Bridging courses are courses that prepare adult and other nontraditional students for undergraduate study. Focus groups examined the strengths, limitations, and impacts of bridging courses offered at a rural university campus in South Australia. A survey based on their responses was returned by 12 current students in bridging courses and 2 who had withdrawn. Bridging study increased respondents' confidence and self-esteem. The gaining of new friendships was significant, but the demands of study interfered with work and home life. Making a commitment to study and not being distracted by unrelated menial tasks was a concern. Family and partners were cited as being helpful and supportive. The content of some courses was perceived to be irrelevant to students' future requirements, and at times the pace of delivery was too fast. Respondents recommended workshops on how to study effectively and how to access library resources on the computer. With the exception of requests for introductory subjects related to chosen future discipline areas, respondents felt the program did not need more content. The quality of campus facilities and staff assistance were rated highly, but the need for more activities for mature-age students was pointed out. Respondents generally believed that the program had prepared them well for future studies, and all respondents replied that they would recommend the bridging program to others. An appendix presents the survey questionnaire. (TD)
Bridging education has for a number of years been one means of meeting the particular needs of educationally disadvantaged people. In regional areas, without the range of other options that may be found in more populous areas, it has proved its value in providing an alternative pathway to university, and giving a second chance for a higher education to people who have suffered educational disadvantage and/or disenchanted. These have included people of mature age who have earlier not had opportunities to continue with formal education, as well as discouraged school leavers. This has also been the experience in Whyalla, a provincial city of population 23000, situated 400 kilometres (by road) north-west of metropolitan Adelaide.

This paper gives an outline of Bridging education over the years at the Whyalla Campus of the University of South Australia and its predecessor the South Australian Institute of Technology and describes the current Whyalla Bridging Program and its student cohort. Lessons drawn from the various stages of a research project conducted...
during 2000 are compared and the transformative nature of such adult learning experiences is highlighted.

**Whyalla bridging programs**

Bridging education began at Whyalla Campus in 1988 with a Foundation Course in Social Studies that also ran in 1989 and prepared mature-aged students for undergraduate studies in Social Work. This was a response to the realisation of the presence of many mature-aged prospective students in the surrounding region who were barred from university study by their lack of educational background and skills. In 1990 the Foundation Course became the Human Services Bridging Program, preparing students also for Nursing studies. Other Bridging programs that operated in earlier years were the Associate Diploma Bridging Course (preparing students for diploma studies in Business and Computing), the Applied Science and Engineering Bridging Course and the Business Studies Bridging Program. The Whyalla programs, the only internal regional university Bridging programs in South Australia, have now been subsumed into a common Whyalla Bridging Program that provides entrance to most discipline areas (Nursing, Social Work, Business/Accounting, Computing and Communication and Media Management).

The normal entry requirement for bridging programs at Whyalla Campus has been for students to have been out of secondary school for at least two years. In some cases where students have unsuccessfully attempted the last year of secondary schooling and there is room in the program they will also be considered. Entrance testing was discontinued some years ago out of concern that it might be discouraging suitable applicants. The program is free of Higher Education Contribution Scheme fees – the students have only to pay the Student Amenities Fee and buy textbooks as required. The current program is offered as day-time on-campus classes of three hours per course, the courses (formerly called ‘subjects’) being two semesters each of Introductory Communications, Mathematics, Science or Australian Studies, and Computing. Students who wish to proceed to the Nursing program must choose Science. Therefore, full-time study requires 12 contact hours per week and significant additional time outside classes to complete tutorial exercises and assignments. The program may be studied part-time over two or more years.
These Whyalla bridging programs have tended to have a 40-50% student completion rate. In 1999 and 2000, there were around 50 commencing students in bridging program/s with about 25 completing and being eligible for undergraduate places. Interestingly, only about 20 each year chose to accept these places. The 2001 bridging cohort consisted of 33 students who enrolled at the start of Semester 1, reducing to 27 over the first six weeks of the program. Females have always outnumbered males in the program, and that is also the case in 2001 where the ratio is 2:1. Ages extend from recent school leavers to over 60 year olds. There is a range of ethnicities, including one Indigenous student. A feature of the bridging programs has been their ability to attract students from lower socioeconomic backgrounds. Other equity groups represented include rural students (naturally) and also students with disabilities.

The research project

Beginning early in 2000, the research project focused on the role of Whyalla bridging education in developing lifelong learners and providing an expanded range of future opportunities. The members of the research team had all been involved to varying extents in coordinating, teaching courses and providing support to Bridging students, and so reflection on this accumulated experience was an important part of the project (Cooper, Ellis, & Sawyer, 2000a). To gather data concerning student perspectives, people who had successfully completed past Whyalla bridging programs were invited to comment on their experience. These 26 participants, all studying at the time in undergraduate programs or graduates of such programs, were invited to be involved in one of three focus groups facilitated by one or more of the researchers (Cooper, Ellis, & Sawyer, 2000b). The discussions, on the highs and lows of their bridging study experience and an assessment of the extent to which it had prepared them for subsequent university study, were tape-recorded. The following questions guided the discussions:

1. What influence has Bridging study had on your life (personal, study, other)?
   (a) Negative impacts (b) Positive impacts

2. What aspects contributed to your success in Bridging?
   (a) Personal factors (b) Course-related factors

3. What challenges/obstacles did you experience in your Bridging year?
   (a) Personal matters (b) Course-related matters
4. How well did the Bridging course prepare you for your subsequent university study?

(a) Helpful aspects  (b) Problem areas  (c) Suggestions for improvement

Main points were also written up on large sheets of paper so that the participants could refer back to earlier comments and add extra information. This survey approach using focus groups was chosen to obtain a breadth and depth of data, and the results obtained provided a wealth of information.

Invariably, the bridging experience was considered to be life changing for the students with both gains and losses identified in the focus groups including the negative impact of bridging study upon personal relationships. Many participants identified enhanced feelings of self-worth, increased confidence, greater tolerance of diversity and broadened interests attributable to their involvement in a bridging program. Some former bridging students in the focus groups expressed concern about the content and delivery of certain subjects and bridging programs that they had found to be less relevant to some fields of subsequent undergraduate studies. However, the general feeling was that Whyalla Campus was an appropriate setting for tertiary preparatory and alternative entry programs because of its small size, good facilities and location in an area with high unemployment and consequent demand for education.

Comments received from the focus groups formed the basis for the second stage of the project conducted later in 2000. The focus group questions were developed and expanded into a questionnaire for an anonymous survey of the year 2000 Bridging students, the first cohort of the single, generic program. Questionnaires were distributed to all students and also to others who had enrolled in 2000 but had withdrawn, either officially or informally. (See Appendix A.) This paper incorporates the results of this later survey, pointing out where they confirm focus group findings, and highlighting new insights.

Questionnaires were distributed to 32 students in the current Bridging program. A total of 12 useable responses were received, giving a response rate of only 37.5 per cent, despite e-mail and class reminders. The following tables indicate respondents'
age range, activities prior to enrolment, and aims at commencement. All respondents were female and had English as their first language.

Table 1: Number and percentage of respondents by age.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 21 years</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>21 - 30</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>31 - 40</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>41 - 50</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>&gt; 50 years</td>
<td>2</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 2: Activities engaged in prior to Bridging Program

<table>
<thead>
<tr>
<th>Response</th>
<th>N*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finishing School</td>
<td>3</td>
</tr>
<tr>
<td>Working Part-time</td>
<td>3</td>
</tr>
<tr>
<td>Volunteer Work</td>
<td>2</td>
</tr>
<tr>
<td>Home Duties</td>
<td>2</td>
</tr>
<tr>
<td>Studying at TAFE</td>
<td>1</td>
</tr>
<tr>
<td>Nothing</td>
<td>1</td>
</tr>
</tbody>
</table>

* 'N' indicates the number of times the response was identified

Table 3: Aims at commencement of Bridging Program

<table>
<thead>
<tr>
<th>Response</th>
<th>N*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass/finish the program</td>
<td>4</td>
</tr>
<tr>
<td>Study Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Study Social Work</td>
<td>3</td>
</tr>
<tr>
<td>Keep occupied</td>
<td>1</td>
</tr>
<tr>
<td>Gain a job</td>
<td>1</td>
</tr>
<tr>
<td>No aims</td>
<td>1</td>
</tr>
</tbody>
</table>

* 'N' indicates the number of times the response was identified

Respondents were asked about the influence that bridging study had had on their lives so far. The strongest theme to emerge was that the respondents had increased in
confidence and self-esteem. The Program provided them with motivation, stimulation, and incentive to strive. Comments were received that the Program has ‘made me want to get more out of life’; ‘has expanded my knowledge – given me so much confidence – taught me to value knowledge, access areas for better understanding’; and ‘I am not scared of going to Uni any more’. The gaining of new friendships was also significant. The respondents frequently referred to meeting ‘a lot of nice people who are now friends’ and ‘feeling better’ about themselves as a result. However, the respondents also reported that their ‘priorities had shifted’. The responses indicated that the demands of study took the students away from parenting duties in particular. They found their study homework ‘time-consuming’ and commented that it ‘doesn’t leave time for work, kids, partner, home’. Making a commitment to study and not being distracted by menial tasks not related to study was expressed as a concern. These responses align closely with those obtained in the earlier focus groups: there participants referred to their increased motivation for study and for life generally and an increased sense of self-worth; and they also talked of their changed patterns of behaviour at home and the pressures of work, home and family. While the focus group participants placed emphasis on changing relationships with existing partners and friends, this was not a factor mentioned by the current students, except in the context of having less time for these relationships and networks. Rather than receiving negative reactions, the current students reported that ‘family are a great help’, and that partners were ‘helpful and supportive’. One respondent commented, ‘If it wasn’t for my mother and sister I would not be at uni’, indicating that they help ‘by giving me a little pusher to study’.

The content of some courses was perceived to be irrelevant to students’ future requirements, and at times the pace of delivery was seen to be too fast. A comment was received that some lecturers ‘seem to assume there has been prior experience when this is not the case for some students’. These comments align with focus group feedback mentioning particular problems for some students unfamiliar with new technology or lacking recent mathematics study. Interestingly, in those earlier findings negatives also concentrated mostly on course content and delivery. Forty-two per cent of the later respondents replied that they had felt like withdrawing from particular subjects or the whole course at some stage. It is noteworthy that the major
reasons for this were course-related – concerns with particular content or lecturing staff.

The main reason these respondents continued in the program was a strong desire to succeed and realise their dreams of gaining a degree. Encouragement from other students was given as an important factor in their continuing with the program. This is consistent with the focus group findings, which reported that camaraderie was a factor that contributed to success in bridging studies.

With regard to what other things they would have liked in the course, the respondents suggested a workshop on how to study effectively and on how to access library resources on the computer. Interestingly, students requested the inclusion of introductory subjects related to their chosen future discipline area. In past programs this had been provided but was lost with the amalgamation of the discipline-specific courses into the more efficient generic program. Overall, however, the opinion was that the program did not need more content as it was already ‘full on’. This is in contrast to previous findings that indicated that bridging workloads were light and an easy introduction to tertiary study.

The length of the course was considered to be ‘a good length’ and ‘acceptable’. The class times were reported to be suitable, although a comment was made that ‘more choices should be available’. The level of difficulty was generally perceived as increasing ‘gradually’. Some respondents commented that the increase in difficulty in Semester 2 was ‘too fast’, particularly in the mathematics area.

Comments were requested in relation to the University facilities. The students were happy with the services provided by Campus Central, adding that ‘the ladies are a great help and they are so friendly!’ This was again expressed in relation to the library staff, although students often found the library ‘confusing’ and indicated that they required more direction in its use. The services provided by the Student Support Centre and those of the Student Association were also rated highly, with comments received such as ‘excellent’, ‘great’, ‘helpful’ and ‘friendly’. The computer pools were generally regarded as ‘good’, and ‘easy and accessible’. The accessibility of lecturers was also reported as ‘great’, ‘good’ and ‘excellent’. Another comment
received in relation to facilities and support was to have social activities such as quiz nights. These comments relate well to the feedback from the earlier focus groups where the positives of the learning environment usually included assistance from staff and the quality of campus facilities, but mention was made that there could be more activities for mature-age students.

Students reported that the best thing about being a student in the bridging program was ‘understanding uni expectations before a degree’ and knowing ‘I will be ready for my course next year’. The comment was made that ‘you get to make your mistakes early’ and ‘maybe do better in the degree’. Other commonly mentioned factors were ‘meeting new people’, ‘making friends’, and ‘the support and encouragement’ received. The impression gained was that the students believed that they would start their degree studies more confidently, having gained new skills and knowledge and the chance of getting future employment. The ‘friendly environment’ and the ease of integration as a mature-age student were other positive comments. One student specifically mentioned that ‘age has not been a drawback with regard to coping with program’. On the other hand, the worst things about the program were considered to be the stress of the workload and ‘high elevation’ of learning with some lecturers not recognising students’ needs. Time wasters and people talking in class were mentioned as problem areas to be remedied.

Respondents generally believed that the Bridging Program had prepared them well for future studies. Learning how to structure essays and reference appropriately for university studies were given as ways the Bridging Program helped. Getting to know the campus and making friends with people who would be in the same program in the future were additional factors mentioned. All respondents replied that they would recommend the Whyalla Bridging Program to other people. Some commented that they already had done so. Others added that their recommendation would include provisos such as ‘only if no children and no commitments and not employed’. Comments included: ‘It is a great opportunity to expand your horizons’; and ‘it’s been a great experience getting back into study mode and what better way than at Whyalla Campus – so accessible and excellent facilities’.
The research also aimed to capture data from people who had discontinued the bridging program, as this would have indicated ways of meeting the learning needs of an extended group. Questionnaires were posted to 23 students who had initially enrolled. However, only three responses from this cohort were received, and two were returned, the intended recipient being no longer at that address. Each of the three respondents had withdrawn before making a start on their study program. All respondents were female, aged between 31 and 50 and had English as their first language.

Only two useable questionnaires were received, from respondents who had previously been open learning students at TAFE, who wished to enter the Social Work degree at the University in the future, but chose to continue study at TAFE as a means of entry to the degree. One respondent enrolled but did not begin in the Bridging Program because she was unsure whether she could cope with the amount of study needed. She replied that ‘fear’ made her decide to leave the course. However, the additional comment was made that she would have ‘loved to complete the course’. The other respondent preferred to continue to do open learning without the need to attend classes on campus. This respondent indicated that a mix of day and night classes would have suited her. Childcare was also a concern. Both respondents replied that they would recommend the Whyalla Bridging Program to other people.

A transforming experience

Mezirow (1991) has presented a model of ‘transformative learning’ that seems relevant to the findings from both stages of this research. He argues that the major development in any adult learning program is the transformation of learners’ meaning perspectives or frame of reference. This process requires critical analysis of individual belief structures gained through socialisation during childhood. He claims that the transformation may be precipitated by a trauma or merely result from an illuminative discussion. In particular, safe, supportive and democratic environments are considered essential if students are to challenge their own thought processes. Aspects related to transformative learning may be identified in the findings throughout this project. Students have found their new studies a life-changing experience that has impacted on their identity and life outside of the study environment, necessitating a need for
support. In the earlier research there were frequent references to supportive environments where lecturers were described as ‘dedicated, nurturing and supportive’. (Quotations of student comments from the focus groups are documented in Cooper, Ellis & Sawyer, 2000b). In the later questionnaire feedback, support from staff was linked to feeling worthwhile and confident.

This research project has also identified some of the expected outcomes from this learning development that include alteration in the individual’s sense of self and thinking processes. It is argued that transformative learning may involve ‘changes in locus of control, personal competence or self concept’ (Mezirow, 1991, p. 220). In both stages of this research project, there was evidence of students experiencing gains in assertiveness, self-worth and confidence as a result of bridging study. To quote a focus group participant: ‘In your general life when you are out talking to people, you feel more confident’. This positive impact on students’ lives was also identified in a study relating to a metropolitan foundation course (Beasley, 1997, p. 192).

There were also indications in the research findings of significant shifts in perspectives. Many participants in the first stage of the research project claimed that they developed wider interests and became more accepting of others and open-minded on issues. Similarly in the later stage of the research students identified changes in terms of gaining and valuing knowledge, improvements in self-esteem and confidence, and achievement of greater flexibility. These developments are characteristic of transformative learning, which broadens the learner’s outlook as it ‘moves the individual toward a more inclusive, differentiated, permeable (open to other points of view) and integrated meaning perspective’ (Mezirow, 1991, p. 7).

Developing student confidence and new ways of thinking have been among the objectives of bridging education at Whyalla from the beginning. In most programs, the aim has been to foster developmental learning that respects what people bring to their study and gradually challenges them more and more as the year progresses (Stevenson & Munn, 1990). However, it is apparent in the feedback gained in both stages of the research that students have not always experienced the teaching/learning approach as developmental. Students have complained about finding the pace too fast, dealing with assumptions about prior knowledge and the rapid increase in complexity
in some content areas, in some years. They have also highlighted the problems of mature-age students unfamiliar with computer technology.

There are other aspects of transformative learning theory that may relate particularly to the female students' experience of bridging education. Morgan (Mezirow 1991, p. 169) studied women returning to education and found that there was identity development separate from their relationships, and also recognition that people can choose their ways of thinking. The negative impact on relationships that is highlighted by some of the participants may point to the development of a new and separate identity for the women undertaking bridging study that changes family dynamics. There was a comment in the earlier research that people in the students' networks thought that the students were 'going above them'. As Candy in Self-Direction for Lifelong Learning (cited by Cranton 1994, p. 18) comments:

If learning is not part of the cultural norm for a particular group, then the person seeking to emancipate himself or herself through self-education has first of all to transcend the indifference or even antagonism of those with whom she or he is regularly in contact.

The extent of the transformation identified by the focus group participants and questionnaire respondents may also be due to the characteristics of the bridging students themselves. From our experience of interacting with bridging students and the research, it is apparent to us that the students often make considerable financial and other sacrifices to complete their program and for some it is a long-awaited opportunity to obtain the education they missed in their teenage years. Consequently, they tend to have an intrinsic motivation to learn and bring a lot of enthusiasm to their classes. In addition, broad age ranges and diversity of student backgrounds are often viewed by people as stimulating (Beasley, 1990), and the former bridging students in our research felt that this was so. Possibly because of commensurate ages, enthusiasm and diversity, there appears to be a particularly relaxed and egalitarian relationship that develops between bridging students and lecturers. Strong commitment from students to their bridging studies would seem to be an ideal condition for transformative learning to occur.
Conclusion

The Whyalla Campus of the University of South Australia has over a decade of experience with bridging education, and has given a range of non-traditional students a second chance to enter university. Strong demand from prospective students for the programs has been maintained, ensuring viable class sizes. There has been a 50 per cent completion rate in recent years and a large proportion of the successful students enter undergraduate programs at the campus.

The research was conducted in two stages during 2000, with former and current bridging students. The perspectives of the respondents were sought in regard to the strengths and limitations of the programs and the impact of bridging study on their lives. The feedback received from the earlier focus groups and the subsequent anonymous questionnaires was similar.

While the respondents in both stages of this research identified problems with the content and/or delivery of particular courses, they recognised the value of acculturation to a university environment before commencing degree study. They also highlighted the significant impact of bridging study on their lives. Of particular note is their feedback in terms of changes to self-concept and ways of thinking that indicate that in many instances the learning has been transformative. It is apparent that many students in their bridging year do more than accumulate useful knowledge and study skills; the development of inner strength, tolerance and flexibility are all essential for effective tertiary study and professional practice.

The insights gained from this research have been valuable in the development and selection of teaching and learning strategies for the 2001 program. There have already been adjustments to the content in some courses, and increased use of experiential learning methods. It is also important to take into consideration the positive feedback in order to ensure the maintenance of those aspects of the bridging learning environment that were appreciated by the students. The study confirmed the importance of bridging education at Whyalla in providing expanded educational opportunities through an alternative pathway to university for rural South Australians.
REFERENCES

Beasley, V. (1990). Can a university equity program be made to work? HERDSA, 12, 118-120.


APPENDIX A

Questionnaire for Whyalla Bridging Courses Project
(Current Whyalla Bridging Program students)

[More space was left on distribution copies]

Earlier this year we conducted a research project about Bridging courses at Whyalla Campus. It involved focus groups attended by former Whyalla Campus Bridging students who had successfully completed their course and qualified for admission to undergraduate courses at the Campus. The aim was to find out the impact their course had made on their lives, and how well it had prepared them for degree studies afterwards.

We would now like to give you, the current students of the Whyalla Bridging Program, an opportunity to have your say. We would like you to tell us about the impact of the course so far on your lives, and about some other course-related matters. Your comments will provide a useful contribution to future Bridging Program planning.

This study has been approved by the University’s Human Research Ethics Committee. If you have any questions about general aspects of the project, the Chair of that committee, Ms Linley Hartmann (telephone 8302 0327, internal extension 20327), will be available to discuss these matters. Please feel free to direct other queries to Bronwyn Ellis (telephone 8647 6001; internal extension 26001) or the other researchers.

Please take the time to complete the following short anonymous questionnaire. It should take no more than half an hour. It is of course completely voluntary. If you do not want to answer particular questions, feel free to omit them. If you want to write more than there is space for, please use the blank space at the end or attach an extra piece of paper.

Thank you for your participation and all the best!

Nancy Cooper, Bronwyn Ellis and Janet Sawyer

Profile of participant (please underline the answers that apply to you):

1. Gender: Male Female
2. Age group: <21 21-30 31-40 41-50 >50
3. First language: English A language other than English

Your Bridging experience

1. What influence has Bridging study so far had on your life (personal, study, other)?
   - Negative impacts
   - Positive impacts

2. What aspects are contributing to your study success?
   - Personal factors
   - Course-related factors

3. What challenges/obstacles are you experiencing in your Bridging year?
   - Personal matters
   - Course-related matters

4. Have you ever felt like withdrawing from particular subjects or the whole course?
If yes, what made you feel that way?

What kept you going?

5. How well do you think the Bridging course so far has helped you to get used to further study in a university environment?

What other things do you wish were in the course?

Any other suggestions for improvement?

6. Any positive or negative comments on University facilities and support?

   Campus Central
   Library
   Student Support Centre
   Computer pools
   Accessibility of lecturers
   Student Association (USASA)

7. What do you think about the length of the course?

8. What do you think about class times?

9. Have you found that the level of difficulty is increasing gradually, too fast, or not at all?

10. What has been the best thing about being a student in the Bridging Program?

11. What were your aims when you began the Bridging course?

12. What are you hoping to do after completing the course?

13. Would you recommend the Whyalla Bridging Program to other people?

When you have filled in the questionnaire, please return it to Campus Central as soon as possible in the envelope provided.

THANK YOU!

[A similar questionnaire was distributed to students who had enrolled in 2000, but had discontinued. Questions were modified to fit their situation, and additional questions were: ‘What did you go on to do after withdrawing from the course?’ and ‘Are you studying now, or do you think you’ll study again? Uni? TAFE? Elsewhere?’]
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