Awareness of oral health issues

In an attempt to elicit a tangible measure of learning, students were asked to list as many oral health issues that affected rural communities that they were aware of before attending the RPP. On completion of the program, the students were asked the same question. Before the placement, 8 students (33%) were unable to identify any more than two dental health issues affecting rural communities. On completion of the RPP, this had decreased to 4 students (16%). In addition, students identified two oral health issues that they had not considered before the placement and their responses were both more detailed and demonstrated clarity of thought. There was increased awareness of indigenous oral health needs and the students were able to describe the issues rather than speculate and list issues. For example, "Fluoridation??" was mentioned before the RPP whereas after the RPP the student (08) documented that, "although the water may be fluoridated, if the people in the community do not drink it they cannot expect to get the benefits! Mind you, it does taste foul!"

Table 3: Oral health issues identified by students pre- and post- RPP 2000

<table>
<thead>
<tr>
<th></th>
<th>Number of comments pre-RPP</th>
<th>Number of comments post-RPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to dental care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate manpower</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Lack of Specialist support</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Geographical isolation</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Lack of allied health support</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Funding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability to pay for treatment due to low income</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Lack of public sector funding</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Patient factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited dental awareness</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Lower dental health priority</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Aboriginal health needs</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Increased caries incidence</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Public health issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of fluoridation</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Little oral health promotion</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
The major benefit of this element of the research was to determine common areas of deficiency in knowledge before the RPP and thus facilitate the development of appropriate core topics to be included in the orientation program. It was apparent however that the students had a greater awareness of oral health issues facing rural communities after the RPP. There was a significant increase in awareness of geographical isolation after the RPP. Before the RPP, there was a perception that rural residents would not be ‘dentally aware’ however after the RPP, this was considered to be less of an issue.

Learning outcomes and Learning contracts

In order that the various activities and experiences were constructive, students outlined their own anticipated learning outcomes from the program and identified methods by which they would achieve these outcomes. With support from the RPP coordinator, each student selected one of their learning outcomes and developed this to become their formal learning contract for the program. Mindful of the potential benefits of shared learning and in an attempt to encourage peer-facilitated reflection throughout the RPP, the learning contracts were negotiated to ensure that as many of the group learning outcomes were covered as possible. In order to optimise learning, a structured orientation program, exposing students to commonly identified learning outcomes, was combined with a tailored individual learning contract.

Learning contracts have been reported as benefiting students through increasing personal responsibility (86), providing a focus for learning (212) and demarcating roles, responsibilities and expectations of learning (213). As a large number of clinical supervisors were involved with the RPP, the added benefit of provision of a working structure for RPP participants (188) was beneficial.

All 24 students submitted reports on completed learning contracts. All of these contracts provided evidence of student learning in the selected area but they did not allow any evaluation of additional learning. During the post-placement briefing session it transpired that many students found it onerous to establish learning outcomes,
maintain learning journals, fulfil learning contracts and determine criteria for self- and peer assessments. There was however unanimous agreement that these elements enhanced learning throughout the RPP. One student (02) commented that, "The contract gave us a focus when we were visiting the different places and as we learnt more, we also learnt more about what to ask".

The post-placement questionnaire specifically requested feedback on the various elements of the RPP. When asked whether the learning outcomes and contracts should be retained, 22 students (92%) felt that the learning outcomes and contracts had been an essential element of the RPP and that they should be retained. The remaining 2 students felt that "they were too much work" (19) and one commented that, "We didn't need to have learning requirements like this - it was all so new that we had no choice but to learn" (05).

On the final morning of the RPP, the completed learning contracts formed the basis of a 10-minute presentation to peers. Individual learning was therefore shared with peers and this promoted student reflection on their experiences in an informal setting. Several of the participating staff were able to attend the sessions to provide further learning opportunities.

On reflection, the RPP provided numerous opportunities for students to determine their learning but as the RPP took place over a short period of time (2 weeks) there were too many elements included within the program. The individual strategies selected, the time involved in negotiating contracts and criteria, and the expectation that the students would complete all of these requirements resulted in a perception of an excessively high workload for all involved. In addition, support for individual learning and assessment was not always provided. As a consequence, some students felt that their learning was not as well supported as they had anticipated.

"Thought we had it all worked out but apparently K informed students that contracts were pointless and that it was much better to talk things through. He may be right but they were a bit fed up that they had done all the work and then"
it was disregarded. Think it worked really well with the ones that I did but it really needs me to be able to work through with all of them afterwards. Having done the contracts and self-assessment I feel a bit disappointed that I didn’t get to talk through the outcomes with all of them individually. Possible solutions?? I do de-brief all of them in one place eg Sydney. Provide better staff support. Reduce number of strategies. Need to talk it through with the mentors”.

DJC December 2000

Self-assessment strategies and outcomes

As previously discussed, students were required to complete a self-assessment for the RPP to ensure that the assessment was in alignment with each student's individual learning outcomes. As the RPP was an elective curriculum component there was no formal summative assessment requirement. During the pre-placement session and the one-to-one sessions during orientation, it was indicated that the ‘unofficial’ assessment requirement would be restricted to successful fulfilment of the learning contract and that this would be non-ranked and non-graded assessment using pass or fail descriptors.

Twenty one of the twenty four (87.5% response rate) students submitted their self-assessments at the post-placement session in Sydney. Students who had elected to peer assess completed this assessment during the final session of the RPP.

The assessment strategies selected by the individual students showed remarkable similarity. All of the students selected a pass/fail approach to their assessment however three students described a 'bonus system' whereby they would assess themselves as “excelling” according to various criteria. These additional criteria were "enjoyment of the program" (11) and "helps me to decide about my future career" (07 and 08). The determination of self-assessment criteria required considerable discussion and guidance. Students tended to be either ambitious or overly simplistic. As these students had little or no prior experience of self-assessment or criterion referencing, there were
unreasonable expectations of their ability to embrace the concept. Inevitably, many of the criteria were influenced by the facilitation of the RPP coordinator.

Table 4: Summary of self-assessment criteria used during the RPP 2000

<table>
<thead>
<tr>
<th>Self-assessment criteria</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally achieved all learning outcomes</td>
<td>9</td>
</tr>
<tr>
<td>Fulfilled learning contract and partially achieved learning outcomes</td>
<td>1</td>
</tr>
<tr>
<td>Partially completed all learning outcomes</td>
<td>5</td>
</tr>
<tr>
<td>Fulfilled learning contract</td>
<td>2</td>
</tr>
<tr>
<td>Clarification of future career direction</td>
<td>3</td>
</tr>
<tr>
<td>Learnt anything</td>
<td>1</td>
</tr>
</tbody>
</table>

The other three students chose to award themselves a 'bonus' as outlined above. Throughout the RPP, students were asked about the self-assessment strategy in the context of the RPP becoming a mandatory element of the curriculum. Various alternative assessment strategies were discussed.

All 21 students assessed themselves as having 'passed' the RPP, including the three students who defined an additional level (Pass +).

"This placement has been a success for me as I have fulfilled my learning contract and have shared this learning with the rest of the group - I passed!"

Student 19 October 2000

"I achieved all of my (10) learning outcomes! I am glad that I pushed myself and it was fun"

Student 03 October 2000

"Passed the program for sure and definitely a bonus that it has had a positive effect on future career direction".

Student 23 October 2000
Many students made additional comments to supplement their self-assessments suggesting that their chosen criteria were inadequate to define their learning from the RPP.

"Have I done all that I wanted to do? Yes – I may have done more with more time. Have I learned anything? YES – there’s practically a new learning experience for me every day. My approach to dentistry is broadened. Have I fulfilled my learning contract – definitely yes."

Student 06 October 2000

"I learnt about things I didn’t even have a view on before so my self-assessment was a bit limited in retrospect. Definitely a pass though!"

Student 12 October 2000

Sixteen students (76% of those who submitted a self-assessment and 66% of the whole group) felt that the self-assessment strategy enhanced reflection on their learning and should be retained as a component of the RPP.

Peer assessment strategies and outcomes

The value of peer assessment in student learning has been described \(^{(84, 97)}\). As stated by Nightingale, “the overwhelming view is that peer assessment is generally a useful, valid and reliable exercise”.

Selecting grade descriptors for peer assessment was a difficult exercise for the students who employed many different strategies. Students selected pass/fail, percentage and the traditional University system of grades ranging from High Distinction to Fail. All of the students felt that ‘fulfilment of learning contract’ was an essential criterion although numerous other criteria were referred to. These included various elements of presentation style and evidence of shared learning at various levels. It was also interesting to note that the students involved with the RPP selected criteria that
assessed both product and presentation as previous reports have noted that students focus on either one element or the other (97) (105).

Their peers assessed all of the students as having passed the program. Only three students used the originally defined criteria and 12 supported their peer assessment with written feedback. Students showed a general reluctance to 'fail' their colleagues as demonstrated by comments such as "pass but only just" and "pass - ". The peer assessment component of the program was neither valid nor reliable as there was insufficient time available to develop the assessment criteria. In retrospect the inclusion of this assessment strategy may have been overly ambitious as the students required considerable and unanticipated levels of support to develop the other planned assessment methods.

Only 6 students felt that the peer assessment was a valuable element and at the post-placement de-briefing session, one student summed up the feelings of the group.

"We had never really thought about how to assess other people. It seems easy at first but then you have to decide whether they need to fulfil all of your criteria or just some of them. If it's just some of them, which ones? I don't think that any of us would have actually failed anyone".

Student 11 October 2000

Another student (21) felt that the exercise had been useful in demonstrating the variability and subjectivity of assessment in general, and from this perspective it had been useful in rationalising the assessments obtained during undergraduate studies.

Unfortunately many of the students "forgot" to complete this element of the RPP and it did not seem to impede their learning as demonstrated in the post-placement questionnaires and reflective statements.

"I couldn't really see the point of the peer assessments - it was better to chat about the presentations rather than mark them. We learnt heaps just through
sitting and chatting about stuff especially when the dentists were involved as sort of equals".

Student 16 October 2000

ADA NSW Risk Management session

As discussed in Chapter 6, the ADA NSW were key stakeholders in the RPP and a formal evaluation of the Risk Management session facilitated by O and B was undertaken. The aim of the session was to demonstrate to students that rural practice carried no greater risk of litigation than metropolitan practice. The objectives were to; Identify and evaluate the possible risks involved with the provision of dental treatment, Develop strategies to select and implement techniques for minimising such risks, and Discuss the various aspects of complaints resolution

The session comprised a short introduction, a case-based learning activity based on real cases and a concluding presentation. All students were asked to complete a short open and closed response anonymous questionnaire at the end of each session. The response rate was 100% and the evaluation outcomes are summarised in Figure 3.

![Graph showing student evaluation results]

Figure 3: Student evaluation of Risk Management session 2000 (n=24)

When asked to comment on aspects of the session that particularly enhanced learning, fourteen students felt that the use of case-based learning was of distinct value. In addition, the value of small group work was further acknowledged. "Interactive
learning (is) definitely better than being given the lists yourself". The "input from other people" and the "ability to brainstorm/critique others" were quoted as being helpful in learning. Seven students specifically commented on the approachability of, and support from the facilitators as being important in their learning. Students made comments such as, "We could ask whatever we liked", "presence of a tutor helped guide us in the right direction or pick up on important points we missed", "facilitator kept the ideas rolling" and "facilitators had expertise in their fields, were open to questions and challenged our thoughts".

Nine students stated that the presentations and facilitation provided by O and B were important in their learning. "O was facilitator - large knowledge base". "Presentations were easy to follow and relevant". "Hearing from a lawyer's point of view - a new perspective"

The students were also asked to list any improvements that may be made to the session. Nine students were unable to identify any area for improvement. Of the fifteen students who made suggestions, seven would have liked to consider more cases. Whilst additional cases would undoubtedly be beneficial, the session time would have to be increased proportionately in an already heavily timetabled orientation program.

Three students would have liked a longer session while two would have preferred a shorter session or more breaks, with one student commenting that, "too long sitting in one place leads to decreased concentration, start to feel sleepy therefore decreased value of excellent information". Two students would have preferred to receive the case material in advance of the session in order that they would have had longer to think about the issues involved. Two students requested that there should be more time at the end of the session for questions. One respondent suggested that, "scenarios could be given and we could be asked to discuss them as a group with the added info. etc. then there could be presentations to the rest of the class. After this we could be asked if these scenarios took place in the country would things change? I think this would be a good way of introducing a rural focus without complicating the other issues".

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As shown in the student feedback, this session was perceived by the students to be relevant to both degree program and future career. The cases provided useful learning experiences and the facilitators supported the learning. The students noted that the case-based learning format was helpful in their learning and that the contribution made by O and B was of great benefit.

This evaluation was central to the reporting element of the RPP and is considered further in the ‘Reporting’ section of each Chapter in Phase 2.

**Role of staff**

Feedback from interviews and the questionnaires demonstrated the crucial role that staff played in the RPP. Many clinicians were mentioned by name as being particularly supportive and being one of the “three best things about the RPP” in the post-placement questionnaire. The students were astounded at the level of support that they received. As there were always fewer than four students to one staff member, it was inevitable that the level of practical support would exceed that experienced by students during metropolitan-based clinical education. This was of great benefit to the students and led to increased self-confidence in clinical skills.

“I think that the RPP has made me more confident on the clinics. I have greater confidence in the things that I can do and much more of an idea when I really need help rather than just asking the tutor all of the time. A gave me some tips about diagnostic sieves and I have used this a lot, specially in Oral Surgery – its also helped those who didn’t meet A as they asked me about it and we are now using this to revise for finals. I think he was pleased when I told him!”

Student 22 (by email) October 2000

One student expressed concern at a particular technique used by a staff member. Interestingly, the staff member reported concerns at the narrow range of clinical awareness shown by some of the students. During follow up one-to-one discussions it
appeared that the student had been rather confrontational in his analysis of the staff member’s technique and this had led to a fairly heated debate between the staff member and the student. This ‘critical incident’ had not been reported at the final debriefing session during the RPP as both the student and the staff member were present at this session. The ability for the RPP coordinator to discuss the incident with both parties independently assisted in their learning from this experience, as both the student and staff member referred to the enlightenment in post-RPP feedback.

DATA COLLECTION AND ANALYSIS

Data collection

Elements of the collection and analysis of data have been mentioned in the previous ‘Student Learning’ section and they will be discussed later in this section. Other data collected from the questionnaires, interviews and logbooks will be described and analysed in this section. Of the 24 participants, all students submitted post-RPP reflective statements and questionnaires.
Student familiarity with rural lifestyle

There is evidence that students who are familiar with rural lifestyle, particularly if they have spent their childhood in rural areas, are more likely to return to rural areas when they graduate (see for example (136, 141, 154, 157, 214)). A meta-analysis of the literature (160) concludes that a combination of rural background and rural placement during medical education is the most significant predictor for future rural practice. In order that this combination could be considered in the context of the RPP, students were asked to indicate their familiarity with rural lifestyle before the program.

The majority of students attending the placements felt that they were unfamiliar with rural lifestyle. Seventeen students (71%) had spent less than one month in rural areas of Australia and six of this group (25% of RPP cohort) had spent no time at all in rural areas. One student had spent most of his life in rural NSW but had attended secondary school in a metropolitan area. The remaining students had spent up to 1 year in rural NSW. Twenty-two of the students (92%) had completed their primary and secondary education in a metropolitan or regional centre. Two students were overseas-trained dentists and had only recently arrived in Australia to complete their studies; one of these students had spent over 10 years in rural areas of India. In their pre-RPP reflective statements, many students referred to their lack of knowledge about rural lifestyle and practice.

"Then I started thinking more about what would being a dentist in a country town be like - this curiosity was more intensified when I opted to go on the rural placement. I wondered how I felt about leaving behind 'city life', what advantages and benefits would there be? What would the life-style be like? The people? The dentistry?"

Student 22 August 2000

"I have lived in regional Australia and visited a farm or two but most of my expectations of rural life are based on TV and the opinion of a handful of people. I imagine rural people to perhaps be a bit tougher than me and a bit
more practically-minded. In my imagination they all ride horses or
motorbikes."

Student 03 August 2000

"I always had a picture that country lifestyle would be very challenging as
there will be so many things to get accustomed to. Being a person who has
spent a lifetime in the city, I actually have no idea at all about the country"

Student 11 August 2000

The two students who considered themselves to be familiar with rural lifestyle had
spent several years in regional and rural areas. Student 03 had been educated in a
regional town and spent holiday time in metropolitan areas. Student 09 had attended a
rural primary school and a regional high school. The experiences and comments of
these students are considered further later in this Chapter and in an overall analysis of
the RPP in Phase 3.

Student attitudes to rural practice before and after RPP

Students were asked to list three major advantages and three limitations of rural
practice before and after attending the RPP. Before the placements, the major
advantages reported were rural lifestyle, being a member of a small, friendly
community and the broad range of clinical experience available, in decreasing
frequency. The frequency of responses is detailed in Table 5 below. Student
perceptions of the three major advantages to a rural career were consistent before and
after the RPP although 'rural lifestyle' was ranked third after the RPP. Seventeen
students (71%) listed "being part of a small, friendly community" as being the major
advantage of a rural career. Five students (21%) also identified the "low cost of living"
as being a major advantage having experienced the RPP.
Table 5: Students perceptions of major advantages of rural dental practice pre- and post-RPP 2000

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Frequency of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural lifestyle</td>
<td>Pre-placement 9 14</td>
</tr>
<tr>
<td>Being part of a small, friendly community</td>
<td>Pre-placement 14 17</td>
</tr>
<tr>
<td>Broader range of clinical experience</td>
<td>Pre-placement 11 14</td>
</tr>
<tr>
<td>Less stressful working environment</td>
<td>Pre-placement 8 6</td>
</tr>
<tr>
<td>Increased remuneration</td>
<td>Pre-placement 6 8</td>
</tr>
<tr>
<td>Full-time employment opportunities</td>
<td>Pre-placement 5 2</td>
</tr>
<tr>
<td>Ability to provide care where none exists</td>
<td>Pre-placement 3 2</td>
</tr>
<tr>
<td>Low cost of living</td>
<td>Pre-placement 0 5</td>
</tr>
<tr>
<td>Easy commuting</td>
<td>Pre-placement 0 1</td>
</tr>
</tbody>
</table>

Students listed the perceived limitations of a rural career before the RPP. As the majority of the students had reported that they were "not familiar" with rural or remote areas, it would seem that these limitations had been identified following discussions with others and through the media portrayal of “the bush”, with one student referring to the film “Crocodile Dundee”. After the RPP, students quoted "professional isolation" as being the major limitation of a rural career (ranked 3rd before Program). The "distance from family and friends" was still an important consideration however after the program, 33% of students who had originally considered this to be a limitation felt that this was no longer the case. Similarly, of the eleven students who listed "lack of social activities" as being a limitation, four felt that this was not the case after the RPP. All seven students who felt that ‘the bush’ was too far from Sydney withdrew this comment after the placement. As the students travelled by plane to both Broken Hill and Dubbo, it is assumed that the ease of transport contributed to the altered perception. Before the placement, a total of 52 perceived limitations were listed.
by 24 students, however after the placements, the total number had decreased to 40. The frequency of response has been tabulated below.

Table 6: Perceived limitations of rural practice pre- and post-RPP 2000

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Frequency of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from family and friends</td>
<td>15</td>
</tr>
<tr>
<td>Lack of social activities</td>
<td>11</td>
</tr>
<tr>
<td>Professional isolation</td>
<td>9</td>
</tr>
<tr>
<td>Distance from Sydney</td>
<td>7</td>
</tr>
<tr>
<td>Lack of education choice for children</td>
<td>4</td>
</tr>
<tr>
<td>Cultural isolation</td>
<td>2</td>
</tr>
<tr>
<td>Lack of public transport</td>
<td>2</td>
</tr>
<tr>
<td>No opportunity to meet a partner</td>
<td>1</td>
</tr>
<tr>
<td>Being identifiable within the community</td>
<td>1</td>
</tr>
<tr>
<td>Difficulty in leaving once established</td>
<td>0</td>
</tr>
<tr>
<td>Poor remuneration</td>
<td>0</td>
</tr>
<tr>
<td>Rural lifestyle</td>
<td>0</td>
</tr>
</tbody>
</table>

This suggested that the RPP had confirmed the students’ perceived advantages of a rural career and reduced the number of perceived limitations to a rural career. 'Professional isolation' was the only area in which students felt that the reality was more of a limitation than they had perceived and became the first ranked area of concern for the students. This has implications for new graduate employment in rural areas and is discussed in Phase 3.

Students’ attitudes to rural lifestyle on completion of the RPP

On completion of the RPP, most students felt positive about the rural lifestyle as evidenced by their post-placement reflective statements and as indicated above. Students who had been involved with the University health club, MIRAGE, had a
more realistic idea about rural lifestyle and on completion, felt that this awareness before the placement had enhanced their experience. As a consequence of the RPP, seven students (30%) expressed a desire to become more involved with MIRAGE activities on campus.

"This two weeks gave me a chance to taste the country life before making any big moves and without this opportunity I probably wouldn't have ventured out of Sydney to work".

Student 21 October 2000

"This scheme has really changed my perceptions of the country. It was really surprising how much different it was to the image portrayed on the mass media. Friendly people with warm hearts and plenty of things to do - it was great"

Student 01 October 2000

"The pace of life was a little slower yet the people seemed laid back and very friendly, which was a noticeable contrast to the hustle and bustle of the city where engaging in a conversation with a passing stranger is a rarity. I could adapt quite comfortably"

Student 15 October 2000

Student interest in a rural career
Students were asked to indicate their "present interest in a rural career" before and after the RPP. The responses were based on a scale from 1 to 10 with 1 equating to "no interest" and 10 equating to "very interested" and are represented graphically in Figure 4.
Figure 4: Interest in rural career before and after RPP 2000

SPSS® software was used to analyse the pre- and post-scores. The mean interest scores before and after the placements were almost identical 7.4 ±1.8 SD and 7.3 ± 2.0 SD respectively. A paired samples T Test provides t = 0.116 with 23 degrees of freedom and a corresponding significance level of 0.908. There was therefore no significant difference in the grouped pre- and post-RPP rural career interest scores however analysis of pre- and post-scores demonstrated a positive impact for individual students. The number of students reporting an interest rate of 9 or higher increased from seven (30%) to nine (38%). Seven students (30%) were more interested in a rural career after the RPP, ten (42%) were less interested and seven (30%) had the same interest level before and after the RPP. It is interesting to note that of those who were less interested after the RPP, five (50% of this group) had a decreased interest rate of 1 unit. Of the group who had an increased interest, three (43%) had increased their interest rate by 3 or more units.

Four students rated their interest rate as 5 or below both before and after the program. Discussions with this group of students revealed that three of the group had family commitments that prevented them from leaving the city. One of the five (09) had spent most of his life in rural NSW and "I now know for certain that I don't want to go back, at least not yet". This student considered that his professional education afforded him

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6 SPSS 11.0 software. Copyright © 2001 by SPSS Inc., Chicago
mobility and flexibility, and he was reluctant to return to the “narrow mindedness” that he had experienced during his formative years.

In order to provide more insight into attitudes towards and interest in rural or remote practice, the reflective statements were reviewed and the following comments were made by students at the end of the placement. The comments made in the post-placement reflective statements confirm the perception that the program had a positive influence on future career direction. While not all students wished to practice in rural areas, the RPP had provided them with the opportunity to clarify their thoughts and ideas about their futures.

"Now I think that I would seriously consider working in the bush. Lightning Ridge appeals to me; hopefully there's still an opportunity to go there. I don't want to sound too keen and unrealistic but at this point I think going there will be a good option" (Interest levels 8 to 9)

Student 12 October 2000

"I plan to go somewhere quite small and far away- like Walgett or Broken Hill - because I'm ready for a change and I want it to be obvious" (Interest levels 9 to 9)

Student 23 October 2000

"Overall the rural experience has been beneficial as it has increased my awareness of life in rural areas and increased my willingness to work in the rural sector. Whether I work in a rural area will depend on what family commitments I must fulfil next year" (Interest levels 5 to 8)

Student 19 October 2000

"I feel that my pre-conceived ideas have been challenged- dentistry is the same wherever you go. I have come out of this experience with a lot of positive decisions about how I feel about rural dentistry" (Interest levels 4 to 3)

Student 06 October 2000
Role of peers

While the inclusion of peer assessment was not successful, the students acknowledged the support of their peers during the RPP.

"The size of the group helped - I was a bit worried I wouldn't know where to go or what to do but lots of people made it all easy and non-threatening. I thought that I might get stared at but as there were lots of us it wasn't an issue".

Student 03 September 2000

"It was great to have a buddy to experience it all with. When Student 18 was nursing for me I felt more secure as I knew that she knew how good (or bad!) I was and that she would help me if I stuffed up (I didn't!). If I'd been there on my own I think it would have been more nerve racking. Thought that I did OK as she gave me confidence".

Student 15 October 2000

During group discussions and development of Learning Contracts it became increasingly apparent that many students were concerned that they may attract attention due to their Asian appearance. They were of the opinion that rural residents were racist and that their Asian backgrounds would mean that the community did not accept them. They admitted that they had had reservations about attending the RPP on this basis but were reassured when they realised that they would be attending with peers. Within a short time, these fears were allayed and students reported feeling more confident about spending time in smaller groups. There were no reported incidents of racial prejudice and the students commented that they had been made to feel welcome by all of those residents that they had encountered. Students spoke to local Asian residents and reported that these residents were unaware of any racial tension in the community.

On reflection, electing to provide a group RPP experience benefited students for several reasons. With the changing student demographic, many students had concerns
about bigotry and in addition, the vast majority of students had not visited rural areas before the RPP. Many students mentioned the value of peer support from practical and personal perspectives. They also considered that they would be more likely to consider relocating to rural areas if they were able to live and work with new graduate colleagues. The role of peers as co-learners and clinical allies in the experiential program were also considered to be important in the RPP. This is discussed further in Phase 3.

**Staff input**

In response to the statement "I felt well supported during my rural experience", seven students strongly agreed, twelve agreed and one was unsure. The PDO based in Dubbo and Broken Hill acted as mentors to the students. Students were asked about the role of the mentor in the RPP given the statement, "The mentor was supportive and allowed me to clarify issues of importance to me". Seven students strongly agreed, eleven agreed and two were unsure. During the second RPP, one mentor was unavailable and this was commented on in the student interviews.

*Student 19: “It was much better when P was there – he was away second week and we weren’t quite sure who we were supposed to go to. There weren’t any major dramas and I suppose it was the activities outside the clinic that we missed out on.”*

*Student 22: “But we did get to work with S who was great ....”*

*Student 19: “Yeh I suppose what we missed in one area we gained in another”*

*Student 21: “Yes but we all felt that when P wasn’t there it didn’t seem to be so organised. It was important to have one person who was the identified boss. It was still OK though”*

Seven students strongly agreed that the clinicians involved enhanced their learning. Twelve students agreed that this was the case and one was unsure.
"Some had other ideas from mine but it made me think and even if I don't agree I get something out of the discussions. It was all so different from Uni."

Student 11 October 2000

"M was fantastic. All of the dentists seem so enthusiastic about what they do. They have inspired me a lot in choosing a rural career but I wonder whether it was for our benefit. Haven't really seen many dentists working in Sydney – would be worthwhile visiting private practices before we come so that we have something to compare it with"

Student 08 October 2000

There were several comments that related to the different methods and materials used by rural practitioners and although a majority of students agreed that they were well prepared for their placement, it was apparent that the diversity of treatment options should be discussed in more detail before future placements.

"Watching R really made me think about what makes a good dentist. Patients loved him and obviously had been seeing him for years. Lesson for today ....GOOD TECHNICAL DENTISTRY DOESN'T NECESSARILY MAKE A GOOD DENTIST"

Student 12 (from learning journal submitted voluntarily)

**Student contribution to oral health care**

During the RPP, students were required to keep a logbook of their clinical experience. Analysis of these logs reveals that the 24 students were involved with the treatment of at least 840 patients during the seven days of their clinical attachments#. Details of patient encounters are summarised in Table 7.

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# Wednesday to Friday of RPP Week one and Monday to Thursday of RPP Week two
Table 7: Clinical experience of students during RPP 2000

<table>
<thead>
<tr>
<th></th>
<th>Operator</th>
<th>Assistant</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of patients</td>
<td>205</td>
<td>149</td>
<td>486</td>
</tr>
<tr>
<td>Average number of patients</td>
<td>9</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Range</td>
<td>2-21</td>
<td>0-23</td>
<td>0-70</td>
</tr>
</tbody>
</table>

Several students commented that they had "given up" recording patient care in which they assisted or observed therefore the only accurate statistics relate to the number of patients treated. A total of 205 patients were treated over the eleven-day period in Dubbo and Broken Hill. During the planning of the RPP, various methods of quantifying the students' productivity were discussed with the Principal Dental Officers. It was agreed that an analysis of productivity in the clinics for August, the month before (21 working days) the placements, would form the basis for comparison. In September the students worked for a total of seven days in the clinics.

The PDO in Dubbo provided a written evaluation of productivity and stated that, "The highlight is the apparent increased productivity in the two most common services of fillings and extractions [plus 28% and 31% respectively]. In light of these findings it could be said that Placement 2000 had a positive rather than a neutral or negative impact on the productivity of the Dubbo Community Dental Clinic".

Due to unforeseen circumstances, the PDO in Broken Hill stated that "Unfortunately, (I) didn't think to keep tabs on productivity, but the help the students gave was significant and would be reflected in a greater output for the period they were here".

In the Town Dental Clinic in Broken Hill, patients attending the clinic for either routine treatment, or emergency care, were allocated to a student operator. Patients were informed that the clinic was an accredited facility of the University of Sydney. All patients consented to treatment by the students. In contrast, patients awaiting
routine care at the Dubbo Community Clinic were contacted by the receptionist and offered an earlier appointment with a student. All of those contacted accepted this appointment with no apparent reservations. As many of the patients had waited a considerable length of time for their treatment, they were amenable to the concept of supervised care with a student.

The receptionist at Dubbo commented that, "the patients expressed some anxieties on arrival at the clinic and were reassured by myself and the nursing staff. They were generally very pleased with the treatment provided and several patients asked if it would be possible to see the student again". In his evaluation, the PDO at Dubbo noted that, "One of the good outcomes is that the patients have been happy with their treatment with no complaints and some positive feedback".

Staff feedback

As co-researchers, all staff involved with the RPP were surveyed using a brief open and closed response questionnaire. In addition, personal or telephone interviews were conducted during the three months following the RPP. Several staff supplied additional written comments.

The clinicians involved in the supervision of students in the public dental clinics were "pleasantly surprised" at the ability of the students. One clinician however expressed concern that the students had a very "narrow outlook on restorative dentistry".

Another noted that, "whilst all students appeared confident and comfortable with patients there was a perception in this second rotation, that perhaps students did not fully realise that one of the purposes of their clinical placements was to broaden their horizons: to listen to and to try alternative suggestions/comments offered about how to be more confident or effectively treat patients" (P).

"Very interesting chat with students – they are really surprised that people do things so differently. The two-visit full dentures were a hit – student 10 was
quite critical that this was completely at odds with what they are taught but the others had an appreciation of the impact that this would have if the patient lives miles away. Very critical of some clinical techniques but led to a lively debate/discussion about what 'good dentistry' is and whose responsibility is it to maintain standards. This criticism could have been quite negative if we hadn't chatted about it but it's not the sort of thing that you can actually 'teach'. It's back to the experience thing and the need to be able to talk things through with others. Went on to CE and need to be able to look at your own work and do the best that you can do. Student 12 is really astute – others seem to learn from him and listen to him where it may be too confrontational if I drive the discussion. Upshot was that they had greater understanding of aims of Risk Management session and importance of professional responsibilities. If every group had a Student 12 then there wouldn't be the need for a facilitator!! How do we find and share 12s!!

DJC September 2000

Of the private dental practitioners who supervised student observation and assisting, two strongly agreed, two agreed and one was unsure as to whether the presence of students was beneficial to their practice. One dentist commented that "the intellectual stimulation of discussing current topics with the students" was one of the best things about the placement. Others commented favourably on the professionalism and enthusiasm of the students.

The clinicians all agreed that the students were well prepared for the placement and that the supporting documentation was appropriate. The level of academic support was also felt to be appropriate. One clinician considered that the “aim of the exercise needs to be better defined”.

As a consequence of the RPP, several dentists indicated their willingness to employ a new graduate. One dentist informed the students that he "would employ any one of you tomorrow". During the planning stages of the RPP, the PDO in Dubbo had stated that
he would be reluctant to employ a dentist with no post-graduate experience. It was heartening to receive this comment from him at the end of the Program.

"As a result of the supervising dentists' exposure to the generally very high calibre of student ability, Macquarie Area Health Service will undertake to vary existing policy and create a position to accommodate the placement of junior dentists in late 2000/2001".

Staff p October 2000

Improvements to the RPP

On conclusion of the program, students and staff were asked to identify possible improvements to the RPP. Several students listed only one or two improvements thus yielding a total of 46 comments. These responses formed the basis for the questions asked at the de-briefing session held in Sydney.

Orientation Program

Five comments referred specifically to the orientation program at Broken Hill. Four students commented that they would have preferred a shorter orientation program to allow them more time for clinical work. One suggested that the orientation could be completed in Sydney prior to commencement of the RPP. A group discussion revealed that the majority of students would have preferred a longer, less intensive orientation program in Broken Hill. There were specific comments made to support the retention of existing content but two students suggested that a modified format would be preferable.

Several students in the first group expressed a desire to learn more about the Aboriginal communities and cross-cultural issues. The cross-cultural session planned for them had been disappointing in that the staff scheduled to facilitate the session arrived very late and "seemed totally bored with the whole thing" (Student 06).
"The AMS visit was not as beneficial as I had hoped – pretty hopeless really. The staff there did not seem to be interested in us and the presentation was quite difficult to follow. Maybe they just get fed up with talking to city slickers when they have their own work to be getting on with but you would think that they might see it as an opportunity to convert us".

Student 04 October 2000

Staff from the Department of Rural Health provided an excellent program for the second group of students. On completion of this session, one student made the recommendation that "I believe that it would be valuable to meet with Aboriginal people in a health care environment as well as in a social environment to facilitate greater understanding" (Student 23). The facilitator noted that the students were interested in the session and participated fully in the workshop activities. She commented that other allied health student groups were less enthusiastic about the cross-cultural session.

Clinical work

Nineteen comments indicated that students would have preferred more clinical experience during their placements. Of these, seven requested that students be allowed to undertake treatment in the Aboriginal Medical Service clinics and three requested extra sessions with the RFDS dentist. Three students commented that they felt that too much time was spent observing general dental practitioners and one student felt that they spent too much time observing in the rural town of Coonamble.

Comments ranged from, "observing at times may be slightly boring" (Student 19) to "more RFDS. Every day if possible. It was great" (Student 22) and "it would be more worthwhile if we had more opportunity to practice. There were too many sessions spent watching" (Student 09).
Rostering

The students generally appreciated the diversity of the program however one student commented that they would have liked a greater variety of dental experience. Of the 12 students who attended Broken Hill for the orientation and were then based in Dubbo, 4 would have appreciated the opportunity to visit the dental practices in Broken Hill before their departure. Two students would have liked to travel with the RFDS from Dubbo. As the Dubbo RFDS base was not completed this would obviously have been impossible however this was to be re-visited as the Dubbo RFDS service developed.

One student would have liked to visit Coonamble and one felt that they would have liked some time in Orange. Following a group discussion, it was agreed that students should take greater advantage of the ability to 'swap' sessions if mutually agreeable. The student must personally contact the course mentor and the clinician involved. One student provided a useful comment on this aspect of the placement that will be considered as the mandatory rural placements of the BDent curriculum are developed.

"Could students be rostered to a particular location for slightly longer period of time (eg Orange 2 weeks, Dubbo 2 weeks, Broken Hill 2 weeks)? The student may rotate their trips throughout the year so the 6 weeks total is spread out".

Student 12 October 2000

Social opportunities

Two students commented that they would have liked more recreational time and 1 requested more social functions. Three students would have liked to have transport made available to them to allow them to visit local sights and to do their shopping. A car was available at Broken Hill on Saturday mornings only and Macquarie AHS provided a car for those students based in Dubbo. Two students felt that larger student groups would be advantageous from a social perspective however both clinical facilities and accommodation within the Base Hospitals limited the group size.
Other comments

One student commented that she had had little exposure to general dental practitioners in the city so she was not too sure how practice in the country differed. As the RPP took place in September/October 2000, two students expressed concern at the timing in relation to end of year examinations.

Strengths of the RPP

All of the students felt very positive about the RPP and referred to their “enjoyment” of the program. More specifically, students were asked to list "the three best things about the Program". A total of 72 items were listed. These responses are summarised in Table 8 below.

<table>
<thead>
<tr>
<th>Grouped themes</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiencing rural lifestyle</td>
<td>18</td>
</tr>
<tr>
<td>Range of locations/activities</td>
<td>14</td>
</tr>
<tr>
<td>Approachability of clinicians</td>
<td>13</td>
</tr>
<tr>
<td>Clinical experience with minimal supervision</td>
<td>9</td>
</tr>
<tr>
<td>Influenced future career direction</td>
<td>7</td>
</tr>
<tr>
<td>Organisation of the RPP</td>
<td>5</td>
</tr>
<tr>
<td>Opportunity to fly with RFDS</td>
<td>3</td>
</tr>
<tr>
<td>Opportunity to observe trauma</td>
<td>2</td>
</tr>
<tr>
<td>Balance between work and recreational time</td>
<td>1</td>
</tr>
<tr>
<td>Opportunity to meet dental therapists</td>
<td>1</td>
</tr>
<tr>
<td>Spending time with friends</td>
<td>1</td>
</tr>
<tr>
<td>Provision of financial support</td>
<td>1</td>
</tr>
<tr>
<td>Learning without worrying about being assessed</td>
<td>1</td>
</tr>
<tr>
<td>Risk management session</td>
<td>1</td>
</tr>
<tr>
<td>Got to ride a horse!</td>
<td>1</td>
</tr>
</tbody>
</table>
REPORTING

Reporting on the RPP was based on fulfilling stakeholder requirements and encouraging continued collaboration with the project. In addition, the report was distributed to all students and staff to ensure its accuracy and the validity of the findings. Comments and input were requested from the recipients of the report.

Co-researcher input

As previously described, all staff and students participating in the RPP were included as co-researchers in the project. A comprehensive report was distributed to all students and staff involved with the RPP with comments invited. No comments were received. As the report was lengthy, it was assumed that the co-researchers had found it too onerous a task and an Executive Summary with formal rationalised recommendations was re-distributed to all co-researchers.

In the absence of written input, it was decided that all staff would be contacted for their opinions. There was unanimous agreement with the summary document and there was overwhelming support for continuation of the RPP. A request was made for students to attend a RPP discussion session in December 2000. As 20 of the students had
graduated by this time, it was impossible to coordinate the session although the four students who had just completed year 4 agreed to meet to discuss the RPP. Of these, two students attended the discussion session. These students agreed with the findings of the report but commented that the career interest score analysis did not reflect their perceptions of the program. We discussed methods for obtaining more accurate information and one student commented that she was aware of at least three students who had accepted rural positions as a consequence of their involvement with the RPP. She suggested that while the career interest scores gave a short-term indication of impact, investigation of future career direction might provide valuable additional information. The second student agreed with that suggestion and also noted that the information provided by the report had led to a written report to MIRAGE (see Chapter 6) with recommendations for enhancing contribution from dental students. She believed that the ability to work together for mutual gain had been a key element of her involvement. She also noted that the lack of response from the new graduates was understandable and was not to be construed as a lack of interest.

**INPUT FROM STAKEHOLDERS**

**Faculty of Dentistry**

The final RPP report was distributed via the Dean to the Curriculum Committee who accepted the report and its findings. The concept of a mandatory RPP for BDent students was discussed and agreed in principle. The Faculty demonstrated its commitment to the project by supporting an academic position for the further development of the RPP. It was decided that the RPP should continue in 2001 with a view to expanding the number of clinical sites involved.
University Department of Rural Health

The UDRH maintained its commitment to the RPP through co-funding of an academic position. The RPP report was used as a basis for reporting within the College of Health Sciences at the University of Sydney and as a result of this, the Faculty of Pharmacy adopted the RPP format for its students from 2001. The RPP was also reported during University strategic planning as an example of a positive, collaborative, multi-disciplinary initiative. The need for sustainability of the project was of interest to the UDRH and the need to develop a readily transferable protocol was facilitated through the involvement with the Faculty of Pharmacy.

Oral Health Branch of NSW Health (OHB)

The Chief Dental Officer acknowledged the success of the RPP and pledged continuing support for the project. The need for ongoing and long-term evaluation was considered a priority. The OHB also requested a more effective method of service provision analysis and proposed that the new Information System for Oral Health (ISOH) system be used in the future. Commitment and support were guaranteed although there were no funding opportunities for the RPP at that time.

ADA NSW

In addition to the final report, an article was published in the ADANSW Newsletter1 to inform the membership of the RPP. As a consequence of this article, several dentists contacted the Branch to ask how they could become involved with the RPP. The ADA NSW acknowledged the success of the RPP through internal publications and responded positively to a request for continued support. ADA NSW personnel reported that they had no hesitation in continuing their support for the project, specifically through further development of the Risk Management session. Co-sponsors, Guild Insurance and Financial Services (GIFS), reported their enthusiasm for the Risk Management session and the likely favourable impact that this would have on new graduate practice.

1 Australian Dental Association New South Wales Branch Newsletter January 2001
**Dental Board**

The Dental Board received the RPP report and an accompanying letter requesting continued support. In advance of inclusion of additional clinical centres, the Board required criteria for selection of community dental clinics by the Faculty.

Additional reports

Following widespread distribution of the report, a series of requests for presentations and articles were received. Numerous local newspaper articles and presentations to various professional interest groups and allied health associations eventuated.

Discussions with various staff resulted in the identification of future research needs and the Dental Board of NSW awarded a grant to investigate the perceptions of University of Sydney dental graduates to rural and remote dental practice. Several staff lamented the fact that continuing education opportunities were generally limited to major metropolitan centres. As a consequence of their input to the RPP, the Faculty of Dentistry Department of Continuing Education provided a “Rural Update” at Dubbo Plains Zoo Conference Centre early in 2001. This program, with internationally recognised speakers, was an unqualified success and this initiative continues to date. It provides an example of the mutual gain offered through staff involvement in the RPP.

As an additional consequence of reporting, students who had been participants in RPP 2000 formed an electronic discussion group, moderated by the RPP coordinator. The moderator received details of numerous rural job opportunities. These were forwarded to the discussion group. Students were assisted in establishing informal and formal contact with interested practitioners and were directed to professional support networks. The discussion group also allowed further investigation into the effects of the RPP.
Graduate employment of RPP students

As e-mail contact was ongoing, students who had participated in the RPP informed the coordinator of their employment details in February 2001. This information was used to provide an additional report to the stakeholders in March 2001. All 20 of the final year participants graduated from the Faculty of Dentistry in December 2000. The four fourth year students progressed to the final year of studies. The following analysis therefore relates to those 20 students who graduated in 2000.

Five students (25%) elected to work as Dental Officers in one of the two dental teaching hospitals in Sydney. Six students (30%) were working in private practice in metropolitan areas (three of these were working on a part-time basis only) and one student (5%) had moved to the UK. The remaining eight students (40%) were working in Moderately Accessible (MA) and Remote areas (R), seven in NSW and one interstate. Five of the eight students working in rural areas stated that they would not have considered such a career move if they had not been involved in the RPP. The other three students considered that the RPP had validated their intent to practice in rural areas.

A review of the questionnaires completed by the eight graduates working in MA and R areas, demonstrated that the latter two students indicated pre- and post-placement career interest scores of 10 and 9. Of the other six students, three had indicated increased interest scores after the RPP (4 to 7, 5 to 8, and 8 to 9), two had indicated a decreased career interest score (8 to 6 and 9 to 8) and one had maintained a career interest level of 9. Of the eight students who had indicated a career interest score of 8 or more after the RPP, six (75%) were working in rural areas. Of the 10 who had indicated a pre-RPP career interest score of 8 or more, six (60%) were working in rural areas. 40% of the RPP 2000 cohort was therefore working in rural areas and it appeared that in this small group a post-RPP career interest rating of 8 or higher was a stronger predictor for future rural practice than a pre-RPP career interest rating of 8 or higher. This is considered further in chapter 11.
CHAPTER 8
RURAL PLACEMENT PROGRAM 2001

Using the information obtained from RPP 2000 and documented in Chapter 7, plans for RPP 2001 commenced early in the year. A third Area Health Service expressed a desire to become formally involved with the RPP and as a consequence, links were established with Mid Western Area Health Service.
As the aims of the RPP were achieved in 2000, plans for 2001 focused on refinement of both the structure of the program and the research methods employed. Amendments to the structure of the RPP are detailed later in this Chapter and these included minor modifications to both the orientation program and clinical placements. It was apparent that the research methods employed during RPP 2000 required modification and details of such modifications are described within the ‘Research’ section of this Chapter.

In conjunction with the RPP, opportunities for further research were identified and the Commonwealth Department of Health and Aged Care supported a study of the rural dental workforce through its Rural Health Service Education and Training (RHSET) program. The findings of the project\(^6\) led to further refinement of the RPP and informed broader strategic planning for the rural dental workforce.

**RPP STRUCTURE**

\(^6\) Copy of the Rural Health Service Education and Training report are available from Deborah J Cockrell, Faculty of Dentistry, University of Sydney
With the introduction of a third clinical placement based at Orange, the opportunities for each student were enhanced. The experiential framework was maintained and local mentors submitted a range of clinical opportunities that could be made available during the RPP 2001. Additional experiences were identified including various outreach opportunities; the introduction of specialist practice visits and enhanced opportunities to work with oral health team members such as prosthetists and dental therapists.

As the mentor at Broken Hill had subsequently relocated, there was an immediate need to identify and recruit a new mentor. An individual was identified as a consequence of their involvement in RPP 2000 and was willing to accept this responsibility. The mentor at Orange had also been involved with RPP 2000 and had expressed a desire for further involvement. These mentors were familiar with the philosophy and practicalities of the RPP and had contributed as co-researchers in 2000. Staff development was provided on a 1:1 basis and academic support continued throughout 2001. The mentor at Dubbo had acted in this role in 2000 and was supported as required.

The RPP was scheduled to take place during the mid-Semester break in June/July 2001. In consultation, it was decided to again offer 24 student places with 12 students attending each of the two planned RPPs. On each occasion 12 students would attend the Orientation Program at Broken Hill with 4 students then attending each clinical placement based at Broken Hill, Dubbo and Orange. It was anticipated that this would maintain the peer supported introduction to rural NSW but would allow increased clinical opportunities for each student in the three locations.

The earlier onset of planning allowed excellent student accommodation to be booked at each clinical placement location. ADA NSW resolved to continue its support both for travel bursaries and the Risk Management session and the Dental Board of NSW accredited the community dental clinic at Orange for student placements. A formal Memorandum of Understanding (MOU) was established with Mid Western Area Health Service (AHS), the existing MOU with Far West and Macquarie AHS being valid until 2005.
The local mentors recruited support from colleagues to develop a wide range of social opportunities. Local practitioners also developed additional learning opportunities for the students. These included rescheduling of local study group meetings, clinical seminars and tutorials to include students.

**Pre-placement briefings**

2001 provided an opportunity to review the pre-placement briefing session. In 2000, this session was used to introduce myself as the RPP coordinator, provide practical details of the program and introduce the student-centred elements of the reflective curriculum. As planning in 2001 commenced earlier in the year, there was an opportunity to introduce myself during the Year 5 general orientation in February. A short presentation was made to all of the students and a written overview of the RPP was provided. Students were encouraged to talk with me at any time during that day and 43 of the 56 enrolled students availed themselves of the opportunity. Application forms were distributed electronically through the University administrator and any interested students were encouraged to submit their email addresses to me. An electronic forum was therefore established prior to the RPP. Students were able to post group or individually directed messages and comments.

This forum was subsequently used to inform students of the practical details of the RPP. A total of 39 students registered their interest and received copies of handbooks and draft rosters. Six students indicated that they would not be able to participate due to other vacation commitments. Of the remaining 33 students, 24 were selected to attend the RPP 2001. This selection was made as a consequence of contribution to the forum and submission of a statement outlining why they wished to attend the RPP. Previous familiarity with rural areas was also considered in the final selection. Over a period of weeks, and as other vacation opportunities became available, some students chose to withdraw and as a consequence, only one student who had wished to attend was not accommodated. While this was ultimately a favourable outcome, the constantly changing student pool was a great frustration and required considerable additional work.
Students were encouraged to post a list of motivating factors for their participation in the RPP in order that the planned orientation program could be tailored to their group needs. The motivating factors were very similar to those described by RPP 2000 participants and are summarised in Table 9. The planned structure of both the orientation program and clinical attachments were in alignment with these motivating factors.

**Table 9: Motivating factors for students attending RPP 2001**

<table>
<thead>
<tr>
<th>Motivation to attend RPP 2001</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>To experience rural lifestyle</td>
<td>22</td>
</tr>
<tr>
<td>To learn about dentistry in a different environment</td>
<td>22</td>
</tr>
<tr>
<td>To assist in career decision-making</td>
<td>12</td>
</tr>
<tr>
<td>To have a new life experience</td>
<td>12</td>
</tr>
<tr>
<td>To have a holiday</td>
<td>5</td>
</tr>
<tr>
<td>To meet new people</td>
<td>12</td>
</tr>
<tr>
<td>To learn about dental health issues in the country</td>
<td>5</td>
</tr>
<tr>
<td>To get more clinical experience</td>
<td>4</td>
</tr>
</tbody>
</table>

The electronic forum also allowed the introduction of the various educational elements of the RPP. Through a series of rhetorical questions, students were challenged to think about prior learning experiences, learning outcomes and self-assessment. It was anticipated that students would complete the pre-placement questionnaire through this forum although only two students chose to do so. The pre-placement briefing in Sydney therefore commenced with the students completing a pre-placement questionnaire, based on that used in 2000.

Through email communications, all of the students were aware that the briefing session would culminate in the determination of individual learning outcomes for the RPP and that these would be used to determine a formal learning contract for the RPP. They
were also aware that they would need to have this learning contract negotiated by the end of the orientation program.

Mindful of the difficulties encountered during the development of self-assessment strategies in 2000, guidelines for self-assessment were compiled and distributed in advance of the briefing session. Students were encouraged to consider and document draft criteria that would result in them either ‘passing’ or ‘failing’ the RPP.

During the pre-placement briefing, students worked in groups of four according to their rural placement venues. With the overall aims of sharing learning and promoting reflection, students were provided with structured opportunities to develop their learning outcomes and to refine these to form learning contracts. Each group then shared suggested learning contracts with the other student groups resulting in modifications and amendments to the contracts. The students had an appreciation of the opportunities for shared learning and suggested that all of the contracts could be distributed to all students on completion of the RPP. They also considered that insight into the learning contracts from RPP 2000 would have provided a valuable starting point for their own contracts. In conjunction with the learning contracts, the need for ongoing reflection was introduced and students were asked to develop possible methods for reflecting on the RPP. Diaries and journals were identified as being appropriate methods. During lively discussion, several students agreed that while this was a valuable exercise, the need for them to write something every day might result in trite, “mindless” comments purely written to fulfil the program requirements.

There was a small group of male students who considered that documenting reflections was “pointless”. The overwhelming opinion was that the program would inevitably lead to learning and that sharing the experience with others would enhance learning. The group recommendations from this initial element of the briefing session were that learning contracts would provide documented evidence of learning against which they could be assessed and that diaries would help them to fulfil their contracts but that this element should be left to the individual. During lunch and prior to the second section of the briefing, three students who represented the three different opinions on
journaling were briefly interviewed in private. The following excerpts taken from field notes reflect the opinions of these students and are in alignment with the literature in this area (please see Chapter 3).

DJC: You think that diaries are a good idea?

11: Yes but I don't think that everyone likes writing things down. It's something I've always done and it helps me to work things through for myself.

DJC: So do you think everyone should do this?

11: Absolutely. If you write notes on a daily basis it becomes part of a routine and it's good to go back and see how far you have come.

DJC: Should I be able to see what you write?

11: Mostly! Maybe we could write what we think at the end rather than giving in diaries. That way we have to keep them but we can only let you see what we want.

DJC: You have some reservations about diaries?

04: They are a good idea but I think that if we have to write something every day then we will end up writing about what we had for lunch and that sort of thing. There's not always things to write about.

DJC: Do you think everyone should write a diary during the RPP?

04: No because not everyone will. If you make people do it then how will you know that they have unless you read them all and then there's not much point because its written for you and most people will write what you want to read.

DJC: So I shouldn't be able to see what you write?

04: Depends what its for really. If it's for you to learn from us then I guess you could read it but it wouldn't really tell you what we have learned other than what we want you to think that we have learned!

DJC: You don't like the idea of diaries?

05: Not really – it's a girl thing. Well I suppose it depends what we are supposed to write in it.

DJC: Isn't that up to you?

05: No – its what you tell us we need to write

DJC: So if I said you could write anything what would you write?
Nothing probably. I might write about the treatment I had done I suppose. If you
told me I had to write other stuff to pass then I would do it but I can’t see the point
myself.

Interview with Students 14, 08 and 04 – June 2001

In accordance with student-centred learning theory (refer Chapter 3), the use of diaries
is an example of how the RPP content is negotiable. All of the students had an
appreciation of the need to have some form of learning structure but considered that
the exact nature of this should be left to the individual. This was particularly
emphasised in the second session that introduced assessment for the RPP.

In the distributed self-assessment documentation and in the preamble, the rationale for
assessment of the RPP was outlined. As the students would be under the direct
supervision and guidance of a range of practitioners, the need for a realistic approach
to assessment was discussed. There was an appreciation of the role of self-assessment
in this context although many students considered that the RPP should not be assessed
as it was not a degree requirement. In light of the proposal to include a mandatory rural
element to the new curriculum, students agreed that self-assessment was likely to be
the most sensible solution. Small group discussion led to other suggestions from the
students. These included a group assessment that included assessments by peers,
assessment by clinicians and assessment by the program coordinator. Each option was
discussed at length and students agreed that a group assessment would be difficult to
administer and may be considered unreliable. Students initially considered that
assessment by clinicians was an important component but they referred to the lack of
objectivity in clinical assessment that they had previously experienced. They agreed
that determination of criteria for assessment would be essential if there were multiple
assessors.

Many students agreed with one student who noted that assessment of clinical skills
didn’t actually help with learning but was useful for benchmarking purposes and
academic progression. This student indicated that she would learn more if she were
able to ask questions and request support, without the fear that this would have a

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negative influence on her assessment. There were also concerns that about the amalgamation of such assessments. An example was given of a bad clinical session with one tutor against several good sessions with a second tutor and the apportioning of input from the two tutors. It was concluded that self-assessment provided an opportunity for more valid assessment but that it was important to set out personal guidelines for this assessment. It was agreed that a ‘pass’ or ‘fail’ assessment be used.

In determining the criteria for this self-assessment, students ranged through numerous areas. These ranged from largely generic attributes such as communication skills and enthusiasm, to very specific clinical skills such as restoration margins and quality of root canal treatments. Using a whiteboard display of all of the suggested assessment areas, students worked individually to determine the areas in which they would assess their RPP involvement with no imposed restriction in the number of areas for assessment. The students worked in groups to develop criteria for self-assessment in each of these areas. The result was a draft self-assessment form for each student. Comparison of randomly selected self-assessment forms led to further discussions. Again, the time taken to reach this stage of development was under-estimated and at the end of the pre-placement briefing it was agreed that the students would develop these further before the RPP began. The students were encouraged to submit their final learning contracts and self-assessment forms to me electronically. While there were multiple email exchanges over the following three weeks, only two students submitted these items prior to the RPP.

It was interesting to note that the electronic forum allayed practical anxieties about the RPP and established communication between the group and myself, but did not facilitate student input to the development of the educational elements of the program. Despite there being fewer program elements to be negotiated during the briefing, the level of discussion exceeded that of 2000 and resulted in failure to complete the predetermined tasks. The willingness of students to participate in the learning activities was heartening and may have been attributed to the establishment of stronger communication links before the session.
Program structure

Mindful of the findings from RPP 2000, minor modifications were made to the RPP structure for 2001.

Orientation Program

The RPP 2000 students had suggested that the orientation in Broken Hill could be less intensive and last longer. As there were no flights to Broken Hill on Saturdays, it was impossible to extend the orientation without reducing the amount of clinical time available. Because the students had indicated that they would like more clinical time, lengthening of the orientation program was not feasible. The content of the orientation program was therefore modified to provide the students with more opportunity to visit areas around Broken Hill. The orientation commenced on a Sunday with an, ‘Area in Context’ session as described in Chapter 7. The Risk Management session supported by the ADA NSW was held on Monday morning with the RFDS session condensed to two hours. The students’ desire for more formal and structured cross-cultural education resulted in this element being expanded and delivered by the staff of the UDRH on Tuesday morning. The learning session previously conducted on Tuesday afternoon was held on a one to one and ad hoc basis over these two days allowing ample time for sight-seeing and enjoyment of the town and its surrounds.

In collaboration with the local mentors, free time was included in the rosters so that students were able to experience rural lifestyle. Weekend trips and transport were made available wherever possible and local practitioners lavished hospitality on the students.

On completion of the orientation program, all learning contracts and self-assessment forms were finalised although this necessitated some unorthodox meetings. The need for these elements to be completed in advance of the RPP was acknowledged.
Clinical placements

The introduction of a third clinical placement with a consequent reduction of student numbers from six to four in each location, provided additional opportunities for clinical work. In response to student comments observation sessions in general practice were reduced to half-day sessions. As there is only one Royal Flying Doctor Services (RFDS) dentist, it was impossible to increase experience in this area. Dentists working in the Aboriginal Medical Services (AMS) clinics in Dubbo and Broken Hill provided clinical supervision for students to work in these areas. Students were required to complete a log of experience and submit this on completion of the RPP.

Rostering

In response to comments from RPP 2000 students, prior to their departure to clinical placements, students were able to visit the various dental facilities in Broken Hill on the Wednesday morning. Students were also encouraged to exchange sessions with student colleagues with the caveat that all students should attend the same number of clinical treatment sessions. None of the students chose to change their roster. While a lengthier placement is worthy of further consideration, the BDS curriculum structure dictated that the RPP took place during vacation time. In order to accommodate the maximum number of students, longer placements were not feasible.

Learning requirements

As has been discussed, the learning requirements were modified as a result of the experience of RPP 2000 and the pre-placement briefing. The requirement to maintain a Learning Journal and the peer assessment strategy were removed. It was therefore agreed that on completion of the RPP, students would have completed;

- their learning contract,
- a self-assessment, and
- a log of clinical experience.

These were submitted on the final morning of the RPP after the ‘de-brief’ session facilitated by the local mentor.
Post-placement briefing

The post-placement briefing was held in Sydney within one month of completion of the RPP. Twenty one of the 24 students from the RPP attended this session. All 24 students submitted the required learning elements and completed a post-placement questionnaire.

Interestingly, four fourth year students attended the session and indicated a strong desire to participate in RPP 2002. These students joined the electronic forum established to support the RPP 2001 students. This forum was used to distribute employment details and support the students during the transition from university to practice. Several students accepted employment opportunities provided through the forum and many maintain contact to date.

Staff development

The need to recruit two new mentors required site visits for one to one staff development. The RPP mentors accepted their role in staff development for local practitioners involved in the project and organised a series of workshops. As RPP coordinator, I attended these sessions as determined by the local mentors. All clinical staff supporting the RPP were invited to submit CVs to the Faculty for honorary academic appointments.

RPP documentation provided by the coordinator was supplemented with local information. Using the information provided by the mentors, draft rosters were compiled by the coordinator early in 2001. These were distributed to the mentors and after amendment, to all staff and students involved in the RPP. As mentioned, there were no changes made by students.

STAKEHOLDERS

As a consequence of reporting from RPP 2000, all stakeholders maintained their support for the RPP.
Faculty of Dentistry

Until 2001, the appointment of a Senior Lecturer in Rural Dentistry had been on a 0.2 FTE basis, funded by the UDRH. In 2001, the Faculty demonstrated its commitment to the RPP by creating a joint academic appointment between the Faculty and the UDRH on a 0.4 FTE basis. The final report on RPP 2000 was accepted and endorsed by the Faculty’s Curriculum Committee.

UDRH

The establishment of a jointly funded academic position allowed the UDRH to further develop its multi-disciplinary curricula. As mentioned, the RPP provided a model for the Faculty of Pharmacy. The outcomes of this collaboration in rural education were presented, and received an award, at the College of Health Sciences Educational Conference. The academic position helped to emphasise the importance of including oral health care in a primary health care context and I was able to develop an oral health elective for the Primary Health Care curriculum offered to remote indigenous healthcare workers.

Oral Health Branch of NSW Health (OHB)

The OHB supported the expansion of the RPP into the Mid Western AHS and reiterated its desire for a long-term evaluation of the program. The OHB was not able to provide direct funding for the RPP however through the AHS, funds were provided for local accommodation. Support from local public sector dentists was assured.

ADA NSW

ADA NSW agreed to increase the value of the travel bursaries in line with increased travel costs and, in conjunction with Guild Insurance and Financial Services (GIFS), provided $14,000 to this end. Personnel involved with the Risk Management session collaborated with the RPP coordinator to refine the teaching materials for the session and as in 2000, attended both orientation programs in Broken Hill. As recommended by the ADA NSW, the coordinator gave several presentations to dental and health profession groups with great success.
Dental Board of NSW

The Dental Board of NSW accredited the community dental clinic at Orange for student placements in 2001. The RPP coordinator developed criteria for clinic accreditation and the Board approved these in 2001.

RESEARCH CYCLE 2

Research questions

The success of the RPP against its intended aims was described in Chapter 7. As planning for the RPP 2001 commenced, it was essential to consider the research methods employed in 2000 in order to refine these for 2001. With reference to the original establishment of a thematic concern (see Phase 1) and with the benefit of the findings from RPP 2000, a reflective table was constructed to guide further research. Using motivation for involvement with the RPP as a basis for reflection, the thematic table was restructured to provide a list of research questions relating to the RPP (Appendix 2). The list was distributed to the RPP staff and used as a basis for discussion with the stakeholders in advance of research development for 2001. The
refined list was then grouped and tabulated as can be seen in Appendix 3. This summary formed the basis for development of appropriate research methods for 2001.

**Research methods**

Appendix 3 demonstrates the various research questions and lists appropriate strategies to investigate each. It was apparent that multiple methods were required however the emphasis on reflective statements for both research and learning was reduced. It was anticipated that other research methods could provide the required data and that removing the requirement for reflective statements would result in a more manageable student workload.

**Pre and post placement questionnaires**

The questionnaires used in 2000 were used again in 2001 with an additional question, “Would you recommend rural dental practice to a colleague?” with possible responses of “yes”, “no” and “not sure”.

**Log books**

Students were required to maintain a log of experience as in 2000. As the students reported that “observation” and “assisting” cases were too numerous to mention, in 2001 only cases in which the student provided the treatment were recorded. In addition, the Information System for Oral Health (ISOH) patient record system was used to substantiate the student log books.

**Interviews with students**

As RPP coordinator I was fortunate to be able to spend considerable time with every student participant both formally and socially. One of the most valuable ways of gaining insight into student perceptions was through informal conversation. All students were freely communicative and willing to speak frankly about their experiences during the RPP.
Interviews with staff

The mentor at each clinic was interviewed within two months of completion of the RPP. The outcomes of these discussions informed future directions and plans for the RPP 2002. The mentors supplemented the interviews with written reports and details of these can be found later in this chapter.

Discussions with stakeholders

The evaluation report from 2000 was used as the basis for reporting as described in Chapter 7. As a consequence of this and as requested by the stakeholders, additional meetings were held. The major area of interest for all stakeholders was the impact that the RPP had on the rural dental workforce. During discussions with the stakeholders it was agreed that the program was unlikely to have a distinguishable impact upon the existing workforce but that indeed data on the current workforce was not available for making a comparison. With the support from these stakeholders, a successful application was made for funding to support a workforce project, copies of which are available from the author.

It was therefore deemed appropriate for this project to study the influence that the RPP had on the student participants and that this would be achieved by reviewing the career choices made on graduation.
As the RPP in 2000 had been constructed in alignment with experiential learning theory, there was no perceived requirement to change the program structure. Minor amendments were made to the orientation component of the program as already described. The importance of reflection in and after learning was discussed and emphasised during the pre-placement briefing however the formal need to document this reflection through reflective statements was not required in 2001. It was anticipated that removal of this component with the focus on learning contracts maintained in 2001, would provide scope for future research. It was therefore tentatively planned that the learning components for RPP 2001-2003 would be as follows:

- **RPP 2001** Learning contracts / self-assessment
- **RPP 2002** Reflective statements / self-assessment
- **RPP 2003** To be decided based upon findings from 2001 and 2002 and to form final research trial prior to implementation of mandatory RPP.
Awareness of oral health issues

Before the placement, twelve (50%) students were able to identify more than two oral health issues affecting rural communities. On completion of the RPP twenty one (87%) students were able to identify more than two dental health issues affecting rural communities. The total number of comments increased from 62 to 78, thus suggesting that there was a greater awareness of oral health issues after the RPP. Table 10 summarises the perceived oral health issues as indicated by all respondents before and after the RPP.

Table 10: Perceived rural dental health issues before and after RPP 2001

<table>
<thead>
<tr>
<th>Issue</th>
<th>Number of comments before RPP</th>
<th>Ranking before RPP</th>
<th>Number of comments after RPP</th>
<th>Ranking after RPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate manpower</td>
<td>16</td>
<td>1</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Geographical isolation</td>
<td>16</td>
<td>1</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Limited dental awareness</td>
<td>14</td>
<td>3</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Lack of Specialist support</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Inability to pay for treatment due to low income</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>Ageing population</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>Lower dental health priority</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Lack of fluoridation</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Lack of public sector funding</td>
<td>1</td>
<td>Not mentioned</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Aboriginal health needs</td>
<td>0</td>
<td>Not mentioned</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>
The RPP increased awareness of Aboriginal Health needs (not mentioned before RPP and ranked 6th after RPP) and lack of public sector funding (not mentioned before RPP and ranked 5th after RPP). It also appeared that the RPP dispelled concerns about the ability of rural residents to pay for treatment (ranked 5th before and not mentioned after RPP) and the perception of an ageing population (ranked 6th before and not mentioned after RPP). It was also interesting to note that two of the issues identified by students in 2000, perceived increased caries rate and decreased oral health promotion, were not mentioned either before or after the program by the participants in 2001. This observation would suggest that the perceptions before and the experiences during the RPP are unique thus validating the need for a student-centred program with individual structure and outcomes.

Learning outcomes and learning contracts

As described earlier in this chapter, the pre-placement briefing session resulted in the definition of learning contracts for the RPP. As has been noted, the need for students to have ownership in the RPP and to determine their own learning objectives resulted in an eclectic mix of contracts. Although considerable time was devoted to the development of a clear, concise contract, it was apparent that several students still required additional support to finalise their contracts. It was agreed that the submitted contracts would be accepted with the caveat that the self-assessment strategy would have to include an assessment of the initial contract itself.

On conclusion of the RPP, all twenty four students submitted completed learning contracts and all of the students fulfilled the contracts, despite the acknowledgment that the Faculty did not formally require this for assessment purposes. It might be reasonably concluded that the students’ willingness to participate fully with both the learning contracts and self-assessment represented an appreciation of the value of these elements. It was also clear however that the students had a strong desire to support me in my endeavours to develop protocols for a program protocol for future mandatory placements. They had embraced their roles as co-researchers in the project. It was of great personal reward to work with student colleagues in this collegiate manner. The
opportunity to spend time with the students outside the traditional learning environment provided considerable insight into personal motivations, aims and frustrations. The students also appreciated the opportunity to air their opinions in a less formal environment and many made insightful comments on their education to that time.

“We could all see what you were trying to achieve through this although I must admit that we all get a bit fed up with being guinea pigs for the new students (with reference to the students of the new curriculum). It was obvious that what you were suggesting had value to us but just as important was the way that you explained this to us. To be honest, a few (students) weren’t going to bother but we nagged them to do it all so that you had the information that you needed. It was a lot in the holidays though — maybe when the other students have to do it then it will be seen as less of a chore. It was actually good fun to work out what to do rather than being told what to do but on the other hand, I think that we would have learned stacks whether or not we had to do learning contracts or self-assessment.”

Student 08 November 2001

Mindful of my observation in 2000, that individual discussion on learning contracts and self-assessment would be of benefit to the students, I attempted to discuss these elements with individual students in Sydney. It was agreed that individual meetings would be scheduled around the planned post-placement session to ensure my availability. As a non-metropolitan resident I scheduled a two-day visit to Sydney to undertake these meetings and I emailed the group to this effect. As it transpired, only four students were able to attend the meetings because of various non-negotiable curriculum requirements. I therefore decided to correspond with each student via email and maintain the group de-briefing. This session was well attended and there was general agreement with the planned method of email communication. The students unanimously agreed that the RPP had been of great personal and professional benefit and one of the “highlights” of their dental education.
Although this de-briefing session was successful, there was little use of email for information exchange. One student wrote to say that now they had returned to "normality" it was difficult for them to find time to look at the RPP learning again. He stated that most students had now "moved on". This frank observation, although disappointing, was perhaps predictable. The final year curriculum is rigidly scheduled and students have a series of summative assessments that understandably preoccupy them. It had been anticipated that the RPP would provide an opportunity for students to develop reflective skills that had an impact upon their future learning. It was clear however that the need to fulfil curriculum requirements was the priority. These observations would suggest that the students considered the RPP to be a separate clinical opportunity and while there was a commitment to the learning contacts during the placements, it was not transferred to their continued learning. The documented aim of the RPP was to provide a student-centred learning opportunity although an underlying aim was to maintain that learning. By focusing on an individual learning contract, it would seem that the students considered the program to be finite and bounded rather than encouraging transferable learning skills. The comments made by student 18 in RPP 2000 in her reflective statement were in alignment with this observation perhaps suggesting that the use of reflective statements, as in 2000, may be of greater benefit in ongoing learning from the RPP experience.

**Self-assessment strategies and outcomes**

As previously described, students identified areas for self-assessment during the RPP and defined ‘pass’ and ‘fail’ grades for the program. While there was agreement that self-assessment was an appropriate strategy, it was disappointing that only fourteen of the twenty four students completed their self-developed assessment forms. The development of self-assessment strategies required considerably longer than had been anticipated at the pre-placement briefing and there was poor compliance with requests for email follow-up. As a consequence, only fifteen (62%) of the self-assessment forms were fully developed at the beginning of the RPP. Of these, only fourteen were completed at the end of the program. All of these students awarded themselves a 'pass'
grade. This was a considerably lower participation rate than in 2000 when twenty one students (87%) submitted self-assessments.

In 2000, each student was supported in the development of self-assessment on a one to one basis. In 2001 however, the orientation program was modified in response to student feedback; such individual support could not be provided. It is assumed that the lack of apparent prioritisation of self-assessment during orientation had an adverse effect on students’ perceptions and therefore compliance. The lack of previous exposure to criterion referenced, self-assessment meant that students were presented with a new concept during the pre-placement briefing. The expectation that they would complete the assessment forms with individual assistance via email was unrealistic. There was very limited participation in pre-RPP development after the initial briefing session. In an attempt to reconcile the students’ experiential needs with the defined educational elements, the latter was under-supported with a consequent detrimental impact on participation.

"Need to work out whether to a) continue with contracts and self-assessment and if so, allocate enough time to developing them (NB in 2004, students will know about these anyway so I have to make recommendations for both BDS and BDent RPPs) or b) abandon contracts and self-assessment and just have reflective statements. Think that reflective statements may be better for ongoing learning and integrating RPP with rest of curriculum but are they enough for faculty assessment of the RPP? Come to that, does the RPP have to be assessed as a stand alone element??"

DJC January 2002

ADA NSW Risk Management session

Based upon the recommendations from 2000 and additional student feedback, Risk Management sessions were planned for Monday 25th June and Monday 9th July as a component of the RPP 2001. In response to the plea by last years’ students for additional cases, all students worked through each of three separate cases. Because of
time constraints, the cases selected were less complex and required less additional information. The cases and student guides were distributed in advance of the Risk Management Sessions.

All students were asked to complete a short open and closed response questionnaire at the end of each session. Twenty two students responded (92%) and the results of this evaluation follow and are summarised in Figure 5.

**Figure 5: Evaluation of Risk Management session 2001 (n=22)**

One student noted that the session helped them to learn as it was, “very practical and applicable to everyday practice – a lot of what we were taught in ethics was much more theoretical – cases provided very practical application”. Another stated that “The best thing was the group discussion on the case studies – really helped consolidate what we know”. In 2000, only four students strongly agreed that they had a clear understanding of the learning objectives for the session. The improvement in understanding may have been due to the clinical cases and course documentation having been distributed in advance.

With regard to the case-based learning component of the session, eighteen students strongly agreed that the cases provided useful learning experiences with three agreeing that the cases were useful. This compares with ten and fourteen students respectively.
in 2000. The increased number of cases and the consequent amendments to case content may have contributed to the perceived increase in usefulness.

When asked to comment on aspects of the session that particularly enhanced learning, twenty of the twenty two students felt that the use of case-based learning in the form of real-life cases was of particular value. Sample comments in this regard were: "the use of real-life cases really demonstrated the importance of very basic issues such as communication and record-keeping ", "it was excellent to look at past cases and their outcomes and see what other people do" and "Cases were great as they provided real-life practical situations and made me think".

Ten students commented on the approachability of, and support from, the facilitators as being important in their learning. "Having excellent facilitators to explain the cases and how the particular dentists could have avoided the problems was particularly useful", "Excellent facilitators with priceless advice based upon experience" and "The one on one, informal interaction with (the facilitators) was fantastic. It created an environment conducive of learning, in that we weren’t afraid to ask questions about the things we were learning and that they were very interesting".

The students were also asked to list any improvements that may be made to the session. Four students made suggestions and of these, two would have liked to consider more cases. Whilst additional cases would undoubtedly be beneficial, the session time would have to be increased proportionately in an already heavily timetabled orientation program. One student would have liked a longer session in order that more time could be given to each case and one felt that there should be a mid-session break. Three students felt that the session should be offered to all students and suggested that there be a one-day Risk Management Seminar in Sydney.

The absence of suggestions for improvement by 82% of the participants possibly suggests satisfaction with the program. In 2000, two students would have preferred to receive the case material in advance of the session in order that they would have had longer to think about the issues involved. This request was complied with and there
was no similar student comment made in 2001. In response to the request from two students in 2000 that there should be more time at the end of the session for questions, half an hour was allocated for this purpose in 2001. In 2001 each case was discussed independent of location with rurality considered as an additional variable at the end of the case. This format worked well and there was no further feedback on this topic.

As evidenced by the student feedback, these sessions were seen to be highly relevant to both degree program and future career. The cases were perceived as providing useful learning experiences and this perception was an improvement on the feedback obtained in 2000.

Role of staff
As in 2000, the staff involved were committed to ensuring that the students received maximal personal and professional support during the RPP. The level of clinical supervision in all of the clinics ensured that no more than three students were supported during their clinical sessions. This is in vast contrast to clinical supervision in Sydney. The lack of formal assessment enhanced student learning as students were able to query and question with no fear that this would indicate unsatisfactory clinical ability.

"M was brilliant. A couple of times I was not quite sure about the treatment plans and at first I thought that she would give me a hard time if I queried someone else's work when I am only a student. Quite the opposite. She thought it was great that I wanted to discuss and even when I said dumb things she still treated me like a real dentist.

Student 19 November 2001

Without exception, the students recognised the excellent support provided by the RPP staff and described such support as being one of the “three best things” about the RPP. Access to a large number of staff was considered to be of great benefit to learning.
"I've never met so many dentists before! They all had different ideas and ways of doing things which was a bit confusing sometimes. It was excellent to have M and C to talk things through with after. Must admit I felt really special – no one had been so interested before"

Student 07 November 2001

The program was structured to allow such a diverse range of experience and the mentors were encouraged to develop the reflective ability of students. In the traditional educational environment, the staff to student ratio is inevitably less favourable and with a student cohort of approximately sixty, it is extremely difficult to provide the level of mentoring experienced during the RPP. The personal and professional benefits of mentors and diverse experiences are apparent and are considered further in Phase 3.

In 2001, students were advised to note questions or areas of concern in their journals and to use these as a basis for ongoing reflection with the mentor. There were no critical incidents reported. It is fair to say that the students were critical of some aspects of treatment provided but the opportunity to reflect on these with the mentor (and on occasion myself) ensured that these concerns were addressed, rationalised and contextualised.

"All very preoccupied with what they have been told by Professor/Dr so and so. This is the only way to do say endo. and if anyone does it differently they are cowboys. Eg. Student 11 said that they had been told that you should never use lignocaine if pt is hypertensive and she was worried that one of the staff never used anything else. This is a really great opportunity to discuss what makes a good dentist or a good technique leading into the whole EBD stuff. Really supports need to change approach to dental education. They need to challenge but also be able to work out how they will decide for themselves what is OK and what is not. Can see why many find first year out so hard – taught one thing and then working in different ways. Need to be more grounded in critical analysis".

DJC July 2001

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Data collection

All 24 participants completed both the pre- and post-placement questionnaires.

Student familiarity with rural lifestyle

Twenty three (96%) of the twenty four students had spent less than one month in rural areas of Australia and thirteen (56%) of this group had spent no time at all in rural areas. One student lived in regional Australia for the first 12 years of her life but had attended secondary school in a metropolitan area. She considered herself to be very familiar with rural lifestyle. This student is considered with other students from rural backgrounds in Phase 3.

Fourteen of the students had completed their primary education in a metropolitan city, two had been educated in a regional city and nine had received their primary education overseas. Twenty students had received secondary education in a city and four
attended secondary schools overseas. Two students were overseas-trained dentists and were completing their studies in Sydney. Most of the students (22) spent most of their childhood holidays in metropolitan cities or overseas.

**Student attitudes to rural practice before and after RPP**

Before the placements, the major advantages of rural dental practice were documented as being the rural lifestyle (ranked first), the increased breadth of clinical experience (ranked joint second) and the opportunity for increased remuneration (ranked joint second). On completion of the RPP, there was a slightly higher appreciation of the benefits of a rural lifestyle and the ability to provide a comprehensive range of patient care. There was an increased appreciation of the advantages of providing oral health care to a smaller community, where existing dental care opportunities are limited. These findings are summarised in Table 11.

**Table 11: Perceived advantages of a rural career before and after RPP 2001**

<table>
<thead>
<tr>
<th>Frequency of response</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-RPP</td>
</tr>
<tr>
<td>Rural lifestyle</td>
<td>13</td>
</tr>
<tr>
<td>Broader range of clinical experience</td>
<td>11</td>
</tr>
<tr>
<td>Increased remuneration</td>
<td>11</td>
</tr>
<tr>
<td>Ability to provide care where none exists</td>
<td>8</td>
</tr>
<tr>
<td>Being part of a small, friendly community</td>
<td>7</td>
</tr>
<tr>
<td>Full-time employment opportunities</td>
<td>6</td>
</tr>
<tr>
<td>Independence</td>
<td>5</td>
</tr>
<tr>
<td>Opportunity to learn</td>
<td>2</td>
</tr>
</tbody>
</table>

In 2000, students also identified the “less stressful working environment”, “low cost of living” and “easy commuting” as being advantageous. These issues were not mentioned in 2001. Students in 2001 considered “independence” and “opportunity to learn” as being advantages of rural practice. This finding stresses that the students’ perceptions of their personal and professional career needs are understandably unique.
and that the provision of a unique program allows them to tailor their experience to their perceived needs.

Students listed the perceived limitations of a rural career both before and after the RPP. As the majority of the students had reported that they were "not familiar" with rural or remote areas, it would seem that the limitations described before the RPP were as a result of discussions with other students and through the portrayal of 'the bush' in various media. It is apparent that the least attractive features of a rural career, on completion of the RPP, related to social factors. Missing family and friends, anxieties relating to independence, inability to drive, cultural isolation and making new friends accounted for over 50 % of the possible responses.

The pre-placement concerns about professional isolation (which had been the major post-placement concern in 2000) decreased clinical experience and low salaries were less important to the students after the RPP in 2001. These findings are summarised in Table 12.

Again there were differences in perceptions between the students in 2000 and 2001. These differences stress that the reasons for graduates choosing rural careers vary between individuals and are largely focused on social elements. While the RPP led to an altered perception of both the limitations and advantages of rural practice, there is a suggestion that individual support for career choice should be an additional element of professional recruitment strategies. It is possible that lengthier programs might influence these perceptions and this is an area worthy of future research.
Table 12: Perceived limitations of a rural career before and after RPP 2001

<table>
<thead>
<tr>
<th></th>
<th>Frequency of response</th>
<th>Ranking Pre-RPP</th>
<th>Ranking Post-RPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from family and friends</td>
<td>20</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Professional isolation</td>
<td>18</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Lack of community services</td>
<td>6</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lack of social activities</td>
<td>6</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Independence</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Distance from Sydney</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>No opportunity to meet a partner / make friends</td>
<td>3</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Cultural isolation/racism</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Decreased clinical experience</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Low salaries</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>No work opportunities for partner</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Inability to drive</td>
<td>0</td>
<td>2</td>
<td>No mention</td>
</tr>
<tr>
<td>Weather</td>
<td>0</td>
<td>4</td>
<td>No mention</td>
</tr>
<tr>
<td>Having a community identity</td>
<td>0</td>
<td>1</td>
<td>No mention</td>
</tr>
</tbody>
</table>

Student interest in a rural career

As was the case in 2000, students were asked to indicate their interest in a rural career using a 1-10 numeric ranking scale with 1 equating to “no interest” and 10 equating to “very interested”.
After the RPP 2001, only one student recorded a decreased career interest score (from 8 to 7) while four students recorded the same pre- and post-placement scores (either 9 or 10). The remaining nineteen students recorded increased career interest scores after the RPP. Sixteen (66%) of the twenty-four participants recorded scores of 8 and higher after the program compared with eight (33%) recording these score before the placement.

SPSS analysis shows there to be a difference between the mean pre- and post-placement scores ($6.4 \pm 2.1SD$ and $8.0 \pm 1.3$ respectively). A paired samples student T test provides a t value of -4.94 with 23 df and a corresponding significance level less than 0.001. There was therefore a significant difference between the pre- and post-placement career interest scores.

Staff input

All of the students agreed with the statement "I felt well supported during my rural experience", with 50% of the students strongly agreeing that this was the case. The additional comments provided by students revealed that the RPP was well supported although the importance of a local mentor and coordinator was noted. Unforeseen circumstances prevented some mentors from being available throughout the program and the affected students commented specifically in this regard. The role of the local
mentors cannot be overestimated and the determination of suitable replacements needed to be considered further for 2002.

Several clinicians were mentioned by name as being particularly supportive and it is hoped that these practitioners will continue to support the Rural Placement Program. All of the involved clinicians expressed a desire to participate in future rural placements and links with the Faculty were maintained to facilitate this.

"......Our private and public colleagues could not praise them (the students) enough and consequently they will continue to support you and Faculty with the program in the years to come. We wish them well with their future careers...... we only hope that one day they may consider a rural career and lifestyle”

S July 2001

**Student contribution to oral health care**

During the placement, the students were required to keep a logbook of experience. In 2000, this log included details of assistance and observation however in light of student feedback, these data was not collected in 2001. In addition, one of the local mentors was unable to supply documents and details due to unforeseen circumstances. Data were thus incomplete.

Analysis of the sixteen available logbooks reveals that a comprehensive range of treatment was provided for a total of 135 patients. Students attending the RPP in Orange were exposed to a wider range of clinical experience, resulting in less time spent in the provision of patient care in the Community Dental Clinic.
Table 13: Clinical experience during RPP 2001

<table>
<thead>
<tr>
<th></th>
<th>Orange (n=8)</th>
<th>Broken Hill (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of patients</td>
<td>44</td>
<td>91</td>
</tr>
<tr>
<td>Average no. of patients per student</td>
<td>5.5</td>
<td>11.38</td>
</tr>
<tr>
<td>Range</td>
<td>4-9</td>
<td>8-15</td>
</tr>
</tbody>
</table>

Patients attending the Community Clinics in Broken Hill and Orange, either for routine treatment or for emergency care, were allocated to a student operator. Patients were informed that the Clinic was an accredited facility of the University of Sydney; all patients consented to treatment by the students. As many of the patients had waited a considerable length of time for their treatment, they were amenable to the concept of supervised care with a student.

In contrast, patients awaiting routine care at the Dubbo Community Clinic were contacted by the receptionist and offered an earlier appointment with a student. All of those contacted accepted this appointment with no apparent reservations. The coordinator at Dubbo has indicated a willingness to select patients appropriate to individual student needs in future placements. This possibility will be explored for 2002 mindful of patient and community needs.

"The clinical experience that they have had was not as varied as they would have liked and I feel that we could do better if we had a wish list from students well in advance so we could address their wishes via the appointment book"

R August 2001

Staff feedback

The feedback obtained from the local mentors and clinicians was extremely favourable.
“This group of students are very switched on. I can notice a difference in their level of interest and skills in pros. It has all gone very well although ....... has meant that I have not been as personally involved this time”.

R July 2001

“You should be proud of the conduct, demeanour and honest effort of all the students that were placed in (town). They showed to me that they were aware of the present challenges of rural dentistry and in their current clinical skills, they are already showing their capacity for lateral thinking and caring attention to the needs of their patients”.

K September 2001

With the clinical effort given by the students we have been able to reduce our clinical load by about 20%. This has been a profound relief for us in the all too often hectic nature of our daily clinical load. On top of this, it is beneficial to us as rural dental practitioners to share our current thoughts on treatment trends and philosophies that students can provide through their present studies. I look forward to the future development of the relationship of the local Department of Rural Health and the faculty”.

C August 2001

“The students were very keen to make the most of their time here in (town) and you should be extremely proud of the way they represented their Faculty, University and profession”.

T July 2001

Conversations with other staff were universally positive. The students were commended on their professionalism and enthusiasm and all staff made an ongoing commitment to the program.

Involvement with the RPP entitled staff to apply for honorary academic appointments with the Faculty of Dentistry. I encouraged staff to submit curriculum vitae in order to
fulfil university requirements and received nine applications for such appointments. Eight of these were from public sector dentists and one was from a private practitioner in one of the host towns. During conversation, it transpired that the other staff participants had no real desire for an honorary appointment but indicated that they would prefer support from the university in improving access to professional education. As a consequence and with the support of the Faculty’s Department of Continuing Education, a ‘Rural Dental Update’ program was developed and the inaugural program was delivered in one of the host towns in 2001. All RPP staff and numerous other local clinicians attended the continuing education program that I facilitated and that featured renowned international speakers. The response to this endeavour was overwhelming and provided support for those who had been involved in the RPP to that time and also encouraged involvement from new staff. This update initiative subsequently expanded and is now a regular feature of the Department’s annual program.

**Improvements to the RPP**

The students generally felt very positively about the program and the feedback obtained was generally location specific; for example only the Broken Hill students were able to travel with the RFDS. All of the students, without exception, referred to their "enjoyment" of the RPP. All twenty four (100%) indicated that they would recommend rural practice to other student colleagues as a result of their participation, although nine of the students qualified this response with words to the effect that they would advise them to spend a short period in the location prior to decision making. This would suggest that although the students perceived the advantages of rural practice they also had an awareness of the influence of personal factors in decision making.

More specifically, students were asked to list "the three best things about the Program". Several mentioned four or five elements.
Table 14: Student perceived strengths of RPP 2001

<table>
<thead>
<tr>
<th>Strengths of RPP</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting more clinical experience</td>
<td>16</td>
</tr>
<tr>
<td>Experiencing rural lifestyle</td>
<td>14</td>
</tr>
<tr>
<td>Meeting new people</td>
<td>11</td>
</tr>
<tr>
<td>Orientation Program (Risk management session mentioned by 6 students)</td>
<td>11</td>
</tr>
<tr>
<td>Approachability of clinicians</td>
<td>10</td>
</tr>
<tr>
<td>Range of locations/activities</td>
<td>8</td>
</tr>
<tr>
<td>Organisation of the Program</td>
<td>6</td>
</tr>
<tr>
<td>Opportunity to fly with RFDS</td>
<td>5</td>
</tr>
<tr>
<td>Balance between work and recreational time</td>
<td>4</td>
</tr>
<tr>
<td>Learning without worrying about being assessed</td>
<td>3</td>
</tr>
</tbody>
</table>

Students were also asked to list three improvements that they would make to the Program. In general, suggested improvements were individual, location and timing specific.

Orientation Program

In response to feedback from 2000, a slightly longer, less intensive orientation program was held in Broken Hill. In 2001, one student still felt that the orientation program was “too long”. Several students in 2000 had expressed a desire to learn more about the Aboriginal communities and cross-cultural issues. There were no recommendations for further improvements in this regard from 2001 participants.

Clinical work

Thirteen students commented that they would have preferred more clinical experience during their placements; six of these students were placed in Orange and as previously mentioned, the breadth of experience provided restricted the treatment sessions available.

Sixteen students felt that one day observing private practitioners was “too long” and they all suggested that a half-day would be adequate. Eight of these students were based at Broken Hill.
Due to the absence of the RFDS dentist, Group 2 students did not benefit from this experience. An industry colleague provided this group of students with learning materials and they travelled with the RFDS to remote locations to talk to school age children. All four students expressed great disappointment that they were not able to work with Y.

Two students would have liked a greater range of clinical experience as “we didn’t learn much from just doing fillings and scale and polishes”. Whilst appreciating the students’ desire to further develop their clinical skills, the need for and appreciation of ‘real-life’ dentistry is important. One student commented that “perhaps get more chairs so we could do more work”. While this would undoubtedly provide additional clinical experience, the RPP has been developed to use existing infrastructure and staff.

**Program structure**

The students generally appreciated the diversity of the program although one student commented that they would have liked “more information about each place before having to choose where to go”. It had been anticipated that the students would investigate the various options open to them prior to application however this student had not undertaken any pre-placement research. In 2002, students will be informed to this effect. Another student felt that the timetabling was “not very good” and that “flight details should be confirmed the day before departure”. I had assumed that the students would read the information on the flight tickets; this clearly indicated the need for flight details to be reconfirmed the day before departure.

Six students felt that the RPP should be mandatory and one suggested that students should make a financial contribution to allow others to attend. It is the hoped that adequate funding for a mandatory RPP will be obtained by 2004.
Social opportunities

Despite increased leisure time in 2001, four students commented that they would have liked “more free time” and two requested more social functions. Eight students would have liked to have a car available for them during their placements. Three students wished to be accommodated closer to the Town Dental Clinic in Broken Hill as it was a long way to walk. Macquarie AHS provided a car for those students based in Dubbo.

All of the students based in Dubbo commented on the poor accommodation provided. It appears that there were several different student groups present in Dubbo at that time and “the best rooms had gone”.

Students attending the RPP 2002 would be informed of the feedback from 2001 and encouraged to accept responsibility for placement choices, travel arrangement confirmation and local transport.

The local coordinators are pivotal to the success of this program and in light of the various absences, largely unforeseeable, there will be further consultation and collaboration with staff to ensure that appropriate mentoring is provided for the students.
A comprehensive report on the RPP 2001 was compiled and submitted to the Faculty for appropriate distribution. Additional copies of the report and an executive summary were sent to all staff and stakeholders. Recipients were encouraged to provide additional information or amendments by a specified date.

Co-researcher input
As previously described, staff provided brief comments in response to a personal verbal request however there was no spontaneous written submission. There was consensus that the program was successful and the fact that all staff indicated their ongoing commitment to the program is interpreted as tacit approval.

Fourteen of the RPP students attended a discussion group in Sydney approximately one month after completion of the program. As the RPP was held earlier in 2001, there was ample scope to arrange a mutually convenient time. The students agreed that the report was an accurate representation of the RPP 2001 and had no suggestions for
amendments. They did however have opinions on the practicalities of the program and strongly suggested that more students should have the opportunity to participate in the future. The need for academic rigour for any mandatory program was also discussed. The students considered the RPP to be peripheral to their dental education by virtue of the elective nature of the program. In this context they considered that formal assessment during the RPP would have been a barrier to their clinical learning and they strongly advocated a self-assessment strategy of some sort. They reflected that the learning achieved had been broad and multi-faceted and that assessment of the learning contracts was not representative of all that they had learned. They considered that learning was “inevitable” and that the self-assessment should require reflection on that learning. As such they indicated that reflective statements would have been of greater value to them than the fulfilment of a very specific learning contract.

Input from stakeholders

Faculty of Dentistry

In recognition of the need for further program development, the Faculty increased the academic position from 0.2 FTE to 0.4 FTE through a joint appointment with the UDRH. With a commitment to mandatory rural placements from 2004, I became a member of the Faculty’s Year 4 development group in order to support Year 4 BDent curriculum planning. Based upon recommendations from the RPP, the Faculty indicated a desire to incorporate dental education with the rural campus developments in Orange. Discussions with the final year coordinator resulted in a decision to expand the RPP in 2002 and 2003 to ensure that there were ample opportunities for students of the BDS curriculum to participate in the RPP.

University Department of Rural Health

The success of the RPP provided additional impetus to the development of additional rural student experiences at the UDRH. Presentations at a University level demonstrated the value of a multi-disciplinary approach to rural education. The UDRH was receptive to program expansion and facilitated the involvement of new clinical venues through the UDRH at Lismore.
Oral Health Branch of NSW Health

The OHB received the RPP report and documented continued commitment to the program. Negotiations regarding formal funding arrangements for expansion of the program commenced.

ADA NSW Branch

In addition to the formal RPP report, an article and ‘roll of honour’ were written for the branch newsletter. There was support for the proposal that the RPP be expanded in 2002 and it was resolved that additional funding would be provided to allow 36 students to participate. The commitment to the Risk Management session was maintained and the participating ADA NSW staff enthusiastically agreed to attend all three planned RPPs in 2002.

Dental Board of NSW

The Dental Board agreed with the proposed selection criteria for new clinics and supported the expansion of the RPP in 2002.

Additional reports

Both during and after the RPP 2001, students featured in local newspaper articles. In addition, numerous requests were received for radio interviews with local and national stations. These led to incorporation of the RPP as one element of a “7.30 Report” feature on the rural dental workforce.

The Dental Board of NSW research project was completed in 2001, and a second grant was obtained from the Commonwealth Department of Health and Aged Care, through its Rural Health Service Education & Training (RHSET) program. This allowed an investigation into the rural dental workforce to commence in 2001.
Graduate employment of RPP students

It was agreed that all students participating in the RPP in 2001 would provide employment details in early 2002. The established email group (that still included RPP participants from 2000) was used to maintain contact and once again, this provided valuable support for the students through employment advice, distribution of job opportunities and personal support.

All twenty four students graduated from the Faculty of Dentistry in December 2001. The four students who had attended the RPP 2000 as fourth year students, also graduated at this time. Of this group of four, two (50%) chose rural employment in Orange, NSW and Burnie, Tasmania. The other two elected to work as Dental Officers in a metropolitan teaching hospital.

Of the graduating 2001 students (24 who attended RPP 2001 and 4 who attended RPP2000), one did not provide employment details and student colleagues assumed that they had returned overseas. Five (18%) of the graduates were working at the metropolitan teaching hospitals and ten (36%) had accepted private practice employment in metropolitan Sydney. Twelve (43%) had moved outside Sydney; four (15%) of these were working in Accessible (A) areas on the Eastern Seaboard and eight (28%) were working in Moderately Accessible (MA) or Rural (R) areas in NSW.

An analysis of the pre- and post-placement scores for the entire RPP group is provided in chapter 11. The findings from RPP 2000 and 2001 informed the development of RPP 2002.
CHAPTER 9

RURAL PLACEMENT PROGRAM 2002
Expansion of the RPP

During the period 2001-2002, the organisational structure for oral health services in NSW was considerably revised. One outcome of this was the establishment of geographic ‘Oral Health Networks’ with managers responsible for oral health services within groups of Area Health Services (AHS). Far West, Macquarie and Mid West AHS, the locations for the existing RPP, formed the Far Western Network. The formation of the Northern Oral Health Network resulted in the grouping of Hunter, Northern Rivers, New England and Mid North Coast AHS. The appointment of a dynamic and proactive Network Manager facilitated the development of RPP opportunities within the Network. Locations and AHS are shown in Figure 7.
Within the context of emerging Network strategic planning, the Network Manager and AHS managers had identified a need to support recruitment and retention initiatives. The RPP was embraced as one such strategy. The previously documented outcomes of the RPP were presented to key personnel and this resulted in a formal commitment to expansion of the RPP into the Northern Network. Memoranda of Understanding (MOU) were established with each AHS in the Network and the Chief Executive Officers (CEO) for each AHS were co-signatories with the University.
RPP based in the Northern Oral Health Network

RPP mentors in each AHS were identified and were provided support in the development of clinical placements for an additional 12 students. The need to provide an Orientation Component for all of these students was subsequently discussed. It was decided, in light of the favourable outcomes of RPP 2000 and 2001, to maintain a group orientation. While small group orientation may have been easier to coordinate and less expensive to implement, the feedback from previous students supported orientation opportunities for larger groups. In addition, the academic components of the program could not have been delivered at four different locations simultaneously. The possibility of video-conferencing was discussed at length however the cost and availability of the required facilities was prohibitive at this time. The benefits of group learning during the orientation have also been described previously and consultation with the various staff members involved confirmed the decision to conduct a group orientation.

A venue for this group orientation was determined with difficulty. With students based in Lismore, Tamworth, Newcastle and Coffs Harbour, my initial proposal was that the orientation would be based in the newly established University Department of Rural Health (UDRH) at Lismore. Students would fly to Lismore and then travel to their clinical placements by train or plane. They would then return to Sydney by train. Unfortunately this was impossible to coordinate.

"Sydney to Lismore x 12 is about the same as Sydney to Broken Hill x12 so that's OK BUT getting everyone from Lismore to where they need to go is going to be a nightmare. Don't want them to spend the entire RPP travelling – think that the flying makes it all seem so much more accessible. 12 hours on a train might put them off! It's actually pretty hard to get around the place if you are working on a tight schedule. Guess they could drive but know at least half a
dozen who do not have cars. Hiring might be an option. Got to do this on a budget too. Think that we might have to do orientation somewhere more central”

DJC March 2002

The proposed involvement of the UDRH was an additional consideration at this time. As a newly established unit with limited infrastructure and academic support, the ability to host twelve students was questioned. This reticence was purely based on practicalities and the UDRH clearly stated their support for future RPP opportunities.

The possibility of holding the orientation in Sydney was considered. This was obviously practical and cost efficient however my personal experiences and the document feedback from previous students supported orientation at a distant location. The camaraderie and opportunities for shared learning were certainly evident during previous orientations and it was my belief that these benefits should be retained. Fortunately, the Network Manager shared my belief and generously provided financial support for a ‘central’ group orientation. The additional support provided by the CEO on the Mid North Coast resulted in a decision to hold the orientation in Port Macquarie. All 12 students would attend this orientation and it was planned that the four AHS RPP mentors would attend on the final morning of orientation to drive the students to their clinical placements. Students would return to Sydney by plane and train depending upon their location.

During ongoing discussions with the mentors involved in this new RPP, it became apparent that the range of experiences and staff potentially available to support the students were highly variable. In order that clinical experience for the students was optimised, it was subsequently agreed that four students would be based in Hunter AHS, two students based in New England AHS, three students placed in Mid North Coast AHS and three students placed in Northern Rivers AHS. The mentors were provided with reports from the previous RPPs and one to one support in developing appropriate placement rosters. As the students had clearly documented the benefits of additional clinical experience and the RPP aim was to provide oral health care for local
residents, mentors were encouraged to provide as many clinical opportunities as possible. The need to develop links with local private practitioners for observation and outreach opportunities was also stressed.

During discussions with Hunter AHS it became apparent that this AHS would provide an ideal ‘regional’ venue for students who may not be able to spend two weeks away from home and family. This was thought to be an important option for students of the new curriculum who are an older cohort and therefore more likely to have family commitments in Sydney.

I established links with private practitioners in each of the AHS and provided them with details of the planned RPP in the Network. As I was based on the Central Coast and each of the placement sites was geographically distant, the mentors agreed that they would develop the initiated professional links and subsequently compile draft rosters for my input.

With reference to the criteria approved by the Dental Board of NSW, mentors made formal submissions for accreditation as approved teaching facilities. These submissions were approved early in 2002.

The Network Manager strongly supported the RPP aim that the students should have a positive experience during the program and decided to allocate funding for excellent accommodation where possible. Students were provided with beachside Motel accommodation for the duration of the orientation at Port Macquarie and a range of quality accommodation during their clinical attachments.

**RPP based at Broken Hill**

There was considerable organisation required to develop additional RPP opportunities however there was an obvious need to maintain and strengthen links with the staff involved at Broken Hill, Orange and Dubbo. The inevitable personnel changes required new links to be established and once again, academic support was provided.
on a one to one basis. Fortunately the mentors in Orange and Dubbo, having supported the RPP in the past, willingly accepted responsibility for the local organisation of the RPP. This local support allowed me to provide optimum support for the new staff involved in the program with the knowledge that the mentors were totally committed to the existing program. It was particularly rewarding to receive this level of support and collaboration for the program and through this working relationship, the mentors were empowered and accepted ownership of the RPP in their areas.

**Introduction of RPP 2002 to students**

At the start of the 2002 academic year, final year students attended a general orientation week in Sydney. I was provided with an opportunity to address the students during this week and as a consequence, all students were informed of the RPP opportunities planned for 2002. Participation was again entirely voluntary. An application form was distributed to determine the demand for places. A total of 38 applications were received by the end of March 2002. Subsequently four students withdrew their applications, one student accepted a place but subsequently deferred their enrolment and one student was unable to attend due to unforeseen personal reasons. 32 students were therefore provided with places on the RPP 2002.

As a total of 36 places had been developed it was necessary to revise the placement plans. Table 15 shows the placement of students during RPP 2002. In deciding where to place students, flexibility of mentors and local staff, and student choice were major factors. It was agreed that as the mentors in Orange and Dubbo had prior experience and therefore greater confidence in supporting students, they would modify the rosters to accommodate fewer students. The student who withdrew at short notice was placed in Broken Hill during weeks 1 and 2. It was therefore possible to continue with the planned developments in the Northern Network.
Table 15: RPP overview and student placements 2002

<table>
<thead>
<tr>
<th>Location</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broken Hill</td>
<td>Three students</td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>Three students</td>
<td>Three students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dubbo</td>
<td>Three students</td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newcastle</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamworth</td>
<td></td>
<td>Two students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffs Harbour</td>
<td></td>
<td>Three students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lismore</td>
<td></td>
<td>Three students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pre-placement briefing

All 32 students had received written information by email prior to the pre-placement briefing. There was 100% attendance and all students completed the pre-placement questionnaire. Students were informed of the ongoing research into the placements and all students willingly embraced the role of co-researchers. They were clearly informed that the outcomes of their involvement would be used in research documentation and that their anonymity was assured. They were also aware that their participation in the program and its evaluation was voluntary and that they would not be subject to any form of prejudice if they chose not to participate in the planned discussions or complete the distributed questionnaires. There were no concerns raised.

While the motivating factors for participation in the RPP were very similar in the 2000 and 2001 cohorts, it was possible that the increased availability of places may have attracted a different group of participants. On review of the motivating factors it was apparent that these were very similar to those previously described. There was an increased number of students who considered that the RPP would inform their career decision-making. It was interesting to note that overall there were fewer documented motivating factors over the whole group, despite the group being larger than in previous years. Several students responded with one generic statement such as, “experience the country”.

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Table 16: Motivating factors for students attending RPP 2002

<table>
<thead>
<tr>
<th>Motivation to attend RPP 2002</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>To experience rural lifestyle</td>
<td>16</td>
</tr>
<tr>
<td>To learn about dentistry in a different environment</td>
<td>12</td>
</tr>
<tr>
<td>To assist in career decision-making</td>
<td>16</td>
</tr>
<tr>
<td>To have a new life experience</td>
<td>5</td>
</tr>
<tr>
<td>To have a holiday</td>
<td>6</td>
</tr>
<tr>
<td>To meet new people</td>
<td>3</td>
</tr>
<tr>
<td>To learn about dental health issues in the country</td>
<td>4</td>
</tr>
<tr>
<td>To get more clinical experience</td>
<td>4</td>
</tr>
</tbody>
</table>

As described in Chapter 8, it was decided that the students participating in RPP 2002 would be required to submit reflective statements as evidence of experiential learning. The students were also required to complete a self-assessment of their learning during the RPP. The pre-placement briefing was therefore structured to support the students in embracing the concept of reflective statements and determining the criteria against which they would assess themselves. Prior to this, students were given a comprehensive overview of the practicalities of their placements. During email exchange many individuals had communicated their concerns about accommodation, transport, staff expectations and mobile phone reception (!) and this appeared to dominate the educational aspects of the program. I elected to address this at the outset of the briefing session.

Subsequently, as in 2001, students worked in small groups according to their clinical placement location. The value of pre-experiential reflection was demonstrated using contrived examples from the literature (3, 55) and my personal experiences from the RPP. Using various exercises (53, 97, 116), the students were encouraged to discuss and reflect upon their previous learning experiences, strategies that they might use to promote reflection during the RPP and methods by which they might demonstrate their learning through their reflective statements.

The second half of the pre-placement briefing considered self-assessment strategies. Mindful of the time constraints of previous years and the need to provide support for a greater number of students in 2002, a summary document outlining the rationale and
principles of self-assessment was distributed to the students (110). While the majority of
the students openly discussed their opinions and perceptions of self-assessment it was
apparent that several students were unwilling to contribute to the discussion and a
small group were overtly opposed to self-assessment.

"What's the point because we are all going to say that we passed anyway. It's
much more important that the dentists assess us because they know what we
need to do and whether we are any good."

Student 21 June 2002

It was interesting to note that the students debated this comment without prompting.
Student 07 questioned the ability of the clinicians to fulfil the role of assessor when
they did not regularly teach students and therefore did not have current knowledge of
teaching and learning methods. Another student (30) appreciated the need for self-
awareness and noted that he usually assessed himself before he sought validation of
this from his clinical supervisor. He considered this to be an essential element of
clinical care in that he would not seek assessment unless he was satisfied with his
outcomes.

"Surely you wouldn't ask for a grade if you didn't think that you had done it
properly? I mean the tutor isn't there to judge you, they are there to reassure
you that you have done the right thing and you should know that anyway. The
tutor is there to bail you out if you really don't have any idea”.

Student 30 June 2002

Using this student's observations, I described an example of criterion-referenced self-
assessment as being, “Supervisor agreed with me that the treatment I provided was of
good quality” with pass/fail options. In the ensuing discussion it was clear that several
students had the perception that there was a tendency for tutors to want to fail them.
As a clinical educator, I found the students’ comments to be pertinent to the ongoing development of the BDent curriculum. Due to time constraints, discussion had to be limited in order that the self-assessment strategies could be developed within the time frame of the pre-placement briefing. I informed the students that their reflections on the decision to use self-assessment and their experiences of this during the RPP would be usefully documented in their post-placement reflective statements. I also emphasised that while the RPP was designed to provide a student-centred educational program, there were requirements both in terms of academic rigour, validity, reliability and the practicalities of implementation. However it was agreed in principle that clinical staff could be asked to provide assessments for individual students on request. This tentative agreement was qualified by my observation that any formal staff assessment would also need to be criterion-referenced and that the student would need to develop appropriate criteria.

The group agreed that the priority should be the self-assessment and that this should be practical and achievable. One student (12) suggested that there should be an agreed number of assessment domains and there was consensus that this was appropriate. Using small group work with subsequent negotiation, the following domains were identified: clinical skills, communication skills, interest and involvement, attendance and knowledge. Students then developed criteria for each domain on an individual basis with defined ‘satisfactory’ and ‘unsatisfactory’ outcomes. During earlier discussions, the relative merits of graded and un-graded assessment were also discussed with a range of options mooted by students. Again, to ensure timely progression of the development of self-assessment, I advocated an un-graded method. On completion of the criteria, one student (09) observed that “adding up the satisfactory column kind of gives you a ranking”. While a valid observation, another student retorted “but if you get a 2 then that means you actually failed three parts of the
five and if these were clinical skills, knowledge and attendance, you could be interested and communicating well in the pub!".

It was disappointing that the debate on accumulated grades had to be curtailed because of time demands however I encouraged continued debate by email. Despite prompting, this did not occur. I also encouraged those students who wished to develop staff assessment criteria to use the domain framework as a basis for this. None of the students developed a staff assessment strategy however the information gleaned from this session was used in the development of assessment strategies for the Elective Program and the mandatory RPP component of the BDent curriculum (refer Phase 3).

On completion of the pre-placement briefing each student had completed a self-assessment proforma and had commenced a pre-placement reflective statement as a basis for the final reflective statements.

It was disappointing that the students did not participate in email discussions despite a high level of participation in the group debate. While electronic communication provides opportunity for distant communication, it is clear that these students did not value it as a method by which they may contribute on an ongoing basis. Those who communicated by email used it as a way of getting an immediate response to a direct question. As the 2001 cohort had displayed a similar approach, this might suggest that the use of email for shared learning over large distances has limited value without appropriate skill development.

Over the following two weeks, I reviewed all of the self-assessment criteria and returned these to the students. Unsurprisingly there was a remarkable level of consistency in the criteria developed. Several students had defined complex criteria that would be difficult to validate or were unrealistic. One student (13) defined a satisfactory outcome in the knowledge domain as being the ability to “answer any question that I am asked”. Another (17) considered a satisfactory outcome in the skills domain to be “I can do all the treatment without any help”. I made written comments and suggestions on the students’ documentation and encouraged them to consider more
achievable criteria. To use the above examples, the criteria were amended to read, "I have the knowledge to provide treatment but can also work out where the gaps are" and "I can provide treatment with minimal support but know when to ask for help".

Program structure

Some of the practical implications of expanding the RPP into the Northern Oral Health Network have been described at the beginning of this Chapter. Independent of this expansion and based on the feedback from the RPP 2000 and 2001, the overall structure of the RPP was maintained.

Orientation Program

Three separate orientation programs were held in 2002. Each orientation commenced on a Sunday afternoon with an, ‘Area in Context’ presentation. In Port Macquarie, the Network Manager facilitated this session. The ADA NSW Risk Management session was held on the Monday morning of each orientation and, due to the increased time commitment required, O and B were supported by D. As there was no Royal Flying Doctor Service (RFDS) provided from Port Macquarie, the CEO of Mid North Coast AHS and I facilitated a workshop entitled “Access to dentistry in Regional, Rural and Remote Areas”. Students based at Broken Hill attended the RFDS base for a similar session facilitated by M.

UDRH staff facilitated the cross-cultural workshop at Broken Hill however the planned session for Port Macquarie did not take place, as key personnel were unable to attend. This was a major shortcoming and there were no alternative personnel identified to fill the session. Had the orientation been based at a UDRH it may have been feasible to recruit a replacement facilitator at short notice. To their delight, the Port Macquarie students therefore enjoyed an additional afternoon’s recreation. Other elements of the Broken Hill orientation have been described in Chapters 7 and 8. On the final morning of orientation at Port Macquarie I facilitated a panel forum on “Rural Careers” with the mentors from each of the AHS, the Network Manager and local practitioners. This session was based on the motivating factors defined by the students
but was unfortunately interrupted by three separate requests for local TV and radio interviews with students and staff.

There was no longer a need for a formal ‘Learning Workshop’ during the orientation as the Learning Contract component was excluded from the RPP 2002 and the other learning requirements had been conducted during the pre-placement briefing. I did provide a brief ‘refresher’ presentation on the first afternoon of the orientation.

The two orientation programs were very different and the student feedback is detailed later in this Chapter. From a personal perspective, the following excerpt from my research diary demonstrates my frustration at the time.

"Cannot believe it – fell apart big style. What could I have done to avoid this? Couldn’t have done any more to book speakers – the unpredictable is unpredictable but ..... annoying. Maybe should have had back up booked but no-one local so not really feasible. Maybe BH staff could have come here?? Not sure but worth looking at for next time. Orientation at Lismore may also be solution. As for tele – good publicity I suppose and (03) loved the 15 mins of fame! VERY disruptive but couldn’t really tell them to go away. Not sure how to manage this – need to talk to AHS media person. Lots of ‘wasted’ time.”

DJC August 2002

On reflection, there was very little that I could have done to prevent the disruption to the orientation however this stressed the desirability to base the RPP academic orientation in an academic environment where back up and support is available and media interest can be coordinated.
CLINICAL PLACEMENTS

Clinical Work and Rosters

Each placement offered a unique range of clinical experience and students were provided with draft rosters by email. They were encouraged to contact me if they had any queries or concerns about these drafts. The students were also aware that changes to the rosters, whilst likely to be minimal, may take place prior to their placements and that they would be provided with local information at the time.

In liaison with the various AHS, data summarising clinical activity was collected using ISOH (Information System for Oral Health). As in previous years, students were required to maintain individual logs of experience.

Learning requirements

As described in depth, the pre-placement briefing resulted in the learning requirements being clearly defined as;

- a post-placement reflective statement,
- a self-assessment, and
- a log of clinical experience.
- These were submitted at the post-placement briefing held in Sydney.

Post-placement briefing

The post-placement briefing was held in Sydney just over five weeks after the final RPP students had returned. Twenty six of the thirty two students (82%) attended and submitted reflective statements, self-assessments and completed post-placement questionnaires. The remaining six students were subsequently contacted by email and asked to provide a ‘career interest score’ as a minimum for evaluation. All of these students readily supplied this information however they did not submit either reflective statements or self-assessments. It is likely that these elements were not completed.
Staff development

With the introduction of four new AHS placements staff development was a high priority in the months preceding the RPP. The Network Manager supported me in the identification and support for local mentors and these mentors then identified and recruited local personnel. Mentors from existing RPP locations also assisted in staff development, largely through existing oral health networks.

I provided both one to one and small group staff development on an identified needs basis. Teleconferencing provided considerable support, as regular site visits were difficult to coordinate over such large distances, particularly as I had a limited amount of time available.

STAKEHOLDERS

Faculty of Dentistry

The Faculty of Dentistry re-advertised the 0.4 FTE position that had been established in 2001 and presented the outcomes of the RPP at various professional symposia.

University Department of Rural Health (UDRH), Broken Hill

The UDRH also maintained co-funding for the academic position mentioned above. The Faculty of Pharmacy program also expanded and negotiations commenced with other areas of health education. I was invited to contribute to AHS health employee orientation thus increasing awareness of oral health in the context of general health.

Oral Health Branch of NSW Health (OHB)

The OHB supported the development of additional RPP opportunities and I was invited to present at the Oral Health Executive meeting. The Minister for Health documented his strong support for the RPP initiative. The involvement of the Northern Oral Health Network Manager resulted in considerable financial support for those students who were based in the Network.
ADA NSW

The ADA NSW and Guild Insurance and Financial Services (GIFS) again generously provided travel bursaries for all 32 students. $25,000 was provided to ensure that all travel expenses were provided for. In addition, staff involved with the orientation Risk Management session travelled to Port Macquarie and Broken Hill (on two occasions) to facilitate the sessions. ADA NSW hosted welcome functions at each of the orientation programs.

Dental Board of NSW

The Dental Board accredited clinical facilities in each of the four AHS involved with the expansion of the RPP.

RESEARCH CYCLE 3

Research questions

The research methods developed and described in Chapter 8 were reviewed in light of the findings from 2001. While a grouped table (Appendix 3) indicated the reduced relevance of reflective statements within the context of RPP research, the voluntary
nature of the RPP and the need to define the requirements of the mandatory program
provided an opportunity to evaluate reflective statements as a measure of student
learning.

A review of grouped themes (Appendix 3) demonstrated that the research questions
emanating from this project and the outcomes of previous research cycles allowed a
substantial refinement of the research methods to be used in 2002. As described in
Chapter 4, action research methodology provides flexibility to develop new research
questions and appropriate methods throughout the project. The research questions
outlined were therefore developed in light of experience and with stakeholder input in
alignment with the research theory. Using the original research aims as described in
Phase 1 and the identified thematic concerns (Appendix 1) the research questions for
this cycle can therefore be listed as;

- Did the RPP staff support and inspire the students?
- Did the RPP result in students having positive attitudes to rural practice and
  lifestyle?
- Were honorary titles an incentive to become involved with the RPP?
- Did any staff recruit as a consequence of the RPP?
- What contribution did the students make to patient care?
- Have the stakeholders supported the Faculty?
- Did the students learn through participation in the ADA NSW Risk Management
  session?
- Are the students more aware of the ADA?
- Has there been any inclusion of oral health into other health curricula?
- Did the students achieve what they wanted to?
- Is the RPP a student-centred experiential learning opportunity?
- Does the RPP provide a template for extramural education?
- Can the RPP develop into a mandatory program?
- Did the students meet other students?
- Did participants work in rural areas when they graduated?
Research methods

Using the list above, the research methods used in 2000 and 2001 were reviewed to evaluate their validity. As a consequence, the research methods used in 2002 comprised the following.

Pre- and post-placement questionnaires

Outcomes from RPP 2000 and 2001 demonstrate that the pre- and post-placement questionnaires provide data appropriate for questions 1, 2 and 10. Additional questions were inserted to address questions 8 and 14. The session evaluation used in previous years was continued to address question 7.

Reflective statements

As outlined above, students were required to submit reflective statements to fulfil their learning requirements. These were used to support findings from other research methods. It was expected that the reflective statements would assist in addressing questions 10 and 11.

Log books

Students were required to maintain logs of experience and the ISOH system was used to generate clinical activity reports for the participating clinics. These methods addressed question 5.

Student interviews

A student interview proforma was developed to address questions 10 and 11.

Staff interviews

Mindful of the limited response to previous questionnaires, it was decided to ask staff members for direct responses to questions 3 and 4 above. All staff were also invited to submit reports and comments to inform future developments and research.
Personal reflections

Questions 6, 9, 12 and 13 were addressed as a consequence of my personal experiences as RPP researcher.

Review of graduate employment

All final year students were contacted by email to determine where they had chosen to work immediately after graduation. Public records and graduate networks were used to locate the workplace location of non-respondents. This addressed question 15.

These over-arching research questions are considered in depth in Phase 3 of the project; the remainder of this chapter focuses on the findings from the RPP 2002.

STUDENT LEARNING

Did the students achieve their goals?

The decision to omit the learning contract element of the RPP was based on the feedback from students that the contracts tended to narrow their focus to learning (page 121). This necessitated a different approach to learning. As a consequence, the pre-
placement questionnaire required students to define up to five goals that they wanted to achieve during the RPP. All 32 participants completed the questionnaire and listed individual RPP goals. As an indication of the consistency of these goals, Table 17 provides a summary.

Table 17: Student goals for RPP 2002

<table>
<thead>
<tr>
<th>Goal</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaining clinical experience</td>
<td>31</td>
</tr>
<tr>
<td>Having fun</td>
<td>20</td>
</tr>
<tr>
<td>Determining whether they will work in rural area after graduating</td>
<td>12</td>
</tr>
<tr>
<td>Experiencing rural lifestyle</td>
<td>12</td>
</tr>
<tr>
<td>Understanding the oral health issues facing rural communities</td>
<td>9</td>
</tr>
<tr>
<td>Discussing dentistry with professional colleagues / networking</td>
<td>8</td>
</tr>
<tr>
<td>Providing treatment for indigenous patients</td>
<td>7</td>
</tr>
<tr>
<td>Developing communication skills</td>
<td>7</td>
</tr>
<tr>
<td>Providing treatment with RFDS dentist</td>
<td>2</td>
</tr>
</tbody>
</table>

These goals were obviously aligned with the motivating factors for attending the RPP however it was apparent that the major goal for most participants was to gain additional clinical experience. Many students added comments that reflected their desire to gain clinical confidence and independence.

On completion, students were asked to indicate whether they had achieved all, some or none of their goals. Of the 26 respondents, 25 indicated that they had achieved all of their goals and one student indicated that she had achieved some of her goals. Informal conversation revealed that the student had wanted to work with the RFDS dentist and provide care for indigenous Australians but had not had the opportunity to achieve these goals. As an aside, after graduating and through professional links established during the RPP, this student spent one week working with the RFDS dentist.

During the group de-briefing, students were asked directly whether they had achieved all that they wanted to. There was no doubt that they had all achieved their initial goals but several students noted that they weren't really sure exactly what they wanted to
achieve before they went. One student (27) suggested that two placements would provide the opportunity for initial “reconnaissance” followed by a more goal-orientated placement. Other students agreed that this would be a useful opportunity. Another student (08) suggested that I should set “achievable goals” for the RPP. None of the other students agreed with this suggestion with one student (30) stating that “the whole aim of this is that we get what we need from the placements not what anyone else needs otherwise its just like any other thing that we have to do. This was great because we really could decide what we wanted to do”. Other students agreed with this comment.

“It was kind of funny really. I knew that there was nothing that I really had to do but I just kept finding things that I wanted to do. If you had said that we all had to do six endos and write six pages on a topic I think it would have changed the way I felt about the whole placement. I learnt heaps about all sorts of things and I agree with 27 – I reckon I’d get even more out of it if I went on a second placement”

Student 01 August 2002

Analysis of the reflective statements confirmed that students had gained more from the experience than they had anticipated. The following is an extract from one student’s reflective statement.

“I must admit I was quite anxious before I left Sydney as I had never really spent any time away from my family let alone in rural areas. When you asked us to define our goals all I could really think of was that I wanted to have fun and not miss my family so much. After I thought about it I realised that I really had lots of goals. I am not very confident when I am working on the clinic and I really want to get better and quicker. While I have been on the placement I have realised that I really can provide good treatment. Maybe its because the tutor didn’t know that I had failed some things at Uni but he was really positive about what I had done in his clinic. I should really have made that a goal because to be honest I find it very difficult to keep positive when I am at
Westmead because it seems like everyone is so much better than I am but maybe I'm not so bad. I think its going to make a big difference to how I work at Westmead now and my goal should have been to get more confidence”.

Student 10 August 2002

While those who attended the de-briefing session had achieved their goals, it was reported to me that one student (32) had had an “awful time” and had “hated every minute of it”. I established email and subsequent telephone contact with this student. She reported that she had not understood the roster and that she would be spending some of the time in Inverell, some distance from her partner. She reported that her accommodation had been poor and that she had been scared to leave her room at night. I spent some time discussing the situation with her and later, the local mentor. The student had not reported any adverse incidents or undesirable situations to either of us and it was therefore difficult to see how we could have intervened. Interestingly, despite these problems, the student’s career interest score increased from 5 (pre-placement) to 8 (post-placement). On graduating this student chose to work in a metropolitan teaching hospital.

Was the RPP a student-centred experiential learning opportunity?

As has been described in Chapters 7 and 8, and mindful of experiential learning theory described in Chapter 3, the RPP provided the students with an experiential framework on which to base their learning. The RPP 2002 provided opportunities for students to develop and achieve individual learning goals, supported reflection in and on action, and allowed students to self-assess. During group and individual interviews, it was apparent that all of the students believed that the RPP had been a positive learning experience.

In order to determine which elements of the RPP had significantly influenced their learning, students were asked to evaluate the various components of the program. Of the 26 students who submitted post-placement questionnaires, all agreed that the pre-placement briefing session, orientation program, clinical placements, academic
support, mentors and clinicians were ‘important’ or ‘essential’ for their learning. Eight of the students (30%) were ‘unsure’ whether the post-placement briefing had influenced their learning although eighteen (70%) considered this element to be ‘essential’ or ‘important’.

Self-assessment

Interestingly, thirteen students (50%) valued self-assessment as a learning element; of the remaining thirteen students, seven (27% of respondents) indicated that self-assessment was ‘not important’ to their learning.

During the interviews it became apparent that not all of the mentors had valued the self-assessment strategy. Two of the groups of students had not had any opportunity to discuss their self-assessments with the mentors and therefore perceived it to be of no real benefit to their learning. While the other students valued self-assessment many described the support and feedback from mentors and clinicians that had apparently enhanced the value of this element. As the interviews progressed it was evident that the students perceived self-assessment as something that they should be able to do but that they had limited confidence in its value as an independent assessment tool. This student’s comments were typical.

"It's all well and good to do the self-assessment, I mean you have to know how to assess your own work, but really I'm not sure that we know how to do this well enough. I used really broad assessment criteria which made it easier and I did keep going with it but the comments and feedback from the dentists was far more important to me."

Student 14 August 2002

Several of the students believed that the RPP should not have been assessed as it was an elective option but appreciated the need for some form of assessment for a mandatory placement. Various alternative assessment methods were discussed during the interviews. When considering summative and formative options, the students were
evenly split between each of these options. Concerns were expressed that if the RPP were assessed summatively, the value of non-judgmental supervision and support would be lost. One student (24) stated that she felt “safe” asking for help and advice and that had she known that her assessment was going to “count” she might not have been so willing to ask for such support for fear of being failed.

Another student (09) considered that self-assessment would mean that everyone would pass so it didn’t really matter whether the assessment was summative or formative. He considered that if the RPP was going to include assessment from clinicians and mentors, it should be formative only. Several students commented on the variability of clinical support and suggested that assessment by clinicians was likely to be subjective and possibly “unfair”. This comment provoked discussion around the establishment of appropriate criteria and how these could and should influence the nature of the assessment. One student (30) described the development of assessment criteria for clinicians and mentors that were based on the self-assessment criteria defined by the students. He suggested that this would help to structure the assessment to fulfil academic requirements but that the students would still “get the benefits of safe learning”. He considered this to be a method to develop summative assessment that was in alignment with student goals.

Another student (11) suggested that I should assess their learning from the RPP and that would then mean that they could work in the clinics without being concerned about assessment. She also expressed concern that the clinicians and mentors might not provide “good assessment”. While several students agreed that I should provide an assessment, it was noted that it was impossible for me to do this when I was not present during the clinical placements. The students appreciated that this was a physical impossibility. One student (15) considered that my input was valuable but that it should not be the only element of any assessment.

During the majority of the interviews, students described the “unfairness” of assessment. The students were obviously challenged by the practicalities of
implementing valid and reliable assessment methods and during individual interviews many spoke frankly about their concerns.

"I know what you are saying about self-assessment and I think that we all do it. We haven't really had to think about this stuff before – the assessment is given to us and we just do it. Its great to have a say but really, I'm not sure that we have ever really thought about what we would do if we had input. I mean we all moan about how unfair assessment is but when we have to think about how we would do it differently it's hard....

You know that 31 didn't come to half the things he should have. When he was there he just sucked up to the dentists and they all thought he was fantastic. It's just so unfair. I know he didn't even bother to do the self-assessment or reflection but there's no price to pay. (I pointed out that it was difficult to enforce compliance on an elective program and that it was likely that he would not have learned as much from the RPP as others might have)......That's fine but he doesn't see it that way. He thinks its all a big joke and he said that he would have passed himself anyway if he could have been bothered. Its really annoying to be honest. He will do well but those of us who do take the whole thing seriously aren't credited for it”

Student 29 August 2002

As has been stressed previously, the participants in the RPP were educated within the traditional framework and had had little, if any, experience of self-assessment. It is not unreasonable to expect that students of the new student-centred BDent curriculum will approach learning in the RPP with the benefit of prior experience of self-assessment and experiential learning strategies.

With the benefit of experience and evaluation of the RPP from 2000 to 2002, and with reference to assessment methods used in the Graduate Medical Program at the University of Sydney, a proposal for future assessment was distributed to students and discussed during interviews. It was stated that this method would be formally trailed
during the elective RPP in 2003 and subject to evaluation and amendment, would be implemented for students participating in the mandatory RPP from 2004.

The assessment method proposed comprised:

- student self-assessment
- RPP coordinator assessment
- Clinical mentor assessment.

The students would determine the criteria for the first assessment and the criteria for the second and third assessments were based upon a review of the students’ self-determined criteria for 2002. These assessment forms are appended (Appendix 4).

There was unanimous agreement that the proposed assessments would be appropriate for future RPP students, several students, however, referred to the need for additional time and academic support when developing their own criteria. It was agreed that previous experience of self-assessment would have made the task easier and that the BDent students would have acquired the necessary skills and experience to implement the proposed method. While there was overwhelming support for the proposal during the interviews, students were advised to review the documents over time and were encouraged to comment further if required. There were no further comments received.

Reflective Statements

The evaluation of learning elements included reference to the reflective statements. One student (4%) described this as an ‘essential’ learning element, three (11%) considered the statements to be ‘important’, nine (35%) were ‘unsure’ of their value and the remaining thirteen (50%) considered the statements to be ‘unimportant’ or ‘irrelevant’ to their learning. It was apparent that while individual students considered the statements to be beneficial, the majority did not consider reflective statements as useful for their learning.
As described in Chapter 8, the RPP 2002 provided an opportunity to define the RPP structure for mandatory placements in 2004 with the RPP 2003 providing an opportunity for a final evaluation. Based on the feedback from the students, it was clear that the reflective statements were not valued as highly as I had anticipated. I therefore elected to return to learning contracts for future programs. The ability for participants to determine the aims, outcomes and process of learning and therefore assist with structuring of the placements has been described \(^{18}\). The role of critical thinking in "personal and professional effectiveness" is also considered by Toohey \(^{98}\) and based upon the described success in clinical settings \(^{58}\), it was decided to develop learning contracts as the central element; this is included in the assessment documents appended (Appendix 4).

**Did the students learn through participation in the ADA NSW Risk Management session?**

As in previous years, this element of the orientation was evaluated separately to fulfil stakeholder needs. An open and closed response questionnaire was used and all 32 students responded (100%). Responses to the fixed items are represented in Figure 8.

**Figure 8: Student evaluation of Risk Management Session 2002 (n=32)**
In the 2002 evaluation, students were specifically asked to identify the elements of the session that most influenced their learning. They consistently referred to the importance of student participation, the use of real-life cases to ensure relevance, the approachability and humour of the facilitators and the use of “plain speaking with no legal jargon”. Individual students acknowledged the value of small group work, the varied format of the session and the accompanying handouts.

Students were also asked to identify other learning strategies that could be included in the session. Only four students responded to this item, all of whom would have liked to consider additional real-life cases.

The Risk Management session is of obvious benefit to the students and the skills, expertise and enthusiasm of the facilitators is consistently recognised.

**Did the RPP staff support and inspire the students?**

The students greatly appreciated the support provided by the RPP staff. Of the 26 students who completed a post-placement questionnaire, sixteen (62%) described the mentors as ‘essential’ for their learning with the remaining ten students (38%) describing their role as ‘important’. The role of the supervising clinicians was also valued with ten students considering their role to be ‘essential’ and sixteen considering their role to be ‘important’. During interviews it transpired that the level of support provided by both mentors and clinicians had been variable. One group of students saw very little of their mentor and stated that, “we felt like we were a nuisance, taking him away from all of the important things that he had to do”. The career interest scores before the RPP for these three students were 10, 10 and 7. After the RPP the scores were 9, 7 and 7 respectively. The first student in this group pursued a rural career when he qualified and it was apparent that he had a high level of interest in a rural career from the outset. It was impossible to determine where the other two students had chosen to work; colleagues assume that they have moved overseas.
Overall the students were very satisfied with the support that they received and fourteen students (54%) describing their mentors as 'one of the three best things about the RPP'.

While it is difficult to quantify the relative contributions made by each of the elements of the RPP, the impact of the program on career interest scores provides an indication of the inspiration provided by the staff involved. This is considered later in this chapter.

**DATA COLLECTION AND ANALYSIS**

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**Data collection**

All 32 students completed pre-placement questionnaires however only 26 students completed post-placement questionnaires. Individual interviews were conducted with all students during the RPP and group interviews were held with the 26 students who attended the post-placement briefing and who submitted questionnaires, self-assessments and reflective statements.
Student familiarity with rural lifestyle

The participating students reported that they were ‘unfamiliar’ with rural lifestyle with 28 of the 32 respondents (87%) reporting that they had spent a total of less than one month in rural Australia. All of these students had been educated in regional or metropolitan areas and had spent some of their holidays in rural locations.

Four (13%) students had spent most of their lives in rural areas. Of this group, two had been educated at a primary and secondary level in their rural home town while two had received primary education in a rural location but had completed their secondary education in a regional location. These students are considered further in Chapter 11 of Phase 3.

Student attitudes to rural practice before and after the RPP

Before the RPP, the most attractive features of practising dentistry in a rural area were perceived as being part of a small friendly community (ranked first), the rural lifestyle (ranked joint second) and the increased breadth of clinical experience (ranked joint second). These remained the three major advantages after the RPP. It was interesting to note that students did not consider professional support as being an attractive feature before the program but after the program, this was the fourth ranking advantage. This would support earlier observations that the staff involved with the RPP provided professional support for the students. It can also be inferred that these students perceive that this professional support would be available for them as new graduates. These findings are summarised in Table 18.
Table 18: Perceived advantages of a rural career before and after RPP 2002

<table>
<thead>
<tr>
<th></th>
<th>Frequency of response</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-RPP</td>
<td>Post-RPP</td>
</tr>
<tr>
<td>Being part of a small, friendly community</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>Rural lifestyle</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>Increased /broader range of clinical experience</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>Ability to provide care where none exists</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Increased remuneration</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Improved employment opportunities</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Professional support</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Decreased cost of living</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

As in previous years, students also listed the perceived limitations of a rural career. These are summarised in Table 19. The major perceived limitation to a rural career is the distance away from family and friends, ranked first before and after the RPP. It is noteworthy that the number of students who considered this to be a limitation actually decreased after the program.

Students perceived the limited range of social activities to be a significant limiting factor (ranked third before the RPP and second after the RPP) however the number of students reporting this limitation reduced markedly. Overall, there were fewer limitations listed after the RPP than before (67 and 83 respectively). Professional isolation remained a perceived limitation after the program although as described above, nine respondents actually perceived the professional support to be a major advantage of a rural career. These findings are summarised in Table 19 and discussed further in Phase 3.
Table 19: Perceived limitations of a rural career before and after RPP 2002

<table>
<thead>
<tr>
<th></th>
<th>Frequency of response</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-RPP</td>
<td>Post-RPP</td>
</tr>
<tr>
<td>Distance from family and friends</td>
<td>27</td>
<td>19</td>
</tr>
<tr>
<td>Professional isolation</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Limited continuing education</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of social activities</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Independence</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Distance / Cost of travel</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Limited education for children</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Cultural isolation/racism</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Limited range of experience</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Distance from ocean</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Problems returning to city</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Weather</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Having a community identity</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Student interest in a rural career

Figure 9 demonstrates the pre- and post-placement career interest scores provided by the students. As noted previously, six students did not complete the post-placement questionnaires although this group did supply their career interest score on request.
Figure 9: Student interest in a rural career before and after the RPP 2002

The mean interest scores were 7.38 ± 1.7 before the placement and 7.59 ± after the placement. A paired t test provides a t value of -0.677 with 31 df and a corresponding significance level of 0.503. There was therefore no significant impact on career direction for the 2002 cohort. Additional data analysis is supplied in Chapter 11.

Student contribution to oral health care

A review of the 26 submitted student logbooks demonstrated that students provided a range of restorative treatment for local residents although the vast majority of these services were simple restorations, scaling and polishing, and dental extractions. Table 20 summarises the clinical experience obtained by students during the RPP 2002.
Table 20: Clinical experience during RPP 2002

<table>
<thead>
<tr>
<th></th>
<th>Area Health Services in</th>
<th>Area Health Services in Northern Oral Health Network (data collected using ISOH during one RPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Far West Oral Health Network (data collected by students during two RPP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FWAH n=7</td>
<td>MAH n=7</td>
</tr>
<tr>
<td>Total number of occasions of service</td>
<td>124</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>MWAH n=6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NRAH n=3</td>
<td>NEAH n=2</td>
</tr>
<tr>
<td>Average number of occasions of service</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>HAH n=4</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>MNCAH n=3</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69</td>
</tr>
</tbody>
</table>

In the areas with fewer students per placement, the amount of clinical experience obtained was noticeably higher than in those areas hosting more students. This is expected as the program utilised existing staff and infrastructure and shared this between the students present.

The Network Manager of Northern Oral Health Network provided a comprehensive evaluation of the program and noted that, "All areas agreed that any cost or negative effects on activity were outweighed by the overall benefits of the program. However it is acknowledged that any future cost-benefit analysis would require better data, agreed methodology and consideration of the period and circumstances under which any activity down turn or costs were sustained". The initial cost-benefit analysis indicated that the RPP cost the Network approximately $5,435 to host the 12 students. This includes accommodation costs, opportunity costs and transport and equates to approximately $450 per student for the two-week period.

The effects of the RPP on clinical activity, as measured by occasions of service (OOS), demonstrated that in New England AHS where two students were placed, the OOS was 2 48 d during the preceding nine-day period and 2 47 d during the RPP. There was
therefore virtually no impact on OOS in this area. Similarly, in Hunter AHS, the OOS reduced from 1553 to 1428. It was noted that, "there were two sessions of non-clinical activity. If this is considered then the fall in activity during the period of the RPP is negligible". In Northern Rivers AHS, there was a significant decrease in the level of activity from 311 to 233 OOS. The mentor in Northern Rivers spent considerable time providing tutorials for the students resulting in decreased clinical opportunity. There were no additional data submitted by Mid North Coast AHS.

As the students collected the data in the Far West Network, it was not possible to compare OOS data as above. One mentor in this network admitted that, "we are not too bothered about the productivity to be honest. Its great that they can work but really we see this as a long-term investment. Nine days is not going to make a huge difference over a year anyway". A second mentor in this network observed that, "we have empty chairs so the output is bound to increase. Where the student displaces a DO it may be different".

The variability of data collection precludes a detailed cost-benefit analysis and attempts were made to standardise such data collection in future RPP plans.

As the RPP involves numerous staff and various clinical experiences, some of which are as observers, it would be unlikely to result in increased clinical output for the participating clinics. It is not unreasonable to expect the students to make a more significant impact during longer placements.

Staff feedback

As in previous years, the staff were extremely positive about the RPP and the students. Comments were made about individual students and the group as a whole. Those clinicians who had been involved with previous RPP students were understandably less forthcoming in 2002.
"Her skills were of a standard beyond what I had expected. She fitted in well, was easy to get along with and very cooperative with staff. I would be more than happy to give her a reference when she graduates for any position for which she may apply"

Letter from F July 2002

"The staff that tutored the students generally found the experience enjoyable and rewarding. All Areas were enthusiastic for Dental Services to continue their involvement in the RPP. The mentors are enthusiastic about participating in the role again"

Northern Network Manager September 2002

The Northern Network Manager also noted that the students were “very competent” and that they displayed clinical skills beyond those expected. The “high degree of professionalism” that the students demonstrated was recognised by the staff involved.

Twelve of the tutors involved in the RPP 2002 elected to submit CVs for Honorary appointments with the Faculty. All of these staff were employed in the public sector. No private dentists applied for such titles despite their awareness that they were available in recognition of their contribution. As described in Chapter 8, the Department of Continuing Education maintained its commitment to the ‘Rural Update Program’ and held a two-day program in Coffs Harbour later in 2002. This was very well attended and received excellent evaluation.

Improvements to the RPP

Students submitted recommendations for improvements to the RPP. Of the 26 respondents to the post-placement questionnaire, fourteen (54%) would have liked the use of a car, ten (38%) wanted improved cooking facilities, three (11%) would have liked a longer placement and four (15%) would have liked more clinical time. These recommendations were noted to inform the development of RPP 2003.
Twenty-two students (85%) stated that they would recommend rural practice to other students. Four considered that this was a personal choice and that they would not wish to recommend rural practice unsighted.

Recommendations from the RPP 2001 were reviewed and it was pleasing to note that in 2002, there were no adverse comments relating to the orientation program.

**Strengths of the RPP**

Students were again asked to list the ‘three best things’ about the RPP and this information is summarised in Table 21.

These strengths are very similar to those reported previously. The need to ensure that all students gain clinical exposure during their rural experience is evident. The students also appreciated the diversity of the program and the support provide to them by the staff. These elements were considered to be essential elements during planning for the RPP 2003.

**Table 21: Perceived strengths of RPP 2002**

<table>
<thead>
<tr>
<th>Strengths of the RPP 2002</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting more clinical experience</td>
<td>21</td>
</tr>
<tr>
<td>Experiencing rural lifestyle</td>
<td>18</td>
</tr>
<tr>
<td>Range of locations/activities</td>
<td>14</td>
</tr>
<tr>
<td>Approachability of clinicians</td>
<td>14</td>
</tr>
<tr>
<td>Meeting new people</td>
<td>10</td>
</tr>
<tr>
<td>Organisation of the Program</td>
<td>5</td>
</tr>
<tr>
<td>Balance between work and recreational time</td>
<td>5</td>
</tr>
<tr>
<td>Orientation Program</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity to fly with RFDS</td>
<td>4</td>
</tr>
<tr>
<td>Transport</td>
<td>2</td>
</tr>
</tbody>
</table>

**Reporting**

The RPP received considerable exposure in 2002. Several local television and radio stations conducted interviews and ran stories on the rural dental workforce crisis. Professional reporting was conducted along the lines of 2002 with favourable
outcomes. There was consensus that the RPP 2002 report was accurate and the draft recommendations contained therein were valid (see Phase 3).

The University Department of Rural Health (UDRH) maintained its high level of support for mandatory rural placements and the UDRH at Lismore became actively involved in discussions. The Oral Health Branch of NSW Health (OHB), on the recommendation of the Minister for Health, committed $8,000 to the program on an ongoing basis. It was agreed that this would be accessed by the AHS hosting the students and would be used to offset accommodation and transport costs. The New South Wales Branch of the Australian Dental Association (ADA NSW) and Guild Insurance and Financial Services (GIFS) pledged continued support for both the Risk Management session and the travel bursaries. They resolved to provide up to $25,000 for the RPP 2003.

Reporting to the Year 4 Development Group at the Faculty of Dentistry resulted in progression of the research associated with the RPP. It was originally anticipated that this project would conclude at the end of the RPP 2002 with final recommendations for mandatory rural placements for final year students. In the true nature of action research, the various discussions (see below) held within the Year 4 Development Group necessitated further investigation. The research model used throughout this thesis was still valid although this is not represented pictorially from this point in the thesis. The additional factors that required consideration were;

**Increased demand for the RPP in 2003**

In 2003, forty-eight applications were received. Early in 2003, thirty six places had been negotiated working with the seven AHS sites developed in 2002. While it was possible to limit the number of places to 36, I determined that additional places should be made available.
Requirement to accommodate two student cohorts in 2004

In addition to the final year BDent students in 2004, there would also be a final year cohort from the BDS curriculum. I decided that it was essential to offer the RPP experience to both groups; BDS students would be offered elective places and BDent students would participate in mandatory placements.

Provision for mature students who were unable to travel far from home

Students of the BDent curriculum were on average, older than their BDS contemporaries. Several students worked to support their education and a few had young families. It was therefore important to consider placements within commutable distances for these students.

Expanded rural placements

The RPP provided an opportunity to spend a short time in rural NSW however staff and students indicated that lengthier placements would have advantages in terms of both student experiential learning and community service provision. I submitted a proposal to the Year 4 Development Group that additional rural placements might provide significant educational and practical opportunities.

Increased costs associated with placements

The increased number of places required in 2004 would inevitably lead to greater associated expenses. With large groups travelling to distant sites, the option of providing orientation in Sydney required investigation.

Student rosters

As Year 4 curriculum planning proceeded, it became apparent that there were various timetabling possibilities. The relative merits of students attending en bloc or in smaller groups throughout the year were discussed. At that time, the largest group that had attended comprised 12 students. The value of smaller groups had been documented however there was no evidence to support or deny a large group RPP of 64 students.
Curriculum planning continued based upon the small group model however further investigation was required to inform future curriculum planning.

It was therefore important to strengthen the existing rural placement opportunities and develop new clinical placements to cover all eventualities. Additional research questions were thus generated and can be summarised as;

- Can additional RPP clinical placements be developed?
- What are the options for closer placements for mature students?
- Are longer placements achievable and/or desirable?
- Is a Sydney-based orientation appropriate?
- How many students should attend at one time?

Chapter 10 describes the outcomes of the RPP 2003 with reference to both the existing research objectives and the areas identified above.

**Graduate employment of RPP 2002 students**

Thirty of the students (94%) who participated in the RPP 2002 provided employment details over January and February of 2003 and these were categorised using the ARIA (153). The remaining two did not respond to any form of communication and their peers did not know where they had chosen to work. These students had not submitted post-placement questionnaires.

Of the 32, nine (28%) were employed at one of the two metropolitan teaching hospitals. Nine had chosen to work in metropolitan Sydney and one in metropolitan Brisbane (total 31%). Four other students (13%) had moved interstate; three of these students worked in Rural (R) areas and one worked in a Moderately Accessible (MA) area. Seven (22%) students had chosen to work in rural areas of NSW; this entire group worked in MA areas. In total, eleven students (35%) were employed in MA or R areas of Australia.
Of this group of eleven, three (28%) had increased career interest scores after the RPP, and one had a decreased career interest score from 10 to 9. Ten (91%) students had recorded pre-placement interest scores of 7 or higher with the remaining student indicating a pre-placement interest score of 4. The entire group had interest levels of 7 or higher after the RPP, with seven (64%) recording scores of 9 or 10.

Of the eleven students who indicated a career interest score of 9 or 10 after the RPP, seven (64%) chose to work in rural areas on graduation.

These outcomes are analysed and discussed further in Phase 3.
CHAPTER 10

RURAL PLACEMENT PROGRAM 2003

RPP STRUCTURE

As noted in Chapter 9, there was a need to consider additional placement locations to accommodate both the 2003 BDS cohort and the 2004 BDS/BDent cohort (a). It was also necessary to consider placements closer to Sydney (b), opportunities for longer placements (c), optimum group size (d) and Sydney-based orientation (e). The plans for the RPP 2003 were designed to address each of these issues as follows.

a) Development of additional placement locations

In addition to the well-established Broken Hill program, involving Orange and Dubbo, it was decided to continue with the Northern Network Placements. This provided a total of seven clinical placement locations. The appointment of an acting Network Manager led to a review of the practicalities of student placement in 2002 and resulted in additional places being available in 2003. A total of 16 students were accommodated in the four Area Health Services comprising the Northern Network. With 12 student places available in each of the Broken Hill programs, a total of 40 places were offered in established locations.

In an attempt to develop greater opportunities for more accessible placements (see below), support was requested from the South West Oral Health Network. With the support of the Network Manager, four students were accommodated in Albury and four in Queanbeyan. A total of 48 places were offered to BDS students in 2003. All of these students attended the RPP during the four-week mid-Semester break. An overview of the student placements is provided in Table 22.
Table 22: RPP overview and student placements 2003

<table>
<thead>
<tr>
<th>Location</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broken Hill</td>
<td>Four students</td>
<td>Four students</td>
<td>Four students</td>
<td>Four students</td>
</tr>
<tr>
<td>Orange</td>
<td>Four students</td>
<td>Four students</td>
<td>Four students</td>
<td>Four students</td>
</tr>
<tr>
<td>Dubbo</td>
<td>Four students</td>
<td>Four students</td>
<td>Four students</td>
<td>Four students</td>
</tr>
<tr>
<td>Newcastle</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamworth</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffs Harbour</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lismore</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queanbeyan</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albury</td>
<td></td>
<td>Four students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mentors were identified and supported in the development of an experiential framework for the students. Fortunately the three Broken Hill program mentors from 2002 were committed to supporting the RPP 2003 and had sufficient experience to develop these placements independently. Each of these placements was reviewed and mentors were provided with support as required. In the Northern Network, two of the mentors in 2002 stood aside and new mentors were identified. Initial support was provided and the Network Manager and other mentors in the Network offered considerable additional support. New mentors were identified and supported in the two additional placements venues. The distances between each of these placements and the difficulties associated with providing personal academic support on a fractional appointment meant that the academic support for the mentors was largely provided through teleconferencing. This was a limitation of the RPP 2003.

Mindful of the outcomes from the RPP 2002, a venue for the orientation required considerable thought. It was obviously physically impossible for the orientation program academic staff, including myself, to be in two or more places at one time. The value of the content of the orientation had been demonstrated in previous RPPs and there was a personal commitment to retaining this structure. Students had also valued the learning and peer support provided by attending the orientation in larger groups before the smaller group clinical placement. It was determined that large group orientation was required for the RPP 2003. The orientation for the Broken Hill programs, commencing in weeks 1 and 3 (Table 21), continued in Broken Hill as in
previous years. The major dilemma related to the provision of a large group orientation for the students attending the six placements organised commencing week 2.

As described in chapter 9, opportunities to involve the UDRH at Lismore had been identified although the practicality of transporting 24 students to Lismore and subsequently to their distant clinical placements was impractical. Transport availability was extremely limited and prohibitively expensive. In addition, there was insufficient accommodation available in Lismore for all 24 students. An invitation to hold the orientation in the South West Network was received although this proved similarly impractical. The option of holding the orientation closer to Sydney was investigated but the costs of accommodation and transport were excessive. Mindful of the feedback from 2002, it was therefore decided to hold the orientation at Westmead Centre for Oral Health. This was an inexpensive option and minimised transport needs. In addition, academic staff based in Sydney were able to contribute to the program at minimal personal inconvenience. In order to maximize the opportunities for clinical experience, it was decided to hold the Sydney-based orientation on the first Sunday and Monday of the second placement. Tuesday was allocated for student travel and local orientation with clinical placements commencing on the first Wednesday.

b) Placements closer to Sydney

In 2002, the Newcastle placement had provided potential opportunities for students with family commitments to be placed closer to Sydney. While there were no such students in the 2002 cohort, two students participating in RPP 2003 had such commitments. They were offered places at Newcastle, but both students elected to travel further afield and in one instance the student took family with them. In light of this admittedly limited experience, the need to develop a second closer venue was not considered to be a high priority.