of higher education.
In this part of the document please fill in your institution’s policies which provide for flexibility (ie choices or options for learners) in the provision of higher education.

Institution's Practices Regarding the Flexible Provision of higher education

In this part of the document please describe any major initiatives undertaken by your institution regarding the flexible provision of higher education.

Contact People for Further Information

Please identify any contact people and their contact details for the initiatives outlined above.
Glossary

Flexible provision for learning /flexible provision
A mode of provision of higher education that provides learners with choice through the use of appropriate learning and teaching strategies and policies.

Mode of provision/provision
Broad approach to provision of learning, that is, on-campus attendance, external study, flexible provision.

Elements of flexibility
Elements of choice for learners: time, pace, place of learning; content; learning style; and individual versus collaborative learning.

Policies for provision of learning/provision of education
Policies that afford choice to learners such as open entry, recognition of prior learning, credit transfer arrangements, articulated/embedded awards, content choice.

Strategies for provision of learning/provision of education
Strategies that afford choice to learners such as resource-based tuition materials and/or communication technologies used as an alternative to face-to-face contact.

Models of flexible provision of learning/flexible provision
Patterns of provision combining strategies and policies to provide choice for learners.

Cases of flexible provision of learning/flexible provision
Instances within models. At subject or course level.

Indicators of effectiveness and cost effectiveness of models
Indicators of effectiveness and cost effectiveness of models applied to cases. Indicators may be divided into learning aspects, provision aspects, and quality indicators.

Complemented face-to-face
The provision of global degrees, where students have the opportunities are taught by experts from industry and academics, and also have the opportunity to work in study groups with students from other nations (M Hayden SCU).
Effectiveness of models of flexible provision of higher education
Bibliography


Competitiveness, Council on 1995, *Breaking the Barriers to the National Information Infrastructure (NII)*. Washington DC.


Evans, T. 1999, ‘From Dual Mode to Flexible Provision: Paradoxical Transitions In Australian Open and Distance Education’ *Performance improvement quarterly*, Vol 12, pp. 84–95.
Effectiveness of models of flexible provision of higher education

Hodgson, P. 1998, An Educational Brief for the Dubbo Campus, Charles Sturt University, Dubbo.
James, R., Baldwin, G. and al., e. 1999, Which University? The Factors: Influencing the Choices of Prospective Undergraduates, AGPS Canberra.
Leasure, R. 2000, Comparison of Student Outcomes and Preferences in a Traditional v’s WWW-Based Baccalaureate Nursing Research Course.
Ryan, M., Carlton, K. and Ali, N. 1999, Evaluation of traditional classroom


