Exploring Issues Associated with the Postgraduate Research Environment at RMIT

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A study conducted on behalf of the RMIT Research & Graduate Studies Committee

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Executive Summary

The findings of the On-going Postgraduate Research Experience Survey, 2000, demonstrated that considerable discontentment exists amongst research students at RMIT with the quality of the research environment. This study aims to investigate why by identifying:

- How research students and academic staff at RMIT experience the postgraduate research environment at RMIT, and
- How the postgraduate research environment can be improved

The aim of the study is to lead to an improvement in the research student experience of the research environment at RMIT.

The study uses qualitative methods to undertake case sampling, consisting primarily of focus groups with a sample of research students from each Faculty at RMIT, and secondarily, of interviews with academics involved in the management of research degree programs within RMIT and across the ATN.

The study found that the critical factor in determining the quality of the research student experience is the human or intellectual community, and that the key to improving the research environment is the level of enthusiasm and commitment of academic staff, and also to a lesser extent, students, toward research. Students’ comments indicate that a gulf exists for many between their expectations regarding a good research environment and their experience at RMIT. Research student aspirations regarding the research environment can be summarised as follows:

- To be embraced as part of a vibrant, engaging and supportive culture of research (i.e.; passion for discovery, scholarship and ideas).
- Desire for respect: to be treated as a researcher (rather than just (sic) a student).
- To receive the necessary technical, library and financial support that will enable the successful realization of a research program.
- A physical environment that promotes the emergence of both spontaneous and formal opportunities for intellectual and social exchange between and amongst academics and students.

The study found that mode of enrolment and discipline are no guarantee as to the quality of the research student experience, but that students enrolled full time may have higher expectations regarding the research environment than those enrolled part time.

Comments from academic staff indicate that they share many of the concerns and aspirations of research students. It is also evident from the comments of academics that impediments to academic staff undertaking research and engaging in a scholarly community need to be addressed in tandem with issues associated with the postgraduate research environment.

Recommendations:

1. An improvement needs to occur in the quality of the research cultures or communities experienced by research students at RMIT. While there is no single model for how this might be achieved, faculty and departmental staff involved in the management of research degree programs are encouraged to review their current practices in the context of the findings of this study. Evaluation needs to occur into the extent to which the issues identified within this study exist within departments or
programs and strategies devised to address them. The table of strategic practices contained within the appendix is provided to assist in this process.

2. Departments need to adopt a comprehensive approach to the treatment of research students, being clear, for example, what the nature of the research student experience is that they are offering, and whether students should be treated differently from undergraduates, and if so, in what ways. The aim should be to ensure that the opportunities and services offered to research students reflect an understanding shared by the entire staff body as to their status and role within the overall research community.

3. Research students need to be offered seminars and other opportunities to present work in the presence of other students and academics. Organisers need to devise mechanisms that ensure the success of seminar programs in view of the enrolment characteristics of their research student cohort. Strategies include ensuring that schedules are published well in advance and that mechanisms are used to promote student and staff attendance, such as including seminars in academic work-plans; being formalised as part of the student curriculum; or being linked with drinks or other social occasions.

4. In relation to part time and off-campus research students, strategies need to be developed within the specificity of disciplinary contexts to assist access to research communities, both in terms of how students might create their own research communities and how the departmental research community might be brought to them. A further study is recommended to consider what electronic technologies such as the Internet may offer in this regard.

5. A review of the library needs to occur to ascertain whether it is being sufficiently resourced to meet the special needs of research students. If it is considered acceptable that RMIT’s research students should depend in part on the libraries of other institutions, particularly for their monograph collections, then the review should recommend how our students can be better supported in doing this. The management of student expectation regarding the library could also be improved by providing clarification to students in advance as to the library services on offer.

6. Areas that conduct experimental research need to ensure that their labs are sufficiently serviced by experienced staff and that if a students’ research is funded by an external body that it does not cause undue stress on the student or undermine the content and outcomes of their research.

7. A review needs to occur within departments or programs into the impact that impediments on staff undertaking research have on the research environment experienced by students. Programs need to ensure that teaching loads and administrative demands are not impacting negatively on the ability of staff to engage in a culture of research and the broad range of activities that that implies, such as doing research, attending seminars, being accessible for informal exchange with students, etc.
1. Background

This study was commissioned by the RMIT Research and Graduate Studies Committee to further enhance its understanding of issues surrounding the postgraduate research environment that emerged from the RMIT On-going Postgraduate Research Experience Survey (OPRES) conducted in late 2000.

2. Aims and scope of study

Findings from the year 2000 OPRES demonstrated that there is considerable discontentment with the quality of the research environment at RMIT amongst the research student population. This study aims to improve our understanding as to why this might be the case.

Aims
The purpose of this study is to identify key factors that work to promote, or detract from, a good postgraduate research environment at RMIT. The aim is to identify these factors, taking account of differences:

- Amongst the research student population (e.g., part time / full time, work-based, international, Masters / PhD etc) and,
- Between disciplinary contexts.

The study is diagnostic, in that it identifies issues and strengths related to the postgraduate research environment at RMIT. It is also interpretative, in that it attempts to locate these findings within the broader national and international context of research and debate on higher education. Finally, the study proposes a way forward by formulating recommendations for action and providing examples of strategic practices aimed at improving the postgraduate research environment.

The ultimate aim of the study is to lead to an improvement in the research student experience with the research environment at RMIT.

Scope
The approach of this study has been to let the elements of what constitutes a good research environment emerge through the findings – therefore enabling the participants’ responses to determine the scope of the study. This has also been done in recognition of the variety and flexibility characteristic of current research degree models and practices. A number of recent studies have been conducted arguing for recognition of the continuing diversity of the higher education system in Australia:

'Dual mode’ thinking, which contrasts one form of supervised research and study – the ‘traditional’ (or conventional) PhD – with newer variants such as off-campus programs, is historically inaccurate, and is a barrier to recognising the actual variety and flexibility which is present in current practice and has been in the past. (Pearson & Ford, 1997, p.ix)

Margot Pearson and Lys Ford (1997) describe higher education in Australia as characterised by the following features:

- Diverse population in terms of age, sex, institution and discipline
- The 'open campus': consisting of candidate mobility, part–time and mixed, on and off campus, enrolment.
- The 'virtual campus': consisting of communication and information technologies that
enable a range of possibilities, from enhancement of traditional communication to complete substitution.

- Flexible supervisory arrangements
- Doctoral programs enabling workplace linked research

All of these features can be identified within the RMIT research student population. This study aims to investigate what these factors mean for how the research environment is experienced by research students.

### 3. Research Questions

The key research questions examined by this study are that of how research students and staff experience, and view, the postgraduate research environment at RMIT, and secondly, how the postgraduate research environment can be improved.

### 4. Significance

**National context**

Recent Commonwealth policy statements have asserted the centrality of a stimulating, vibrant and supportive research environment to a quality research training experience (Kemp, 1999 a&b). Such an environment is seen as integral to the graduation of research students with the capabilities to effectively enter and contribute to the knowledge economy (DISR, 2000). In the latest results of the Postgraduate Research Experience Questionnaire (Ainley & Harvey-Beavis, 2002) however, questions relating to the students' experience of the intellectual climate in their respective institution received the lowest levels of satisfaction. This suggests that disappointment with the research environment is occurring amongst research students nationally and that RMIT is not alone in grappling with these issues.

**In the literature: Improving research cultures**

There are a number of studies in the literature that touch on the issues raised in this study. In relation to improving the postgraduate research environment the creation of a vibrant research culture is often associated with notions of student and staff co-location and a critical mass of research students and staff around the same research area. Lovitts and Nelson (2000), for example, address factors that contribute to non-completion amongst a sample of research students from two universities in the U.S. They found, amongst other things: "...a high correlation between integration into a department’s social and professional life (becoming part of the community) and successful completion of the Ph.D" (2000). A study into factors impacting on research student completions by de Valero (2001) resulted in a similar conclusion – that departmental factors figure significantly in research student completion rates.

A perception of the intrinsic value of critical mass has also become evident in Government policy on higher education both in Australia and abroad (Kemp, 1999 a&b; Harris, 1996). The Harris report claims, for example, that:

> There is a strong argument that postgraduate research education is likely to be delivered most effectively in the context of a critical mass of research activity (1996, Section 5.36).

But the critical mass model also has its critics. Delamont, Atkinson and Parry are critical of what they see as the "extent to which the 'critical mass' assumption has become taken for granted in UK higher education" (1997, p.227), and challenge such conceptions for failing to address disciplinary differences. They claim that models of critical mass are premised on the lab-based research practices of the natural and theoretical sciences and are consequently
more difficult to achieve, and perhaps also inappropriate, for the humanities and social sciences. The critical mass model also tends to favour the full-time, on-campus student. Brehony and Deem (2000) examine how research cultures are accessed and experienced by different types of students within the social sciences, i.e.; full time / part time, local / international, male / female. They note that access to research cultures often occurs serendipitously for part time students, and that, overall:

...International students and part-time students ...found much more difficulty in becoming part of peer student cultures and academic cultures than did home and full-time students (2000).

More broadly, studies such as those conducted by Middleton (2001) and Heinrich (2001) explore how Doctoral candidates, in particular, develop passion for research and scholarship and begin to develop a scholarly identity. These studies are instructive as to the role of mentorship within research degrees.

By way of summary, the examples discussed above suggest that in conceiving of how a good postgraduate research environment might be achieved a range of approaches is required. Also evident, however, is a lack of research on how new technologies, such as the Internet, might be used to facilitate research communities, not only amongst off-campus and part-time students but internal, full-time students as well.

There are also a number of studies on improving both the numbers of research active academic staff and the research culture generally that appear relevant to the RMIT experience. DiGregorio and Devonshire (1999) report on a program aimed at assisting innovative teachers to transform their perception of themselves to include research. The program provided a collaborative forum in which the research process could be undertaken within a supportive, or uncompetitive, environment. Similarly, Coy, Margaritis & Pratt (1999) describe a program aimed at improving the research productivity of academics within newer, or post-Dawkins, Universities where a tradition of research may not already exist. The authors argue that such Universities should follow the lead of their more established Group of Eight colleagues by building a research culture out of the research – teaching nexus, rather than seeing the two as necessarily separate. A related study, by Pham (2000), addresses issues facing regional Universities that prior to the national system were, like RMIT, institutes of technology. The article examines recent policy developments and their impact on efforts to develop research cultures within such institutions. Other studies, such as that of Johnston and McCormack (1997), examine the role of mentoring in the development of academic researchers. The authors report on the implementation of a mentoring scheme in which increased research interest, output and networks resulted. All of the above examples provide models that may be useful in assisting the development of new researchers at RMIT.

5. Research Design

The study consists of the following:

- Literature search
- Focus groups with a sample of research students at RMIT
- Interviews with a selection of post-graduate co-ordinators and/or HOD’s within each faculty
- Consultation with key postgraduate research co-ordinators and Deans and Directors of Graduate Studies within the Australian Technology Network (ATN)
- Consultation with Assoc. Deans (Research) and PVC R&D on draft report
Evaluation of the successful implementation of the recommendations of the study will occur through the annual Quality Assurance for Research Training (QART) process and evaluation of improvements in the research student experience through OPRES, 2002 and 2004.

**Population**
The focus group sample is drawn from the population of all currently enrolled research degree candidates (PhD and Masters by Research) at RMIT as at October 2001.

**Sample – focus group**
The study’s sample is not random. Rather, the approach was to deliberately select students with similar enrolment characteristics from the same department or program in the expectation that they may know each other and therefore see themselves, indeed, as a ‘group’ – although the students themselves did not always see it this way. The groupings were not intended to be representative of faculties or departments, but rather, indicative of particular types of research student cohort – ie; full/part-time, on/off-campus, international and local, within a range of disciplinary contexts. An effort was made to achieve a gender balance within each group.

Seven focus groups were selected, or one per faculty, in order to obtain data from a broad cross-section of the University – see table 3. The research student cohorts that make up the focus groups were identified through consultation with the Associate Dean Research (or equivalent) in each faculty. The selection rationale aimed at ensuring that a diversity of cohort ‘types’ participated in the study, and Deans were encouraged to identify groups who have undergone recent change or are characterised by challenging or unique circumstances. A list of student names was supplied to the researcher and a portion volunteered for the study. Note that only the researcher knows the identity of the students who eventually participated in the study.

**Sample - interviews and consultations with academics**
Academics at RMIT were approached for interviews following recommendations from Assoc Deans (Research) – or equivalent, in each faculty. Academics within the ATN were approached following consultation with the deans or directors of graduate studies within respective institutions. In each case, participants were sought who are active in the supervision of research students and co-ordination or management of research degree programs.

**Methodology**
The study employs primarily qualitative methods for both data collection and analysis, with the main data source being open-ended focus groups and interviews. This data has been analysed using a broadly interpretative framework. A literature search was used to contextualize the study in relation to relevant issues and debates within higher education research and public policy generally.

**Ethics**
The study received ethics clearance from the Faculty of Education, Language and Community Services’ Human and Research Ethics Committee in September 2001.

6. Data collection

Data was collected for the study during spring – summer 2001. 36 Students participated in a focus group, 15 RMIT academics in interviews, approximately two per faculty and one representative from chancellery, and 9 academics from ATN universities – see table 3. An earlier draft of this report has also been circulated to Assoc Deans Research, or equivalent,
the Pro-Vice Chancellor, Research and Development, and an RPA representative, for comment.

The demographical make-up of focus group participants appears in table 4. This indicates that the bulk of the participants in the study were enrolled full time, 67%, which is not representative of the RMIT research student population as a whole, in which only 44% of the population are enrolled full time. This is in part a consequence of the data collection technique used in this study. Focus groups tend to favour full time students for obvious access reasons. A more comprehensive analysis of the part time research student experience at RMIT can be found in the study, Investigating Part-time Research Students in Professional Work (Barnacle, 2002). Comparison of the demographical features of focus groups with RMIT’s population as a whole also shows that slightly higher numbers of off-campus and international students participated in the study than are evident in the population. This is a consequence of the strategy deployed in the study of deliberately targeting certain groups, although in regards to off-campus could also be a result of confusion on the part of some students who may work at home but not be enrolled formally as ‘off-campus’.

Focus groups were conducted within departmental settings, excluding the off-campus group (2) where, due to access difficulties, the focus group was replaced by an email questionnaire (as a consequence, the findings from this group unfortunately lack the richness of other groups). Interviews were taped and transcribed verbatim for analysis.

Interviews and consultations with academics, both RMIT and the ATN (University of South Australia, Queensland University of Technology, University of Technology, Sydney, and Curtin University), were conducted face-to-face in their offices. Interviews were taped but not transcribed.

Focus group participants were asked what a research environment made them think of; their experience of interacting with other students and staff within their department; what works against a good research environment; how the research environment could be improved; what the role of students is in creating a good research environment; and finally, what they felt is the most important feature of a good research environment.

Academics were asked their view of the research environment at RMIT as whole; the main strengths and weaknesses of the postgraduate research environment within their particular department or program; activities that they had been involved in to improve the postgraduate research environment; and finally, the most important feature of a good postgraduate research environment. Academics within the ATN were asked to provide examples of good practice.

7. Data analysis

Focus groups
Data derived from focus groups has been analysed according to the broad disciplinary and enrolment characteristics of each group (see table 3) and interpreted as indicative of particular research student cohorts within RMIT as a whole. Cohorts have been differentiated based on the significant characteristics of each group, or in terms of whether the enrolment types are either part or full time, on or off-campus, international or local, PhD or Masters degree. Disciplinary differences have been conceived according to three broadly defined sets of research practices: lab based (indicative of the experimental sciences), work based (research that is conducted within the workplace), and field/text based (research that is derived from textual analysis and/or empirical studies) – see table 1. Significant gender characteristics have also been included as an additional reference. Note that due to the
deliberately non-random construction of focus groups, data derived from them should not be 
considered necessarily representative of the research student experience of a particular 
faculty, department or program.

Table 1: Data analysis: focus groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Research practices</th>
<th>Enrolment type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Field/text based</td>
<td>F/T &amp; P/T, on &amp; off campus, Masters students</td>
</tr>
<tr>
<td>2</td>
<td>Work based</td>
<td>All P/T, off campus, mainly female, Masters students</td>
</tr>
<tr>
<td>3</td>
<td>Field/text based</td>
<td>All F/T, international, PhD &amp; Masters students</td>
</tr>
<tr>
<td>4</td>
<td>Field/text based</td>
<td>Mainly P/T, mainly PhD, male students</td>
</tr>
<tr>
<td>5</td>
<td>Lab based</td>
<td>Mainly F/T, PhD &amp; Masters students</td>
</tr>
<tr>
<td>6</td>
<td>Lab based</td>
<td>F/T &amp; P/T, mainly PhD students</td>
</tr>
<tr>
<td>7</td>
<td>Lab based</td>
<td>All F/T, mainly female, PhD students</td>
</tr>
</tbody>
</table>

Interviews and consultations
The views and comments of academic staff at RMIT have been analysed for key issues and 
examples of good practice. The former have been summarised in terms of the factors that 
contribute and detract from a good postgraduate research environment and analysed in the 
context of the themes and issues raised by students. The latter have been compiled to form 
a table of strategic practices that correspond to key areas of student concern – see table 2. 
Examples of good practice identified by ATN academics have also been included in this 
table.

8. Findings: Research students

Findings have been organised into the following categories.

- Human environment
  - Research culture / community:
    Attitudes toward research; attitudes toward research students; intellectual 
    atmosphere; social opportunities; access / off-campus
  - Learning support:
    Economies of scale / networking; research seminar; supervision; publication / 
    dissemination of research; promotion of research – role of research students

- Resources, infrastructure and support
  - Library resources; program management; financial resources; facilities, 
    equipment and technical support

- Physical environment
  - Relationships facilitated by the physical environment through the layout of 
    building floor plans; proximity to main campus; availability of common rooms / 
    shared space; aesthetic qualities
8.1 Human Environment

8.1a Research culture / community

Aspirations / expectations:

...The real value lies with human interaction, at all levels.(1)

...A culture of intellectual sharing. (1)

The mental environment where you are actually able to interact with peers in research or peers in industry or academics...(1)

Somewhere where things are happening, where there's a core of people basically...actively doing research [and] contributing encouragement, like discussion. Energy. (4)

....Excellent communication ...openness, honesty, trust and ethics... (2)

People coming together to challenge each other's thinking, explore new ideas...Being in a thinking environment, which will not accept complacency and lack of intellectual rigour. (2)

...Active discussion and communication amongst academics, students, etc... (6)

...Along with academics and post grads and technical staff, I would expect some involvement from industrial based people. (6)

...Whether the school or the university or the faculty encourage research, or whether research is only a small part of, or attached to, teaching, ...whether research is itself the main focus of the university, or of the school. And also the attitude towards researchers, for example, of the two types of people, some may focus on teaching and others are research fellows. Have they been treated equally, have they all been respected? (7)

Attitude toward research

The comments below centre on how research students perceive the value attributed toward research within their department or program.

Issues / strengths:

Basically, the supervisors are interested in what they are doing and we are (interested) in what we are doing, and that's basically it. If you've got those two things, it's a really good atmosphere. (5)

You have the unusual culture that teaching gets in the way of research. That would be the general feeling. (5)

In the area that I'm in there's not a real commitment to research... (4)

I don't get the feeling of intellectual sharing being the dominant culture. [] is fantastic, if you speak to him he will reel off five names of people you can talk to and he's plugged into a few different contacts within the faculty and outside it as well, but I don't get the feeling of that in the faculty. Everyone's got their own agenda for their research and are not too interested in going outside those areas. (1)
...The staff have been more than generous with their time and enthusiasm, but in terms of a community of like minded scholars, who are working at the thesis level, it's non-existent. I think that's a problem. (3)

I think certainly within our department we basically are the research environment or culture because 90% of the research work that's done in the department is by the postgraduates. (6)

...The Department's trying to encourage cooperation in the research environment... It's changing quite significantly and that has a lot to do with moving everyone into this building. There's a bit of a different atmosphere now, it's taking a little while but it's improving. (7)

I think it boils down to the fact that the number one objective of this department is to generate money and not to be seen as a really good research institution. (6)

Most interaction has been waffly, demonstrating little effort by participants to trust their ideas to the challenge of the group. Beyond the first proposal presentation, which was very 'polite' and not shared by the whole group, there has been no sharing of work in progress or the opportunity to really find out what everyone is doing and thinking. (2)

[What troubles me is]...the impact of administrative loads and other distractions on staff and students when it detracts from their ability to do research and talk about it and take the opportunity to engage in external forums. (4)

These comments indicate a mixed level of satisfaction by research students with the attitude, or commitment, to research within their department or program. Group 5, lab based with mainly full time students, are notable for the positive nature of their comments about the attitude toward research within their department. The remaining groups were more mixed; with suggestions from group 7 that things are improving, and recognition from group 4 of the administrative and other factors impacting on the ability of staff to devote time to research. Perhaps the most negative comments are from group 6, who feel the absence of a research culture driven by academics. Ironically, however, this group have very similar characteristics to that of group 5 – full time, lab based etc. Conversely, comments from groups 2 and 3 refer specifically to the lack of a research culture amongst students, although the characteristics of both of these groups are very different: with the latter group being all work-based and part time and the former group being all full-time and internal. This diversity of response suggests that the culture of the department has more impact on the research student experience of the human environment than enrolment type or the nature of the research practices.

**Attitude toward research students**
These comments focus on research students' perceptions of the way that they are perceived by academics within their department or program and the accessibility of staff within their department or program.

**Issues / strengths:**

...We're not a cog in a machine, we're dust on an automobile, if we get blown away it doesn't matter. We're not integral to the system... (3)

Everyone is sooooo busy. I feel like it is just one more thing impinging to that rare and indeed scarce commodity - time. (2)
...The whole way you’re treated by the system as well as by some of the academics and the department: you’re not treated as a fully qualified professional, you’re treated as a student and you’re often treated as a pain, and somebody ...who’s basically at the bottom of the list of the people to be satisfied when problems come up, so, there’s that idea of respect I guess. (6)

As a postgrad what I’d like is a bit of respect and recognition of what we do contribute. The fact that, you know, we do the bulk of the research here, we also contribute a lot to the department in other ways through, you know, lecturing, tutoring, running labs, helping undergraduates, conducting commercial work etc]...(6)

**Staff accessibility**

...There’s not much interaction going on and I think there is a big barrier between staff and students...(1)

What I’m talking about is the intellectual atmosphere. You are isolated, and that might be so, but I don’t have anything in common with anyone else... ...you shouldn’t underestimate the importance of the people involved and we are really lucky at least the two or three I deal with are just obsessed with their work basically and happened to be nice guys too. ...It’s a really amazing atmosphere. (5)

Certainly if I want to know something that is right out of my area then I can go to someone else in the department and say “do you know anything about this?” and they’ll either say yes and help me or no but talk to so and so and I’ll approach so and so. I’ll have never met him before but I feel like I can approach [him]... (5)

There are people who are more willing to help but there are still people who resist it. ...I have experience where there are people who are not willing to help at all, ... they have that kind of attitude, where, I rather do things for myself, I won’t have any benefit to help you at all. (7)

In the lab, if you’ve got a few more senior people there you can learn techniques from them ...Tutoring, equipment, stuff like that, like it’s very important you get people supporting you basically. But, I just felt like I’d done so much, like, on my own, [it’s] frustrating. There’s no one there to teach you... (7)

I think I have a lot of help from people who are not my supervisors, for my situation. My senior supervisor is not here very often because she’s sick, so I’ve got to go to other people a lot of the time to ask for their help and they do help me. (7)

...You’ve got to paddle your own canoe a fair bit, that’s understandable, at our age and stage you don't want to be spoon fed, but I think there is an opportunity for that process to be a bit better facilitated. (1)

I went to my thesis advisor before the first class, and said, 'how are we meeting, when do we meet?' there was a deafening silence at the end. You can't make somebody organise a group, you can’t make somebody come up with a list of students. (3)

The concerns expressed above centre on two key issues: the degree of respect extended to research students by staff – whether students feel that they matter; and the accessibility of staff, or the existence of barriers or other constraints keeping students and staff apart.

Again, the response is mixed, but group 5 are clearly the most effusive about the attitude of
staff, interestingly, however, while also recognising the negatives of their situation. Groups 1 and 2 comment on structural barriers between students and staff, while groups 6 and 3 – both with very different characteristics – voice strong feelings of being unappreciated within their respective departments. Group 7 highlight the importance of staff accessibility for lab-based students.

Social opportunities
The following comments centre on the social opportunities available to research students.

Issues / strengths:

...In the university that I'm more familiar with it's a different climate, literally, and therefore one of the things that they have is outings about every month to six weeks, including ice fishing, where you sit in a hut and you put a piece of line through and try and catch a fish. You drink huge amounts to keep warm. There's nothing like five hours in the snow with your professor to break those social barriers. (3)

I asked a professor if I could have a cup of coffee and I thought he thought I was asking for a date. Because it was like, 'Ahh, coffee, I don't know.' (3)

We welcome this interview session because I get to meet people doing the same thing. (3)

That [lack of respect] extends to even things like the end of year Christmas lunch. Last year the postgraduates certainly weren’t invited to the staff lunch at Christmas. ...The last two years we’ve taken to organizing an end of year staff / postgrad barbecue simply because there wasn’t anything. The staff certainly weren’t coming to us and trying to involve us so we tried to go to them and involve them with us. ...Oh they came, yeah. ...Well, I mean we paid for it out of postgrad maintenance funds as well. (6)

Because you’re just down the corridor and you meet these people two or three times and you are bound to smile at each other even though you are not introduced before. Because the frequency of us meeting is much more now compared to in the city... (7)

Just, it’d be nice to have something informal now and again. ...Yeah, social, [a] drink ... (4)

Most things are good because everyone’s friends, pretty much everyone around the place drinks heavily so we get to become friends after a while. (5)

Tea room
....at morning teatime there’s six of us that go down to the tearoom and drink a cup of coffee. (5)

I’d imagine a lot of the postgrads, when they went in the [staff room], because they don’t go there very often, everyone looks up to see who they are and they’d probably feel almost intimidated going in there, it’s as if to say ‘what are you doing in here’... (6)

[Is the staff room open to research students?] You need to be an employee. We go in there unofficially, we're not supposed too. In fact there is a sign on the door that says that. (3)

These comments indicate the range of social opportunities available to research students,
from group 5 who are welcomed in the staff tearoom and who often have drinks with academic staff, to groups 3 and 6 who either do not have access to a tearoom or feel unwelcome. Discontentment with the lack of social events and informal opportunities to get together was evident in most of the groups. Many of the students in group 3, for example, had never met other international students within their department and were consequently grateful of the opportunity that the focus group itself provided. Group 6 reported that the frustration amongst the students in their department led to them taking the initiative of organising an annual social event with staff themselves. Finally, group 7 indicate the importance of the physical environment for engendering spontaneous social opportunities between staff and students.

Access / off-campus

The following comments demonstrate some of the issues facing off-campus students in gaining access to research communities.

Issues / strengths:

The difficulty I had, as others probably do, is, see, I come from the country so getting to Melbourne's not easy. If I come to a session like today I've got a car full of books and so many other things lined up that [making time to meet] is sometimes problematic. (4)

Difficulty in meeting face-to-face, [because of] culture where most participants do not trust their ideas to the group, facilitator does not encourage exposure of work to intellectual rigor of the group, research oriented group behaviour not encouraged/developed. ...When the majority of the group has no experience of what [a research environment] is (having done their degree program externally, without even the formative experience of rigorous tutorials), the facilitator has a key role in nurturing the research environment in the group. (2)

These comments, both from groups with students' predominantly enrolled part time, indicate the tensions that this can create in gaining access to the institution. The comment from group 4 relates to impediments to interacting with a research culture due to being located some distance from campus. Comments from group 2 raise issues facing off-campus students who have limited access to the research cultures that develop within a university campus.

8.1b Learning support

Economies of scale / networking

The comments below relate to opportunities for learning from others – not having to re-invent the wheel – and networking.

Aspirations / expectations:

...The research environment should create some economies of scale, smarter ways of working so the level of research can be improved rather than staying at a static level. (1)

...You should be able to quickly plug in and find the scope what expertise is there so you can add to it, rather than risking six months doing something that someone else has done. (1)

Distance [is what most gets in the way of a good research environment]. And I suppose what would be really useful, I think, is to set up a web page and solicit
information and ideas that way. ...If each student had their own web page it would be possible to share a lot of information... (4)

**Issues / strengths:**

I’m the only student in my lab at the moment, [but] if you’ve got a few more senior people there you can learn techniques from them; ...tutoring, equipment, stuff like that. Like, it’s very important to get people supporting you basically [but] there’s no experienced people in my lab. (7)

It would be nice if there was a more proactive assistance, with networking so that I could know which professors and lecturers already have expertise in the area that I'm looking at because at the moment I'm finding them by trial and error... (1)

...Just general staff room talk about projects. That’s where a lot of ideas [are shared]. You suddenly find that someone has expertise in an area that you may need help with. I think that’s really lacked, especially since we’ve moved down to Bundoora. (6)

In our group it is a willingness to question and investigate [on the part of students]. Students are responsible for themselves in this to a very great extent when they are off campus. If I don’t set it up it does not happen. (2)

From a technical level, there can’t be three distinct groups; postgrads, academics and technicians. ...They’re not working together towards a single goal. ...Whereas in a good environment everyone knows what everyone else is doing, ... it’s a lot more productive, beneficial. (6)

Now that we’ve set up this research lab in a more formal way on the third floor the interaction you get with other research students and the learning experiences you get from people who are further advanced in their research is enormous. That's when you start to build efficiencies and to start to work out smarter ways of doing things. (1)

The above comments demonstrate that research students feel that informal opportunities for meeting with other students and staff – who are not necessarily supervisors – are critical for learning. While it is recognised that students themselves need to drive their own research – particularly in groups 1 and 2, what is sought is a community that can 'add-value'. Comments suggest that the lab based students; groups 6 and 7, both see chats in the corridor or sharing labs and equipment with more experienced researchers as essential to building such a community. For students enrolled predominantly part time, however; groups 1 and 4, alternative mechanisms – such as a web site – are suggested as possible means of assisting with networking.

**Research seminar**

Along with informal opportunities for intellectual exchange, research students also comment on formal opportunities, like research seminars and workshops.

**Aspirations / expectations:**

It would be good to have some specific seminars ...that would be a useful tool, you know, with real purpose, about an opportunity [to share ideas]. ...We usually find out about these things in the same week that they’re on and that’s useless.(4)

A required course, at which we would present papers and readings, the status of our research and kick around ideas… (3)
Issues / strengths:

I bumped into someone in the hall way and they said, 'I hear you're talking in two weeks.' I said, 'you're kidding.' 'No, no, and here's your topic.' I said, 'that's not what I'm talking about and no one's told me the date.' So I had two weeks to change the topic and prepare myself [but] ...I was never officially notified that I would be making it. (3)

[The seminar program] runs for most of the semester and might break a week or two before the end of semester and start up a week or two after. All students have to give one, if not two, and they are good. [What kind of numbers turn out?] You did pretty well. You got twenty-five people turn up. But between ten and thirty I'd guess. [And do you get lots of staff as well as students? Is there a balance?] Yes, senior staff almost always show up. Yeah, it's very supportive. [If I asked you why do you think it works, what would you say?] It's a small department, everyone's friends. Yeah, we all know each other. (5)

...There is a lot of intellectual respect around the department... So you just want to go and hear [the seminars] because you know that they are going to be interesting. (5)

There is a research seminar, to get to know each other, once a week. It's faculty as well, it's not just a student thing. It's an hour over lunch and it's once a week or once a month. How did you find out about it, was it through me? I'm not sure. ...There is a mailing list apparently, but it's not common knowledge. (3)

...Some universities do seminars in a very organised kind of way and a lot of kudos goes to the universities that do that. Our school doesn't seem to have a handle on the problem and I think that's a shame, not only because we're missing out but because it's an opportunity lost. (4)

[They've] ...been saying we're going to organise seminars for students, like, we talk, but they haven't once done it yet. We used to have students presenting their results every week, as well as staff... (7)

[The seminar series] used to run monthly and then maybe two or three postgrads would present their work. That seems to have died. [It had] very little support from academics. Three, or at most four, academics would turn up, and it was always the same ones. (6)

Now we're going to six monthly conferences where we all have to present [progress reports] over a two-day period. ...It's got good ideas and bad ideas. ...I think there's only so much you can listen to in two days. You can't listen to everybody, you don't have time, whereas if you had them once a month you could sort of go down and kind of enjoy it... There's no way you can get people to sit down and concentrate on 32 each day. (6)

Just this year they've started to have an informal seminar that one staff member organised ...but that is not for students. (6)

It's very much left to coincidence whether you meet someone or not. I guess part of the framework of the course that we are studying is that many of us are employed, many of us are working, therefore our availability to be here in the first place is fairly limited. I think that the mass of scheduled activity already transgresses the amount
...that many can cope with. By the same token, I have to say that probably it is perceived to be little by many of us, there's a real target conflict there that is difficult to resolve. (1)

Speaking as a part time student, [its difficult to] participate in too many things while trying to find time to do research. (4)

These comments indicate a strong desire on the part of research students for seminar opportunities, with group 5, once more, providing an example of a successful seminar series. This example raises two key elements for success: enthusiasm, on the part of students and staff, and communication. Some of the problems caused by poor communication are evident in the comments of group 3, in particular, and also group 4. The themes of enthusiasm and communication were also evident in the comments of groups 6 and 7. For the former the problem was the lack of a promised seminar, and for the latter, problems experienced with a new seminar model and the lack of interest on the part of some staff members. The final issue raised by groups 1 and 4 is that of time and access difficulties facing students enrolled part time.

**Supervision**

These comments relate specifically to research student perceptions of the role or impact of supervisors within the research environment.

**Aspirations / expectations:**

[Most important feature of good research environment is] having a supervisor that gives support and offers direction as required to the study group. (2)

**Issues / strengths:**

Selecting a supervisor or supervisors and being selected by supervisors is a real nightmare. It's a big issue because you actually don't know, coming in as a [new student] you don't know who the suitable people are. I guess, as I said, it's a total lack of transparency and I believe a lot could be done to improve that situation.(1)

I don't think sufficient weight is given to the supervision of research students, so it's perceived by the people that are the recipients of it that it's not as supportive and as focused as it could be. (1)

...My supervisor is fantastic. ...He holds these jams, he calls them every now and then. He gets people together to sit around in candlelight and drink red wine and talk about philosophical things, civilized conversation where we can air ideas that we otherwise wouldn't. (3)

I think the post-graduate sheet of paper says that we should be seeing our senior supervisor how many times a week? An hour a week, and our second supervisor, half an hour a week. I've seen them once every three months for about an hour. Probably it's my fault, but I don't feel like I can see them unless I have stuff to show them. I wish we could just meet. They're super-busy and I understand that....... I'm sorry, I just don't buy that anymore, that they're just so busy. If students aren't the priority then what's the point of them being here? (3)

[Our supervisors] don't feel their jobs are secure. So probably that will affect them, the way they supervise us, or how much they contribute to supervising us. ...If they feel it’s a very little chance for them to get funding for the next few years, they’d probably look somewhere else or do some other job. (7)
A lot of postgrads have taught or taken labs while the lecturer was doing their own work. They shouldn’t be doing that because they’re maybe too busy. ...Some students don’t feel that they can say no to their supervisor. ...Their supervisor is a higher authority and they don’t have a right to say no. (6)

These comments indicate a range of issues facing research students in relation to supervision. Both the lab based groups, 6 and 7, indicate issues directly related to the research practices of their disciplines. For the former, the difficulties relate to the tensions of depending on external funding bodies for research funds, and the latter, tensions associated with the pressure to undertake additional work at the request of supervisors. Groups 1 and 3, both characterised by field or text based research practices, raise issues to do with the time and support offered by supervisors, but the latter also provide a contrast to such concerns with an account of supervision that goes beyond expectations.

**Publication / dissemination of research**

These comments relate to the essential role of publication in the research degree and some of the tension that this can cause. Both examples are from lab-based disciplines.

**Aspirations / expectations:**

I think the faculty or the school should encourage a research-oriented environment, for example, for publications. I just feel like I haven’t been pushed enough to get publications, like when we … remember we had a publication board so everyone who got publication would pin it on the board so you can say wow that person has got so many, I haven’t done any at all, but no person come to me and say … how many papers you got, you’ve got published or, I haven’t got that sort of pressure. I think my supervisors should put more pressure on me or the school should put more pressure on the supervisor, say, how many works got published from your group in this year, because there all linked to grant applications and so on and so forth. (7)

**Issues:**

I know an academic who recently did some research, he said to me it was the first research he’d done for ten years. But he’s been publishing two to three papers a year. ...It won’t go down particularly well with your supervisor if you submit a paper with your name and not his. (6)

**Role of students in promoting research**

Students were asked what role they saw themselves as having in the promotion of a good research environment.

**Aspirations / expectations:**

That’s a role that a lot of students need to take up and be that link between the undergrads and get them to go on to postgrad study. I mean there’s a lot of students there that won’t need that encouragement but there’s also a lot that wouldn’t even think of it unless they were told ...of the research activities that go on... (7)

I would say our role in promoting research is talking about what we’re working on, being willing to give things like seminars and presentations and help undergraduate work. You can often pass on your knowledge and your interest in an area when you help out the undergraduates on projects. I think that all helps to promote the research environment. (6)
I think the role [of students] is one of setting the scene, to show what can be done and work as a mentor/supporter of research within the [external] organisation. (2)

Comments from the lab based groups – 6 and 7 – centre on the role of research students in encouraging the transition of undergraduates into research degrees. The comment of group 2 relates specifically to the role of workplace based research students in promoting research within external institutions.

8.2 Resources, Infrastructure and Support

Library resources
These comments relate to the facilities offered by the RMIT library.

Aspirations / expectations:
I just want to get this off my chest, and I think that everybody is going to agree... The most important part of a research environment is an adequate library [emphatic YEAH! from all]. (5)

Issues / strengths:
Library staff are wonderful but the facilities that we have to work with are less than prime. (3)

I actually use Melbourne Uni’s buddy system. The only way I can use it is I have a friend who goes to Melbourne Uni, so I use his ID and his password. I've found the electronic databases here at RMIT fine, but the ones at Melbourne better. (3)

I think the disconcerting thing for me was to go on Cool Cat and find documents that I wanted at other universities and then I said, 'how quickly can they be brought here? 'they said, ‘three weeks.’ Monash, is forty-five minutes to an hour away, so I drive. I go over to Monash and I pick up the books, I have a larger stock of Monash books right now than RMIT books. (3)

I don’t even bother looking on-line for journals, I either get papers from my supervisors or I take a nice walk up to Melbourne Uni. (5)

I get the feeling that RMIT gets away with it because there’s a first class library down the road. That’s just not good enough because we don’t have access to the Melbourne Uni online resources. (5)

Papers, I mean most of the students here get their papers from document delivery and the only reason for that is because RMIT is so [under resourced]. Last year, ...when we were in the city we’d use the medical library at Melbourne University but now it is just too far. ...It was RMIT’s decision, about ten years ago they decided they weren’t going to buy any more books. So the university, they actually tried to outsource it to the state library. The state library said no, we can’t have one particular university being favoured over the others, and then they were just like ‘oh well’. (7)

The library is so bad that it is barely explainable. [What is it about the library?] Firstly, the library books are inadequate; they are not the right type of books. [How are they inadequate?] They simply don’t have the latest books. They stopped buying books in 1980 or something. Yeah! (5)
Document Delivery (DD) used to be fairly adequate but it's now gone down the bloody toilet, for three reasons: For one, when they deliver in the first place, the quality is really crappy. It's hard to read, basically it's just a photocopy. The second thing is that DD does not send articles if there are too many pages in the bloody thing. There is a page limit! What are we meant to do? Look for articles with less than a certain number of pages in it? It's just ridiculous. And the third part about it is they now give you a limit to the number of DD you are allowed to make. Firstly, we don’t have the books, we don’t have the journals and if we actually ask for the documents they won't give us the thick ones, only the thin ones, and then they say that you can't have too many of the thin ones either! (5) [note, these comments do not appear to be entirely accurate – the Library has advised that there is not a page limit on requested items and quotas, though limited, can be extended.]

[So, how are you finding the new electronic resources, the databases and journals?] I find it pretty good, ...[there's a] huge amount of them, for sure. That's really a yeah. (4)

I would argue that if the library tried to [get the book I need] it would be an enormous waste of resources, ... I’d be the only person in the university that would use it so it would be stupid for the library to own that book. However, surely the department should be funding those kinds of book purchases for us? (5)

The amount of time given to us to do our research isn't feasible considering how long it takes for us to get access to information. (3)

Comments about the library centre on the poor monograph collection at RMIT and what is for many a dependence on the document delivery service and the library of other Universities, particularly Melbourne. These practices are evident across the groups, indicating that differences in enrolment type and research practices have little impact on this issue. Group 5 were particularly disparaging about the document delivery service, although a number of their concerns appear unfounded. Attitudes toward the libraries' electronic resources appear more favourable, group 4 in particular.

Program management
These comments focus on the way that postgraduate research is managed, primarily within the students’ department or school, but also more broadly.

Aspirations / expectations:

It seems obvious to me that there needs to be some sort of liaison between the research students and the academics. There needs to be a knowledge base and a liaison where you come to... (1)

I think we need good cooperation, starting from the top of the department to the bottom of the department, so everyone knows the objectives: what they are doing, what they need to do, how they can do their work. This will, I think, greatly improve our objectives and also the quality of research, quality of teaching, quality of administration, everything, because lack of communication, lack of interaction between the staff, the students, undergraduates, postgraduates, and technical staff destroys everything. (6)

We need a real post-graduate co-ordinator... Time, that person needs to be given the time. (3)
...One of the recommendations that you could consider is some sort of book of rights, student’s rights and responsibilities, unique to each faculty. (3)

**Issues / strengths:**

It brings a whole lot of challenges and extra pressures on under paid and over worked academics, because they’ve got all these driven, enthusiastic, industry experienced students saying; ‘we want more, this isn’t good enough’ and they’ve maybe not worked in the industry so they don't know what we're talking about. (1)

There’s really nobody to champion the postgraduate researchers' work and really be in there trying to help them solve particular problems that they’ve got with resources or with dealing with other departments or with any of the problems. There’s nobody championing the postgraduate cause, and the postgraduates can’t do it because we’re not seen as equals. If we sit up and complain long enough and loud enough we’ll get things done but it gets everybody’s back up, and we don’t like doing it and a lot of postgraduates who come from different cultural backgrounds won’t do it because they don’t like challenging authority and they’ll just put up and shut up. (6)

...The policies that come down sometimes are just crazy. I think it’s got to do with the fact that they’re detached from what actually happens on the ground and I’m sure you’d find that in any big institutional company. It does affect us quite dramatically and I don’t think a lot of students are aware of how policies are affecting their day-to-day work, but it does, quite significantly. For instance, just moving out here. For six years or something they were talking about doing it and then all of a sudden, bang, it’s going to happen and bang, it’s going to happen now, we’re not going to wait until next year when we can move in nice and easy and everything will be ready, it’s got to happen now. Actually that’s probably the best example I can give you of a decision made up top that stuffed us all around for at least a few months. Most of us students here have been put out by at least three months and we are kind of considered collateral damage, or, there’s going to be some hard times for the staff but, oh well. (7)

...I think there is interdepartmental cooperation lacking at RMIT... If someone you know in another department is an expert in a particular area it is hard to get access to them because it’s hard to get collaboration between departments. (5)

These comments raise a range issues around how research is managed at the local department or program level to the broader structural relationships at RMIT. The dominant theme is that of the need for improved facilitation between research students and staff, as in groups 1 and 3, and for advocacy of the research student cause, as in group 6. Groups 5 and 7 comment on broader structural issues; the lack of communication between departments in the case of group 5, and the circumstances and events around a major move experienced by group 7.

**Financial resources**

These comments relate to the financial support offered to research students at RMIT.

**Aspirations / expectations:**

Basically, if you want to know what creates a good research environment, it’s money. (7)

I don’t think it’s unreasonable to expect to go to one conference because ...there may be only one conference in the world over a two year period that’s actually
applicable to [your] PhD, it’s kind of crazy if you miss that one conference. (6)

Issues / strengths:

Scholarships:

I’m working on a commercial product and, like, if you get results that aren’t favourable, well they’re not really, sort of, well they’re not encouraged to publish them. ...[they’ll say] we’ll go on to the next student. So, I don’t think it’s a good idea for a PhD student to work on something, a commercial product, in that respect. ...I’d only be able to publish something that was favourable. ...I suppose you just try and find the positive in it, so keep working away until you find something that’s sort of, I don’t know, a positive way of presenting [the findings]. (7)

Yeah, for the kind of scholarship that RMIT invented, that I am on ...I’m required to do a lot of lab demonstrations that I feel are unpaid because I should be getting funded anyway. ...It’s sort of like we do all of this work but in the end the money we get is a lot less than any other scholarship that is available. So it is like the lowest possible scholarship that they can give and you have to work for it. (5)

I would love to add something... I am the recipient of an International scholarship. Having bashed and whinged for an hour, I think it’s crucial to say, that this university, unlike many, is ready to support financially or waive tuition for a few candidates. (3)

Access to funding:

I found the research environment, not isolating, so much, but [difficult in terms of] all the steps needed to get to it. Like access to research funding and having to be on a part time basis...(4)

It’s awful, like, I’ve dived right into it since I’ve been on my project and the constant needing money that, well, not knowing where your money’s coming from for the next particular year or few. When your money’s running out and all that sort of stuff, it’s terrible, it’s like working in Telstra. (7)

[You] see the axe coming down any time. ...Although as students the university has an obligation to get us through our three years and stuff, if your resources dry up, for consumables and stuff, then that makes things very hard. Basically, you’ve got to beg, borrow and steal. (7)

I’m partially funded by a CRC and when you need funding for something it gives you a few avenues. Often people at working sites have funding available to you, so it’s sort of “I need this money, where can I get it from?” and often RMIT doesn’t have it but sometimes when there are other sources you can go to those. If we didn’t have that money our research would not nearly be of a high standard so I would say that the research that we are doing for RMIT is not supported by RMIT or by the government. (5)

Conferences:

...For me recently its attending conferences as well, because, like, the department gives us some money that basically covers registration fees, but travelling and accommodation and everything is very expensive and if your supervisor doesn’t help out from their grant, because they don’t have the money, then you’re pretty much on your own. The problem is you want to go to the conferences because it’s beneficial.
Attending conferences, it’s part of the learning process. (7)

Oh that’s the big problem, yes, because if you travel somewhere, where it’s maybe an airfare, accommodation, and obviously conference fee, it is really very difficult to get the money. It depends a lot on your supervisor and whether he has his own funds available. There’s essentially no departmental funding… (6)

These comments address some of the tensions involved in being a scholarship recipient or undertaking industry funded research as well as the barriers to getting funding for attending conferences. The lab based groups, 5 and 7 in particular, indicate some of the tensions involved in being the recipient of external funding, either in terms of its impact on research content and/or outcomes, or in terms of ensuring sufficient funding exists to complete the project. On a more positive note, however, comments from group 3 – international students – demonstrate some of the benefits of being a scholarship recipient. Group 4 reveal some of the issues facing research student’s enrolled part time who may be ineligible for financial support. The comments relating to funding for conferences demonstrate the importance attributed to attending conferences by research students and some of the financial barriers.

**Facilities, Equipment and Technical support**

These comments address the broad range of facilities and equipment required by research students, and more specifically, the centrality of technical support for science students.

**Aspirations / expectations:**

At the highest level I guess somewhere that has the facilities, the resources to enable you to do what your project set out to achieve. (6)

...Almost every project has some component of experimental or technical work. If you don’t have good technical facilities, be they workshop resources, technicians available, or for computer modelling, systems administrators and skilled people that can help you set up systems, it they’re not available it’s really difficult to do your work. (6)

To me the structure also requires office facilities, phones, faxes, computers, … library services. (3)

**Issues / strengths:**

**Facilities:**

Because we’re fighting over one computer, …we roster ourselves around the time when the computer is available…(4)

I must say since the end of last year there hasn’t been a week gone by without some inconvenience or something going wrong, just like equipment failure… (7)

It’s a bit of a sore point with the postgraduates that the staff computers are constantly upgraded but the university says, you know, ‘cos it’s got to be able to run university wide software and things’. Basically you end up with staff who have computers that are four times more powerful than us and all they do is email, yet we’ve got data processing and computation etc… (6)

**Technical support:**

That’s been one of the really major problems, is postgraduates spend so much time
on what is essentially work for a technician. I can speak for most of us here, you spend an enormous amount of time - that should be dedicated to getting results - just maintaining equipment or repairing equipment or constructing things that you need because, you know, workshop is unable to do it in time. (6)

I found I was doing a lot of sort of lab key things that I shouldn’t really be doing. Like I’m doing a PhD and here I am, like, cleaning out freezers and stuff like this that, I mean, it has to be done, but… (7)

There’s no funding, there’s no people… [to] maintain or calibrate the equipment. The technicians we do have in the workshop are often not qualified to deal with some of the equipment we’ve got. It’s very specialized, we don’t have anybody who’s qualified to deal with that equipment except perhaps some of the postgrads who have learnt to use it. (6)

…I do see the beneficial side too, the problem is getting to that knowledge …the hard way. It’s always better to learn off someone with experience. And what happened years ago is when these technical staff leave [then] there’s no one, …[they’re] lost to the institution, you know what I mean? And that’s what happened, because they didn’t replace staff, …that information wasn’t passed on and …that information leaves the university. (7)

…Our supervisor had specifically wanted …to employ one more technician because we really, really, need an extra person in the workshop to assist with the work in the wind tunnel and he had the money there from commercial funds. It wasn’t slated for anything else [but] the head of department would not let him use those funds to employ a technician. (6)

Comments from the two lab based science groups, 6 and 7, demonstrate the critical role of technical support and concerns on the part of students that present levels of support are insufficient. Lab based science students feel that they are doing work that should be done by technical staff and are also missing out on opportunities to learn from the experience of such staff. The remaining comments refer to access to, and the quality of, computer equipment.

8.3 Physical Environment

Relationships facilitated by physical environment

Aspirations / expectations:

For me, when I think in terms of a research environment I think of a physical setting... (4)

My first thought is of a laboratory, but that is simply a stereotype. I do as much research in a coffee shop as a library or my workplace so there is no single notion. The world and beyond really is the research environment. (2)

Just, the lab. Doing my research and experiments, interacting with colleagues. (7)

The physical environment is...the desk and somewhere quiet where you can get the words down. (1)

A common room would be nice, …some sort of nice environment where you can also meet other researchers, other students, other people who are doing research. (3)
Physical parameters
These comments address the physical qualities of research environments and their effect on the experience of research students.

Issues / strengths:

There are barriers here that make [human interaction] difficult, it starts with the fact of security within the building, the departments where the academics are sitting are just like Fort Knox, you can’t get into them. ...In order to physically break that down what would need to happen ...would be for us to not only be allowed to get to the thirteenth floor but to be immersed between the people who are important to us. (1)

...We’ve got academics here, we’ve got the technicians in a building a hundred meters away, and the postgraduates in a building a further hundred meters away, so there’s almost no interaction on a daily basis. (6)

...I am physically removed. I’m down in the basement and communication, I feel, is a real problem... (5)

I know that was a big problem particularly for students who come from non-English speaking backgrounds; they’re just left in a room for months. (6)

The environment the building creates: ...in the city we were all on different floors, different levels, now, for me to get to my labs I’ve got to walk past all the other labs, and basically, I’ve seen all the people in my Department... (7)

Maybe it’s because the way this building’s set up that you can see people. It has glass [windows and] doors, where you know that, oh, we are here but there are other people working there as well. Whereas, like, in the city, it’s corridors and then labs where you have to enter one lab from one [corridor] and if you have no [sight of] people then you just walk past. You don't know who's in there... (7)

These comments centre on the opportunities for interaction with other staff and students promoted by the physical environment. The barriers that are created by having students and staff in separate floors or buildings – the issue of a lack co-location – are expressed across groups with wide ranging enrolment characteristics and research practices – 1, 5, 6 and 7, although there is a notable absence of such comments from the groups with primarily part time students. Comments from group 7 are instructive as to how improvements in the physical environment of a department can alter the relationships that occur between staff and students.

Proximity to main campus
These comments address issues related to being located off-campus or away from the main RMIT city campus.

Issues / strengths:

My experience is very different to a campus-based student. I am working within my organisation in a management capacity and my project is crucial to my work. For me the data collection and reflection process is critical and requires me to embed this as a practice in my day-to-day activities. I create my own research environment. (2)

One of the things I’ve found before getting in touch with other part-time tutors on an occasional basis was that the contact with other postgraduates was next to nil. So
that was kind of isolating. ...Actually being able to be here five days a week it just means we get to see people informally and talk to them, whereas before, I think, you’d have six hours a week, maybe another job, so you’d never see anyone. (4)

It’s also an issue of isolation though, when we were located back in the city there was quite a bit of interdepartmental assistance, if you like. Whereas out here we are effectively the only department. ...In the city we could simply just walk to another building, which would be five minutes and be a different faculty and there may be somebody there to help you. (6)

...When you’re ...doing practical work, quite often you need to jump in a car and go and get a part because something’s broken on your rig and it’s something unexpected and you don’t have anything in stock. So, in the city you were close to places like electronics shop and other little places where you can just duck in and get something and you’d be back in ten minutes. Out here you’re a little more isolated from those places as well, you’ve got at least a thirty forty minute drive to go and get something. (6)

These comments indicate the impact of location on the research student experience. The comments from group 2 – who are located entirely off-campus, show that such students need to create their own research community, with comments from group 4 suggesting that this can be isolating. Comments from group 6 indicate some of the difficulties of not being located on the city campus.

**Common room**
These comments relate to the role of a shared space in facilitating exchange between research students.

**Issues / strengths:**

*What about informal opportunities to get together, do you have them?*

Only if we show up at the same time by accident. [Where?] Anywhere. (3)

There’s a certain level of informality at RMIT, which is a bit more personal than [other places] ...but by the same token there’s not many shared spaces where people go for morning tea or anything like that and talk. (4)

I think if we can get a common room where we can sit, and at least have a little chat, that will increase, not only our productivity, ...but also, I am thinking that ...we have students particularly from non-English speaking backgrounds, [and] they can improve their English speaking and English composition... (6)

These comments indicate that a desire exists from students across different enrolment types and research practices for shared 'common room' space to enable informal exchange. Comments from group 3 indicate that without a designated space such opportunities are left to chance.

**Aesthetic qualities**
These comments refer to the role that the appearance of physical spaces has on the research student experience.

**Issues / strengths:**

It took me ages for the level two dungeon not to cloud my day, ...its depressing. (5)
These things outside of the elevator are a sore point, because when you do have to work in the basement, or there is water dripping through the ceiling, or when the things are getting broken into because the locks haven’t been changed for years - and they are all the same lock, and blah, blah, and then you get these pink bathrooms! (5)

The department, it can be a bit gloomy. The carpet is 100 years old, and it is brown, and the walls are brown and the door is brown and where they are not covered with dirty finger marks and stains and things, under them there is brown again…(5)

[We have] nice labs now so I think people are willing to take people through and show them and talk to them about the research…(7)

These comments indicate the role that an aesthetically pleasing environment can have on the everyday experience of research students as well as on how they perceive their work. Comments from group 5 demonstrate the negative impact an ugly working environment can have, and group 7, the difference that new working environments can make.

9. Findings: RMIT academic staff

A sample of academics at RMIT were asked what factors they believe contribute to or detract from a good postgraduate research environment as well as their views of the research environment at RMIT as a whole. Comments have been summarised for key issues and identified below. Those relating to the postgraduate research environment have been analysed in relation to the themes and issues raised by students.

9.1 Factors that make for a good postgraduate research environment

Human Environment

- Culture of intellectual curiosity – delight in the exchange of ideas
- Critical mass of good students and research active staff
- For students to feel that they belong to, and feel a part of, the department
- Willingness of experienced researchers to mentor developing researchers and lead by example

Learning support

- Enthusiastic and committed supervisors, both intellectually and emotionally, prepared to go in and bat for their students
- Supervisors who believe in, and are as inspired about, their student's research as they are
- Adequate time allocation for supervision
- Seminar program with enthusiastic support from students and staff

Resources, infrastructure and support

- Time for academics to do research – ie; administrative support; reduced teaching loads
- Appropriate infrastructure and resources
- Formal and strategic links with industry
- Strategy of promoting intellectual / cultural exchange between professionals, professional practice and the University
- Evidence of a diversity of research practices across the institution
Research concentrations creating an intensity of intellectual activity and resources allocation
- Effective research grants support

**Physical environment**

- Physical / spatial proximity of students and staff

### 9.2 Factors that obstruct a good postgraduate research environment

**Human Environment**

*Research Community*

- Us and them mentality between research active and inactive academics
- Insufficient numbers of established researchers within department – ie; cross-sectoral, or traditional lack of research culture within discipline
- Lack of critical mass
- Lack of time to do research due to high teaching and administrative loads

*Learning Support*

- Poor supervision
- Lack of development program for new researchers
- Lack of recognisable career path in research, ie; mentoring, professional development programs

*Resources, infrastructure and support*

- Lack of sabbatical program for academics
- Lack of RTS places and scholarships
- Lack of institutional incentives ie; no reward system for research outcomes; no internal research funds for post docs, research assistants etc
- Tensions created by insecure funding sources, particularly for students’ whose project is linked to research grants and other external funding sources.
- Research often treated as secondary to other tasks
- Research not emphasised on work-plans and therefore not taken seriously by line managers

**Physical environment**

- Lack of physical resources to co-locate research students and staff
- Campus dispersed, or lack of proximity to main campus and related disciplines
- Research students not feeling connected to department

### 9.3 Factors impacting on the research environment at RMIT as a whole

- Some disciplines lack recognition of their research models and outcomes by national funding and policy bodies.
- Both positive and negatives to industry linked research -ie; need to ensure that good science is not compromised in the search for research income from industry (important for the University to maintain role as honest broker rather than be in the pocket of industry).
- Research should be supported for its contribution to society and not be seen as for profit only.
- Research concentrations: need to ensure do not undermine support for emerging / developing research areas and RMIT’s traditional emphasis on research that is
related to professional practice.

- Focus on 'real-world' research may be done at expense of actual RMIT research strengths.
- Measures of research performance need to recognise that research output fluctuates - timeframes should be 2-5 years.
- Lack of institutional leadership and real commitment to research: obsessive view that RMIT is primarily a teaching institution.
- University resources being channelled into compliance with external audits etc rather than in promoting productivity in research.

Issues raised by academics regarding the postgraduate research environment refer to both broad institutional factors as well as those that impact directly on students. This suggests that academics perceive the postgraduate research environment as inextricable from the broader 'academic' research environment, and that as a consequence, many factors that impact on staff are also seen as impacting on students, and vice versa. Concerns regarding levels of institutional support for research, particularly the lack of a sabbatical program, can be understood in this context, as academics recognise that they need to lead a culture of research if positive improvements in the research student experience are to occur.

Comments from students, particularly around the impact of administrative and teaching loads on the time available for academics to do research, indicate that some of these issues are also recognised by students.

Academics’ comments indicate that they, like students, are also conscious of the need for improvements in the postgraduate research culture within their departments or programs. Again, like students, academics identify problems caused in this regard by disproportionate numbers of research active and inactive staff, and physical barriers, such as the lack of co-location and students being located off-campus. While most of the themes identified by staff as impacting on the postgraduate research environment are also evident in the comments made by students, some differences are also evident. Most notable is the significance staff attribute to the role of supervision within the postgraduate research environment. While supervision was an issue for students, their comments focused more on the atmosphere or culture of the department or program as a whole, suggesting that students look beyond their supervisor when thinking about the research environment. One topic that did not receive any attention from staff was that of the library, whereas comments from students clearly indicate that the library features significantly in their perception of the research environment.

10. Reflection on research question

In terms of the experience of research students the notion of a singular, all encompassing, RMIT research environment is a misnomer. Research students’ experience of the research environment largely refers to that which occurs at the local, or departmental, level. It makes more sense, then, to talk of RMIT’s research environments – plural – and recognise the diversity that is created by different learning contexts. There is surprising agreement, however, within this diversity of contexts, on the overall elements that research students see as impacting on and constituting a good research environment. Research student aspirations regarding the research environment can be summarised as follows:

- To be embraced as part of a vibrant, engaging and supportive culture of research (ie; passion for discovery, scholarship and ideas).
- Desire for respect: to be treated as a researcher (rather than just (sic) a student).
- To receive the necessary technical, library and financial support that will enable the successful realization of a research program.
- A physical environment that promotes the emergence of both spontaneous and formal opportunities for intellectual and social exchange between and amongst
academics and students.

When asked about the postgraduate research environment at RMIT, students most frequently spoke of the human and cultural dimension of their experience. Comments addressed both the intellectual culture, or atmosphere, that is created by academic staff and students, coupled with the elements of learning support that are provided, such as provision of seminar programs, opportunities for networking and ideas sharing, and supervision.

Research students also talked about the resources, facilities and support offered within a particular department or by the institution itself. It is evident that these elements also figure significantly in how research students perceive a research environment.

The third area that received attention from the research students who participated in the study was that of the physical or spatial elements of their experience. The import of the physical environment can primarily be understood in relation to its impact on the human dimension of the research student experience. Student location, whether off-campus or in the same building and floor as their supervisor and other students, impacts significantly on how the research culture of a department or program is experienced.

Overall, the findings of this study indicate that the key factor impacting on the quality of the research environment for research students is that of the human community, or the attitudes and conduct of academic staff and students. The critical factor is the level of enthusiasm and commitment of both staff and students toward research. As a consequence, this study has found that while certain elements of the research environment are more critical or apparent to some students than others, the human relationships that students develop within their department or program will have the greatest impact on their experience. In other words, the quality of the research environment will vary across the University on the basis of the individuals involved.

This suggests that enrolment type or discipline is no guarantee as to the quality of the research environment experience. Hence, while the full time, lab-based group 5 were the most effusive about their experience of the research culture or community within their department, the other lab-based groups, 6 and 7, reported a more mixed experience. Moreover, while most of the work and field/text based groups, 1, 2 and 4, raised specific issues associated with part-time and off-campus enrolment, they also raised issues similar to those as the predominantly full-time lab based groups, suggesting that there is no necessary advantage or disadvantage to their situation. If anything, the findings from the groups with large numbers of full-time students – 3, 5, 6 and 7 – suggest that such students may have higher expectations of the research environment than part-time students. For group 7, these expectations were evident in the level of technical and academic support perceived necessary for lab work. Groups 3, 5 and 6, however, showed increased expectation in regard to how they felt they should be valued within their department. This also indicates that the international students who participated in the study, group 3, had no significant variation in expectation or experience regarding the research environment than other student groups. The question as to whether degree type, Masters or PhD, impacts on research student expectation regarding the research environment is difficult to assess, due to the mixed nature of many of the groups. Groups with large numbers of students enrolled full time, however, also tended to have large numbers of PhD candidates (groups 3, 5, 6 and 7) suggesting that PhD candidates may have higher expectations than Masters candidates. Such conclusions can only be tentative, however, when all these groups, excluding 7, also contained masters students. Finally, gender appeared to make little difference as to student expectations and experiences regarding the research environment, although, again, this was difficult to assess due to the degree of gender mix in most of the groups.
Research community
The significance of learning context becomes evident by comparing the comments of group 5 in relation to group 7. While the former group were notable for their enthusiasm in regards to the quality of the research culture or community within their department, at the same time, they were scathing about the physical environment and library services offered by RMIT. This suggests that a good research community may in some ways compensate for other elements of the research environment that are perceived as poor. On the other hand, the comments made by group 7 demonstrate the role that the physical environment can play in improving the research culture within a department. This group were interesting in that they were able to make comparisons between their old building and a newly occupied brand new building, indicating to what extent a physical space that promotes visual access between work areas and co-location can transform a research community. The two groups offer different lessons. Group 5 demonstrate the significance of an academic staff and student body that are committed to, and enthusiastic about, research. Group 7 demonstrate the impact of physical space on enabling a research community to better realise its potential.

Also evident were different conceptions amongst students as to how a research community might be created and supported. The lab based students, groups 4, 5 & 6, who were also largely enrolled full time, all spoke of co-location as being important to the creation of a research community or culture, particularly due to the informal opportunities that it promotes for intellectual and social exchange. The response to this issue was more mixed, however, amongst the field or text and work based students. Comments from group 1 and 3 suggested that co-location was an issue for some students, perhaps reflecting the mix of part time and full time students in those groups. Groups 2 and 4, however, that were both comprised of part time students only, referred to the fact that they were required to create a research community themselves. Notably, this was not necessarily seen as a bad thing. The issues raised by these students, along with group 1, was the need for the university to provide mechanisms to facilitate this occurring (via the Internet, for example), suggesting that when it comes to consideration of how a research community might be facilitated differences in enrolment types and research practices need to be considered.

Unsurprisingly, perhaps, enrolment type and location appears to make little difference to the significance of staff attitudes toward research and research students. Being part of a vibrant research culture that embraces research students impacts positively on all students. A number of themes were more prominent, however, amongst on-campus students. In particular was the desire for respect from academic staff and to feel a part of the academic community. While these issues are difficult to quantify, the comments made by some groups in regards to their access to the staff tearoom provide an interesting insight into how student and staff communities interact within different departments. Recall the contrast between the positive experiences of group 5, who commented on regularly using the staff tearoom, and feeling welcome there, and the more disparaging remarks of groups 3 and 6, who claimed the opposite. Interestingly, group 5 were also the most effusive of all the groups regarding the quality of the research community within their department as a whole. Is access to the tearoom really that critical to a good research environment or is it, instead, indicative of an overall attitude toward research students? This example demonstrates the need for a comprehensive approach to the treatment of research students. If research students are to feel a part of the research community of a department or school then that must occur at every level of their experience, from the little things, like having access to the tearoom, to bigger things, like being included in seminar series with staff. These issues also suggest that the status of research students needs to be clarified – are they no different from undergraduates, or apprentice researchers / academics?

Formal opportunities for intellectual exchange
Comments from all students suggest that formal opportunities for getting together, such as seminars, are critical to the research environment. Again, the positive experience of group 5
is instructive as to what a good seminar series might look like. Harder, however, is the question of how other areas might be able to learn from this and create the enthusiasm and interest amongst students and staff that group 5 spoke of. The main problems raised by students on this issue are that of poor organisation and communication and low participation rates – particularly amongst academic staff. A common refrain from both staff and students was that while there is attendance by academic staff – ‘it’s the same ones every time’. Some staff also mentioned reluctance by students to attend papers not directly related to their own area of research. Also evident from the part time students in the study is a tension between their eagerness to participate in seminars and other forums and simultaneous recognition of the access difficulties associated with being able to attend such events. While there are no easy solutions to these problems, it does suggest a need on the part of those departments that offer research student seminars to better clarify the role and aims of such events, ensure that program schedules are published well in advance, and that mechanisms exist – if necessary – to promote student and staff attendance. The strategic practices table within the appendix (table 2) lists a number of seminar models that may provide useful examples.

**Technical and library support**

The key resources issue impacting on students from all enrolment and disciplinary groups is that of the library. Many are dissatisfied with the breadth of the monograph collection and rely on the libraries of other universities. Students are also troubled by delays caused through the time taken to receive articles and books through the library’s document delivery service. While the library has advised that procedures are underway to improve the speed of the document delivery service, evidence of misunderstandings within some groups about the service suggests there is a need for improved communication between the library and research students on this matter. The comments made by research students also indicate that they have special needs, often requiring specialist or rare books and journals, which raises a broader issue as to whether the RMIT library is being sufficiently resourced to meet these needs. Moreover, is it acceptable that RMIT’s research students are dependent on the libraries of other institutions and will this, overtime, undermine attempts to attract, and keep, good research students here?

The other key resourcing issues that arose were specifically related to lab-based science students, particularly groups 6 and 7. Comments concerned both the poor quality of equipment and lack of technical support, and the impact of a dependence on external research funding. These issues are troubling as they impact on the quality and content of the experimental research conducted by students. Areas that conduct experimental research need to ensure that their labs are sufficiently serviced by experienced staff and that if students’ research is funded by an external body it does not cause undue stress on the student or unduly influence the content and outcomes of the research. It is of particular concern that a student may not be able to publish research findings, and therefore establish a research career, if the industry sponsor considers the findings inappropriate.

**Relationship between comments from students and academics**

Many of the issues identified by students were also evident in the comments made by academics. This indicates that academics share many of the concerns of students, particularly regarding the research culture or atmosphere within departments or programs, and that a corresponding desire to rectify the situation also exists. The degree of congruence between the comments of academics and students should be seen as a positive outcome of the study, in that students can feel that, at the very least, academics recognise their concerns and want to see an improvement themselves.

Academics also raised a number of institutional matters that appear to exceed the scope of this study, suggesting a need for further research into ways of improving the research environment at RMIT as a whole – not just in relation to research students. At the same time, however, this study has found that this distinction is itself artificial to some extent,
suggesting that the scope of this study was perhaps too narrow in its conception. Comments from academic staff indicate that many institutional matters relating to the academic research environment have an impact on the quality of the postgraduate research environment as well. Of particular concern to academic staff in this regard is the lack of a sabbatical program, internal research grants and postdoctoral funding scheme. Academics also voiced the need for programs aimed at developing new researchers, particularly in areas that have low numbers of research active academics. The findings of this study suggest that research student concerns with the research environment and academic concerns need to be understood in tandem, as the factors impacting on staff will also impact on students, and vice versa.

Suggestions for action

Overall, the findings indicate that the key factor impacting on the quality of the human environment for research students is the level of enthusiasm and commitment of both staff and students toward research. As neither of these things can be legislated or manufactured, the key question is that of how can they be encouraged, nurtured or promoted. The table of strategic practices (table 2) provides examples of possible models. More critically, however, leadership needs to occur within departments and programs and a willingness to experiment with different ways of doing things until improvements become apparent.

Postgraduate co-ordinators and program leaders are also encouraged to create opportunities for dialogue within their departments or programs on the issues raised in this study and devise improvement strategies. Again, the table of strategic practices and related resources within the appendix is recommended as a reference for possible models.

11. Recommendations

1. An improvement needs to occur in the quality of the research cultures or communities experienced by research students at RMIT. While there is no single model for how this might be achieved, faculty and departmental staff involved in the management of research degree programs are encouraged to review their current practices in the context of the findings of this study. Evaluation needs to occur into the extent to which the issues identified within this study exist within departments or programs and strategies devised to address them. The table of strategic practices contained within the appendix is provided to assist in this process.

2. Departments need to adopt a comprehensive approach to the treatment of research students, being clear, for example, what the nature of the research student experience is that they are offering, and whether students should be treated differently from undergraduates, and if so, in what ways. The aim should be to ensure that the opportunities and services offered to research students reflect an understanding shared by the entire staff body as to their status and role within the overall research community.

3. Research students need to be offered seminars and other opportunities to present work in the presence of other students and academics. Organisers need to devise mechanisms that ensure the success of seminar programs in view of the enrolment characteristics of their research student cohort. Strategies include ensuring that schedules are published well in advance and that mechanisms are used to promote student and staff attendance, such as including seminars in academic work-plans; being formalised as part of the student curriculum; or being linked with drinks or other social occasions.

4. In relation to part time and off-campus research students, strategies need to be
developed within the specificity of disciplinary contexts to assist access to research communities, both in terms of how students might create their own research communities and how the departmental research community might be brought to them. A further study is recommended to consider what electronic technologies such as the Internet may offer in this regard.

5. A review of the library needs to occur to ascertain whether it is being sufficiently resourced to meet the special needs of research students. If it is considered acceptable that RMIT's research students should depend in part on the libraries of other institutions, particularly for their monograph collections, then the review should recommend how our students can be better supported in doing this. The management of student expectation regarding the library could also be improved by providing clarification to students in advance as to the library services on offer.

6. Areas that conduct experimental research need to ensure that their labs are sufficiently serviced by experienced staff and that if a students' research is funded by an external body that it does not cause undue stress on the student or undermine the content and outcomes of their research.

7. A review needs to occur within departments or programs into the impact that impediments on staff undertaking research have on the research environment experienced by students. Programs need to ensure that teaching loads and administrative demands are not impacting negatively on the ability of staff to engage in a culture of research, and the broad range of activities that that implies, such as doing research, attending seminars, being accessible for informal exchange with students, etc.
### Table 2: Strategic practices

This table identifies examples of good practice described by RMIT and ATN academic staff. The first column identifies a number of recurrent issues identified by students relating to learning support mechanisms. The second column lists examples of current practices identified as successful by academics. These examples are not meant to be exhaustive but instead provide an indication of the types of activities being undertaken at RMIT and across the ATN in an effort to promote an effective postgraduate research environment. Note, also, that this is not a systematic list of good practice as agreed benchmarks do not exist within RMIT and amongst the ATN for that purpose.

Further, international, examples can be found at: [http://www.grad.washington.edu/envision/practices/index.html](http://www.grad.washington.edu/envision/practices/index.html)

<table>
<thead>
<tr>
<th>Issue identified by students</th>
<th>Examples of good practice</th>
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<tbody>
<tr>
<td>Access to research community</td>
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<tr>
<td>Formal and informal opportunities for intellectual exchange</td>
<td>▪ The Globalism Institute, headed by Prof Paul James and Prof Tom Nairn, runs a monthly postgraduate student seminar series that covers themes relevant to RMIT’s globalisation research concentration and students across the University are welcome. Seminars are followed by informal drinks and dinner.</td>
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<td></td>
<td>▪ The Department of Psychology run a regular colloquium program involving both staff and students. To ensure attendance, the program is finalised and published well in advance and is formalised within staff work-plans and scheduled as a timetabled class for students.</td>
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<td></td>
<td>▪ The school of Architecture and Design run an intensive research weekend once a semester for their mainly part time research students. The weekend includes student papers, public examinations (by project), guest lectures by local and international practitioners and scholars, and social events.</td>
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<td></td>
<td>▪ The Department of Nursing and Midwifery have monthly staff / student seminars where it is compulsory for students to present papers. Alumni and industry representatives also attend. The seminar is followed by drinks.</td>
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<td></td>
<td>▪ Last year the School of Applied Communications ran a postgraduate conference that was organised and promoted by and for research students. Selected papers were refereed and published in an internationally distributed journal.</td>
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<td></td>
<td>▪ Curtin University runs an annual humanities postgraduate student conference open to students from across Australia. Conference papers are restricted to students only to provide an opportunity for students to present work in a ‘safe’ environment. Students also plan and run the conference, enabling the development of further generic skills. Papers are refereed internally and proceedings published in a publication that is also edited by students. QUT and UTS have similar conferences run centrally.</td>
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Exploring issues associated with the postgraduate research environment at RMIT

<table>
<thead>
<tr>
<th>Issue identified by students</th>
<th>Examples of good practice</th>
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| Opportunities for informal interaction promoted by co-location | - The Department of Biotechnology and Environmental Biology has been recently re-located into the new Life Sciences Building at Bundoora West where all staff and students have been co-located on a single floor.  
- Last year the Faculty of Business created a dedicated research student space, including desks, computers and tearoom facilities, within the faculty building, enabling exchange between all research students within the Faculty and proximity to staff on other levels.  
- The Division of Humanities at Curtin University have re-organised their management of research students in an effort to promote interdisciplinarity and an equitable distribution of resources. A director of graduate studies has been appointed and students have been linked to research centres that overlap across school and departmental boundaries. Students have been provided with study rooms, workstations and computers in locations that allow for proximity to their home school but also interaction with students from other schools. A divisional common room has been created for all students and staff. |

| Communication | Networking and research promotion mechanisms: electronic or print based | - The Department of Fine Art publish an annual catalogue of the work of their completing post-graduate students. They also regularly publish an electronic newsletter.  
- The School of Business has developed a database of student and staff research activities, including title of study, methodology, industry associations etc. The database is available electronically via the School intranet.  
- The School of Architecture and Design have a database of all current research students, including email addresses. This is used to disseminate regular newsletters and other information electronically |

| Informing and meeting student expectations | - The Research and Graduate Studies Committee have developed guidelines of minimum resources for research students. Faculties are developing their own statements, taking account of disciplinary differences, and are required to disseminate them to students. |

| Promotion of research | - Curtin University have a research incentive system or performance index. The research outputs of both staff and students are rewarded with points that correspond to a dollar return to the researcher or research group ($10 per 1 point).  
- Curtin University and The University of South Australia have attempted to distribute research funding equitably, in an effort to support diversity, by not applying DEST’s RTS formula verbatim across the University.  
- In an effort to improve the postgraduate research culture and completions, the Centre for Allied Health at The University of South Australia have made a strategic decision to discourage part time enrolments in research degrees. If students do enrol part time then they have to also be working part time. The aim is to create a critical mass of research students within the area.  
- The Dean of Graduate Studies at the University of Technology in Sydney is eager to promote part time study for the real world’ critique and impact of such students on the broader research community. Slower completion rates are seen as compensated for by the unique contribution that such students make to the broader research community.  
- The University of Technology in Sydney are also funding a professorial level research mentor in each faculty to promote the development of a research culture by, for example, assisting with grant applications etc.  
- The Faculty of Science at Queensland University of Technology have introduced a learning agreement, or statement of understanding, to be signed by both student and supervisor to ensure mutually shared expectations.  
- The Director of Postgraduate Research Studies at QUT has developed a framework for research degree outcomes, conceived as the acquisition of deep disciplinary expertise coupled with the ability to lead both professionally and within the broader community. The key graduate capabilities associated with this model are networking and communication skills. |
### Table 3: Data Collection

<table>
<thead>
<tr>
<th>Location</th>
<th>No.</th>
<th>Characteristics / role</th>
</tr>
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<tbody>
<tr>
<td><strong>Focus groups</strong></td>
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</tr>
<tr>
<td>1</td>
<td>Business – School of Bus. Info. Tech.</td>
<td>6</td>
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<tr>
<td>2</td>
<td>FELCS – Dept Industry, Prof. &amp; Adult Ed.</td>
<td>4</td>
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<tr>
<td>3</td>
<td>ADC – School of Applied Communication</td>
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<td>4</td>
<td>Constructed Env. – School SS. &amp; Planning</td>
<td>3</td>
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<tr>
<td>7</td>
<td>Life Sciences – School of Med. Sciences</td>
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<tr>
<th>Interviews</th>
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<tr>
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Key: 0 = no value
n/a = not available

*Data obtained from RMIT Statistics and Reporting for research course enrolments at 31 March 2000
Bibliography


Kemp, D., 1999 (b), *Knowledge and Innovation: A policy statement on research and research training*, Commonwealth of Australia: Canberra


