

## Faculty of Health Sciences

### Student Research Experience Questionnaire Report : 2005 - 2009

September 2010

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## EXECUTIVE SUMMARY

### INTRODUCTION

Data on research higher degree students' perceptions of their research training experiences are gathered each year using the Student Research Experience Questionnaire (SREQ). The purpose of the SREQ is to provide the University community with a basis for strategic, faculty level academic development and curriculum review to further enhance the quality of research higher degrees. Analysis of this data provides a comprehensive picture of trends in the student experience, and the performance of the Faculty in relation to two of the University's Key Performance Indicators for Research: Supervision, and Overall Satisfaction with the research higher degree; and other related areas: Infrastructure; Research Climate; and Generic Skills.

Written observations, from respondents to the survey, about their experiences provide evidence to support the Faculty SREQ quantitative data results (percentage agreement scores), and provide detailed information about key issues in the Areas of best practice and Areas needing improvement, during their research training experience. The results are directly aligned with the scales and survey items used in the SREQ, with the addition of items that occur frequently in student comments.

### KEY RESULTS FOR 2009

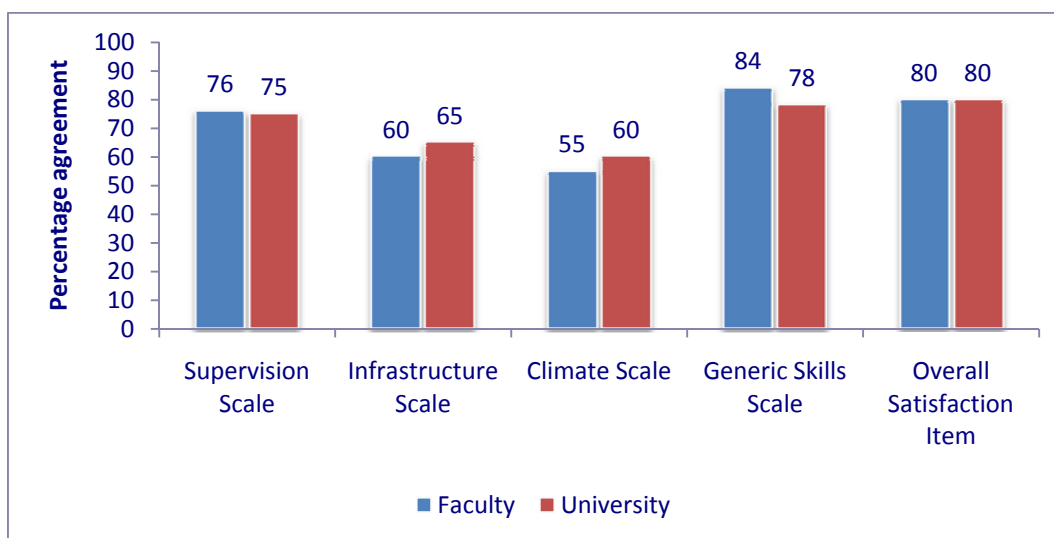
The following results are an indication of those areas of the student experience that were of significance to research higher degree students during 2009. The Faculty scores (percentage agreement results) reflect the experiences of respondents in relation to specific items in the survey; the qualitative data reflects the analysis of written observations provided by those respondents who answered the open ended questions on the best areas of their experience and those that were considered to be in need of improvement.

#### 1 Quantitative data

The following chart compares the 2009 SREQ percentage agreement results (i.e. respondents who either agreed or strongly agreed with the survey items relating to each scale) for the Faculty and for the University.

181 research higher degree students (157 domestic and 24 international) responded to the 2009 SREQ.

Figure 1: Comparison of University and Faculty of Health Sciences:  
Percentage agreement results: SREQ 2009



As indicated in the above chart, Faculty scores are higher than the University average for Supervision and Generic Skills, identical in Overall Satisfaction, and 5% lower in Infrastructure and Climate. At a Faculty level the 2009 SREQ scores for all scales have increased in Supervision, Infrastructure and Generic Skills, and decreased in Climate and Overall Satisfaction since 2008<sup>1</sup>.

<sup>1</sup> See Sections 1-5 of the report for details of trends in each SREQ Scale since 2005, and a comparison of the results for domestic and international students.

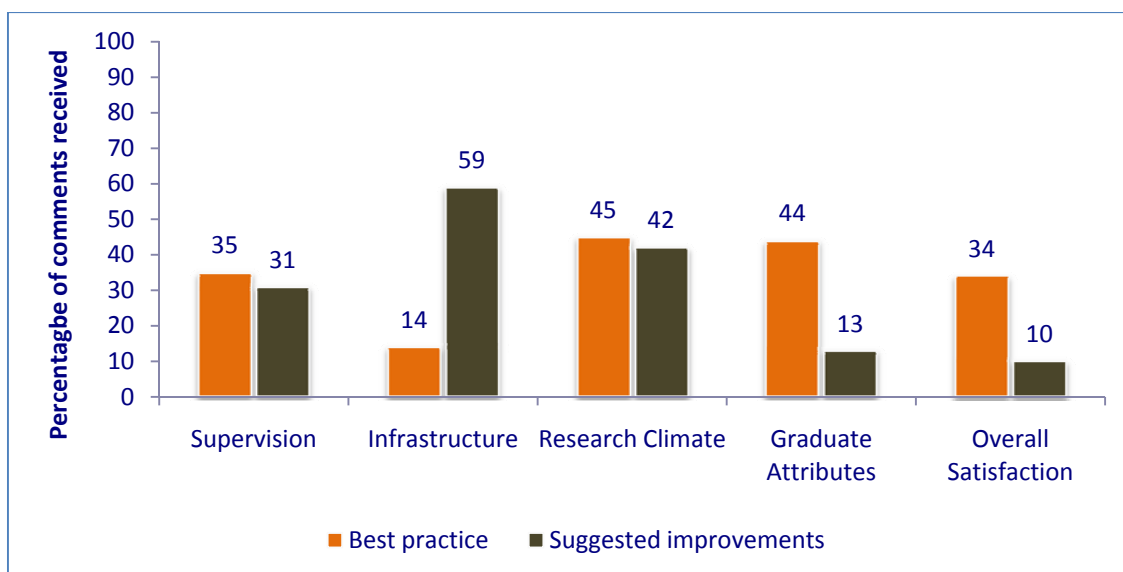
## 2 Focus of written observations SREQ 2009

140 respondents to the 2009 SREQ (126 domestic students; 14 international students) answered the open question requesting comments on areas of best practice in their research higher degree experience; 131 respondents (116 domestic students; 15 international students) suggested areas in need of improvement.

### 2.1 An overview

The following chart provides an overview of the research higher degree student experience of research training in the Faculty of Health Sciences, as indicated in their responses to the open questions in the 2009 SREQ. It demonstrates the relationship between areas of best practice, and areas in need of improvement for each of the Scales. Results are reported as a percentage of the total number of comments received per student group.<sup>2</sup>

Figure 2: Faculty of Health Sciences: Focus of written observations: SREQ 2009



### 2.2 Key issues

#### 2.2.1 Quality of Supervision

- Aspects of the Quality of Supervision that were considered to be of best practice by 35% of respondents to the SREQ in 2009 included: supervisor(s) –usefulness of meetings, support and expertise of individual supervisors (25% of comments received)
- Aspects that were considered to be in need of improvement by 31% of respondents included: supervision process (8%); supervisor(s) (20%).

#### 2.2.2 Quality of infrastructure

- Aspects of the Quality of Infrastructure that were considered to be of best practice 14% of respondents included: research resources (9%).
- Aspects that were considered to be in need of improvement by 59% of respondents included: facilities (18%); funding, scholarships etc (20%); and administration (11%).

#### 2.2.3 Research Climate

- Aspects of the Research Climate that were considered to be of best practice by 45% of respondents to the SREQ in 2009 included: being part of a research community (17% of comments received); experiencing a supportive work environment, that was challenging and stimulating (19%); and having contact with other research higher degree students (6%)
- Aspects that were considered to be in need of improvement by 42% of respondents included: the prevailing work environment – integration into faculty/ department, respect as a fellow researcher (18%); interaction with other research higher degree students (7%); and aspects of research community (13%)

<sup>2</sup> See Attachment 1: note 4 for an explanation of the analysis and counting of comments

#### **2.2.4 Graduate Attributes**

- 11% of respondents to the 2009 SREQ mentioned the development or enhancement of tasks and abilities in all of the University Graduate Attribute clusters: Communication skills (2% of comments received); Ethical, social, professional understanding (1%); Information literacy (6%); Personal and intellectual autonomy (11%); and Research and inquiry (24%).
- Aspects that were considered to be in need of improvement by 13% of respondents included: Communication skills (5%); Information literacy (2%); Personal and intellectual autonomy (2%); and Research and inquiry (5%).

#### **2.2.5 Overall Satisfaction**

- Aspects of Overall Satisfaction that were considered to be of best practice by 34% of respondents to the SREQ in 2009 included: flexibility of program (10% of comments received); Quality of degree (8%); and Satisfaction with research (15%).
- 10% of respondents were dissatisfied with aspects of Overall Satisfaction.

### **FOR MORE INFORMATION**

#### ***On the analysis and reporting of qualitative data***

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SREQ Faculty reports (2003 – 2009) are at: [http://www.usyd.edu.au/learning/evaluating/sreq\\_or.shtml](http://www.usyd.edu.au/learning/evaluating/sreq_or.shtml)

#### ***On SREQ and how to interpret results***

Staff of the ITL are available to provide support to faculties in the interpretation of the SREQ data and the development of strategic responses to address any issues identified

Phone: + 61 2 9351 3725

Email: [itl@sydney.edu.au](mailto:itl@sydney.edu.au)

SREQ results and reports are at <http://www.itl.usyd.edu.au/sreq/secure/rrr.cfm>

## INTRODUCTION

### STUDENT RESEARCH EXPERIENCE QUESTIONNAIRE (SREQ)

In 2002 the Institute for Teaching and Learning (ITL) began collecting data for The University community on research higher degree students' perceptions of their research training experiences. This data is gathered each year using a survey specifically developed for this task, the "Student Research Experience Questionnaire" (SREQ). The purpose of the SREQ is to provide the University community with a basis for strategic, faculty level academic development and curriculum review to further enhance the quality of research higher degrees. The SREQ is based on a national survey of research higher degree students, the Postgraduate Research Experience Questionnaire (PREQ). Some of the information gathered by the SREQ survey also contributes to two of the University's Key Performance Indicators for research. These KPIs are the quality of Supervision, and Overall Satisfaction with the research higher degree.

The survey gathers data on students' perceptions of the quality and frequency of supervision, intellectual and social climate, infrastructure, approaches to research, and generic skills development in their research higher degree, as well as their perceptions of the administration and student support services. The ITL analyses this data and provides a range of reports to staff and students of the university through this web site.

Students are asked to respond to statements using a five point Likert Scale to indicate the extent to which they agree or disagree with each statement. As part of the questionnaires, students are also asked to comment on the following questions:

- *What are the best aspects of your research higher degree experience? Please explain why these aspects are good.*
- *What aspects are most in need of improvement? Please explain why*

Quantitative and qualitative data from the SREQ provide evidence of the success of University and Faculty initiatives to improve the overall student experience in general and the student experience of research training in particular.

### FOCUS OF THE REPORT

Based on the answers to the SREQ, this report seeks to provide an analysis of observable trends in the postgraduate research student experience in the Faculty of Health Sciences between 2005 and 2009. Due to the low number of comments received from respondents to the 2009 SREQ it is not possible to highlight key issues for each category. As an alternative, up to six related comments from respondents are listed after the comparative qualitative data tables. Complete categorised lists of comments are available on request.

Information is arranged by the following areas of the research higher degree student experience: Quality of Supervision, Quality of Infrastructure, Research Climate, Graduate Attributes, and Overall Satisfaction, which, taken together, comprise the student experience of research training within the Faculty.

### FOCUS OF WRITTEN OBSERVATIONS FROM RESPONDENTS

By examining the foci of the students' comments in the 2009 SREQ, this report seeks to highlight areas that were of best practice in the students' experience, together with those that have been suggested as areas of improvement. The views of the research higher degree students, on their overall experience at the University, as received through the open response comments, are a valuable insight into what is important to them; what they consider to be areas of best practice; and what they consider are in need improvement.

It is important to remember, when looking at the results of the analysis of this data, that the absence of favourable comments on a particular aspect of learning and teaching does not reflect that this is not an area of best practice. Rather, it could be interpreted that the students were happy with their experiences, and prefer to focus on commenting about areas in need of improvement.

NB: In 2010 a review of the taxonomy used in the analysis of comments from the SREQ was undertaken in conjunction with staff from the ITL. This resulted in reassignment of Flexibility of program and Pressure to complete from Supervision to Overall Satisfaction, and the realignment of aspects within Graduate Attributes to match the Clusters, Tasks and abilities within the University Graduate Attributes framework. The analysis of qualitative data from 2005 – 2008 has been updated to match the revised criteria. A list of the categories, sub-categories and components is at Attachment Two

Notes relating to the analysis and counting of comments are provided in Attachment One.

## GLOSSARY

The following terms and phrases are used throughout the report

<b>SREQ</b>	Student Research Experience Questionnaire Administered to postgraduate research students annually, during second semester
<b>Supervision Scale</b> <b>Infrastructure Scale</b> <b>Climate Scale</b> <b>Generic Skills Scale</b> <b>Overall Satisfaction Item</b>	The University of Sydney Student Research Experience Questionnaire (SREQ) is based upon the items included in the nationally administered Postgraduate Research Experience Questionnaire (PREQ). These items have been shown to cluster together to form factor scales: <ul style="list-style-type: none"><li>• Supervision</li><li>• Infrastructure</li><li>• Climate</li><li>• Generic Skills</li><li>• Overall Satisfaction Item</li></ul> Within the report, this naming convention is used to identify information relating to the analysis of the quantitative data (survey items)
<b>Faculty Scores</b> <b>Percentage agreement</b>	SREQ item responses are combined and reported in terms of the proportions of students who agreed or disagreed that their research higher degree experience was positive in the areas of: Supervision; Generic Skills; Infrastructure; Climate; and Overall Satisfaction
<b>Quality of Supervision</b> <b>Quality of Infrastructure</b> <b>Research Climate</b> <b>Graduate Attributes</b> <b>Overall Satisfaction</b>	The University of Sydney Student Research Experience Questionnaire (SREQ) is based upon categories used in the SREQ Taxonomy: <ul style="list-style-type: none"><li>• Quality of Supervision</li><li>• Quality of Infrastructure</li><li>• Research Climate</li><li>• Graduate Attributes</li><li>• Overall Satisfaction</li></ul> Within the report, this naming convention is used as headings for each section of the report, and to identify information relating to the analysis of the qualitative data (written observations).
<b>Qualitative data</b> <b>Focus of written observations</b>	Students' written observations received in response to open ended questions in the SREQ: <ul style="list-style-type: none"><li>• What are the <b>best</b> aspects of your research higher degree experience? Please explain why these aspects are good</li><li>• What aspects are most in need of <b>improvement</b>? Please explain why</li></ul>
<b>Percentage of comments received</b>	The number of times an aspect is mentioned within written observations of respondents received from respondents is presented as a percentage of the total number of comments received from respondents to the SREQ in any particular year.
<b>Key issues</b>	As a general rule, only those aspects which receive over 5% of comments from the <u>whole</u> cohort (i.e. domestic and international combined; all respondents per degree) are considered significant enough to be included as key issues in the report.

# 1 QUALITY OF SUPERVISION

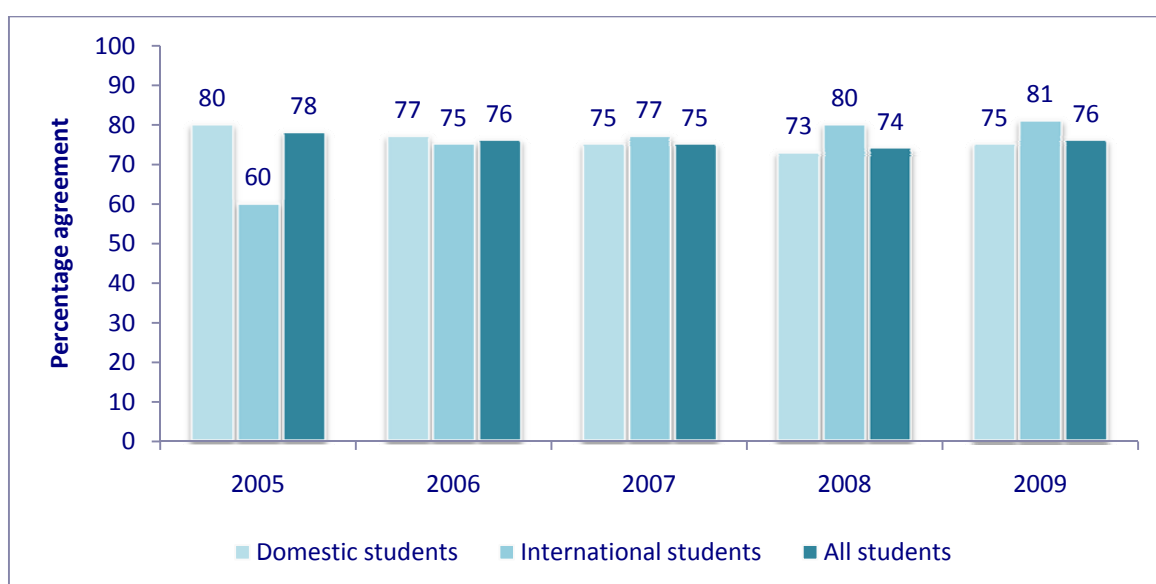
## 1.1 BACKGROUND INFORMATION

The *Supervision Scale* covers aspects of supervision including: supervision being available when needed; understanding by the supervisor(s) of difficulties; provision of additional information relevant to the thesis topic by the supervisor; provision of guidance in topic selection and refinement; provision of helpful feedback on progress; provision of good guidance in literature search; and overall satisfaction with quality of supervision.

## 1.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

The following graph shows the proportion of students who either agreed or strongly agreed with relevant Supervision Scale survey items in the SREQ between 2005 and 2009.

Figure 3: SREQ Supervision Scale: percentage agreement results: 2005 - 2009



## 1.3 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS 2005–2009

The following table shows the percentage of comments, received from respondents to the survey, which can be classified as either areas of best practice or areas for improvement, providing an indication of trends in the focus of students' comments relating to the Quality of Supervision between 2005 and 2009.

		2005	2006	2007	2008	2009
<i>Areas of best practice</i>	Domestic	40%	37%	47%	42%	36%
	International	20%	29%	37%	25%	29%
	<b>All</b>	<b>39%</b>	<b>36%</b>	<b>45%</b>	<b>40%</b>	<b>35%</b>
<i>Areas needing improvement</i>	Domestic	25%	21%	26%	29%	30%
	International	44%	31%	10%	26%	33%
	<b>All</b>	<b>26%</b>	<b>23%</b>	<b>23%</b>	<b>28%</b>	<b>31%</b>

## 1.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2009)

### 1.4.1 Areas of best practice

	Domestic (n=126)	International (n=14)	All (n=140)
<b>Quality of Supervision</b>	<b>36%</b>	<b>29%</b>	<b>35%</b>
- Supervisor(s)	25%	21%	25%

#### Sample comments

- *My supervisor ..... is an amazing academic that oozes knowledge and ability. My confidence in my supervisor to guide me through the processes of research that is relevant and useful to the public and meets academic requirements so my effort is not a waste of time, is essentially the reason I have persisted in study through many external hindrances*
- *Good supervision was provided. This helps me control my research direction and quality as as show me the prospective*
- *I am getting good feedback from my supervisors and generally feel that they are happy with my progress - this makes a big difference to how I feel about my work*
- *Quality of relationship with supervisor is excellent. She understands how I think and work, allowing me to proceed within parameters of research guidelines*

### 1.4.2 Areas needing improvement

	Domestic (n=116)	International (n=15)	All (n=131)
<b>Quality of Supervision</b>	<b>30%</b>	<b>33%</b>	<b>31%</b>
- Supervisor(s)	20%	20%	20%
- Supervision process	8%	7%	8%

#### Sample comments

- *Solid direction from my supervisor. I find we keep changing direction and that I am not in control of where we are going*
- *Supervision, including principal supervisor and associate supervisor's responsibilities to PhD student should be clear. They are always busy. Hopefully the PhD students can work under the same project of the supervisor's. Every PhD student has their own project, and the supervisors had their own project and teaching tasks. This situation can not improve the research level of this uni*
- *The University has to educate supervisors how to supervise and nurture students. The supervisors have their duty of care and accountability for their research students. Unfortunately, some supervisors have no such concept at all*
- *Supervision. My supervisor is not interested in my research at all. He does not have time. He does not read my writing. Papers get ready by trying and error. No feedback is given*

## 2 QUALITY OF INFRASTRUCTURE

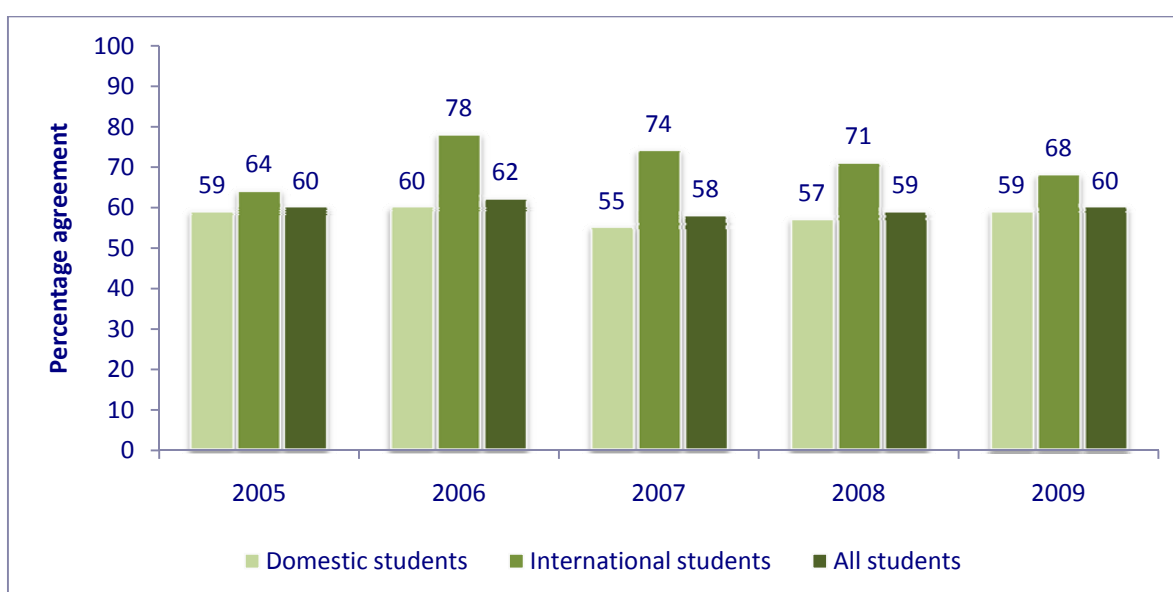
### 2.1 BACKGROUND INFORMATION

The *Infrastructure Scale* covers aspects of the infrastructure available to research students, including: access to a suitable working space; access to technical support; access to a common room; access to necessary equipment; access to computing facilities and resources; appropriate financial support; and overall satisfaction with the quality of services and facilities.

### 2.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

The following graph shows the proportion of students who either agreed or strongly agreed with Infrastructure Scale survey items in the SREQ between 2005 and 2009.

Figure 4: SREQ Infrastructure Scale: Percentage agreement results: 2005 - 2009



### 2.3 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS 2005–2009

The following table shows the percentage of comments, received from respondents to the survey, which can be classified as either areas of best practice or areas for improvement, providing an indication of trends in the focus of students' comments relating to the Quality of Infrastructure between 2005 and 2009.

		2005	2006	2007	2008	2009
Areas of best practice	Domestic	13%	17%	13%	12%	14%
	International	10%	25%	17%	21%	7%
	<b>All</b>	<b>13%</b>	<b>18%</b>	<b>14%</b>	<b>14%</b>	<b>14%</b>
Areas needing improvement	Domestic	53%	43%	48%	41%	60%
	International	56%	27%	52%	35%	47%
	<b>All</b>	<b>53%</b>	<b>40%</b>	<b>48%</b>	<b>40%</b>	<b>59%</b>

## 2.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2009)

### 2.4.1 Areas of best practice

	Domestic (n=128)	International (n=14)	All (n=140)
<b>Quality of Infrastructure</b>	<b>14%</b>	<b>7%</b>	<b>14%</b>
- Research resources	10%	7%	9%

#### Sample comments

- Exposure to the library data base. this has allowed me to explore current theory and formulate a valid approach to furthering our understanding on the project I am involved in
- Unlimited document requests (journals) - very important because I'm doing systematic review
- I am funded with an ARC scholarship and this allows me to study full-time
- Internet access to journal articles. Library staff who are incredibly helpful in teaching me skills 1:1

### 2.4.2 Areas needing improvement

	Domestic (n=116)	International (n=15)	All (n=131)
<b>Quality of Infrastructure</b>	<b>60%</b>	<b>47%</b>	<b>59%</b>
- Finance and funding (incl. scholarships)	22%	7%	20%
- Facilities	20%	7%	18%
- Administration	9%	20%	11%

#### Sample comments

- Knowing what supports and services are actually available so that these can be utilised to their fullest capacity. Sometimes I do not feel I know what support I am entitled or how to get it. There are so many different 'stories' about what you can and can not do it is sometimes difficult to navigate the system
- Having a designated space or shared room for part-time students to do the research, rather than the common room with computers only. Having a regular personal space makes me feel included in the environment. Due to the lack of such facilities at the university, I have to use my space at work, hence feeling disconnected with the faculty and its environment
- There are also STILL rats in the M block post grad research students computer room. Not acceptable. We complained about this nearly a year ago now
- Funding for projects is not sufficient. The \$750 provided by the Discipline and PRSS travel grant and very much appreciated, however in certain areas like physiology where consumables are readily utilised, extra funding is warranted to properly complete projects

### 3 RESEARCH CLIMATE

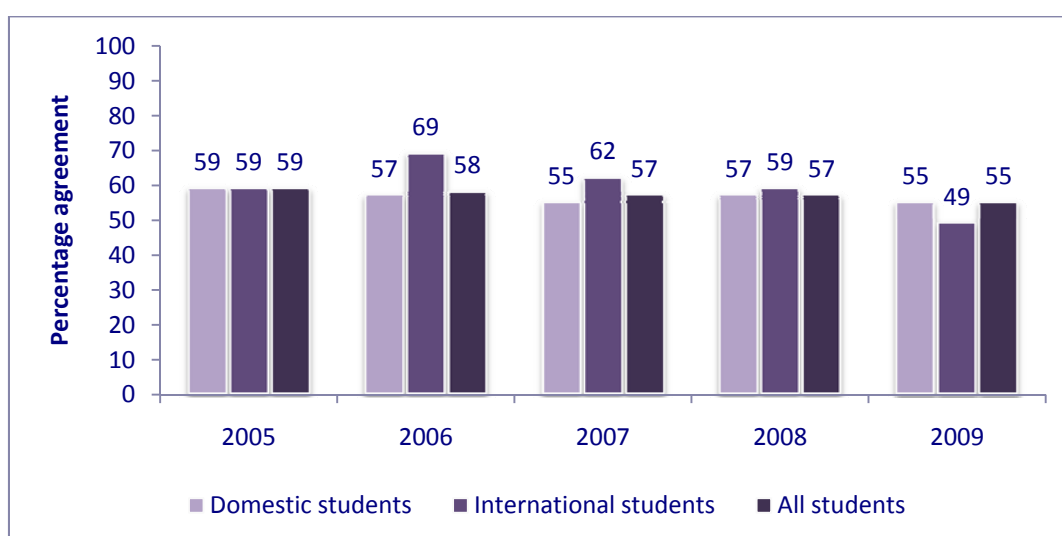
#### 3.1 BACKGROUND INFORMATION

The *Climate Scale* covers aspects of the prevailing research climate in a students' school/ department, including: opportunities for social contact with other postgraduate students; integration into the school/ department community; opportunities to become involved in the broader research culture; perception of other research students as supportive; feelings of isolation within the school/ department; encouragement of interaction with other research students; provision of a good seminar programme; stimulation of personal work by the prevailing research ambience; provision of a supportive work environment; and feeling respected as a fellow researcher.

#### 3.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

The following graph shows the proportion of students who either agreed or strongly agreed with Climate Scale survey items in the SREQ between 2005 and 2009.

Figure 5: SREQ Climate Scale: Percentage agreement results: 2005 - 2008



#### 3.3 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS 2005–2009

The following table shows the percentage of comments, received from respondents to the survey, which can be classified as either areas of best practice or areas for improvement, providing an indication of trends in the focus of students' comments relating to Research Climate between 2005 and 2009.

		2005	2006	2007	2008	2009
<i>Areas of best practice</i>	Domestic	49%	49%	59%	57%	45%
	International	30%	32%	43%	54%	43%
	<b>All</b>	<b>48%</b>	<b>47%</b>	<b>56%</b>	<b>56%</b>	<b>45%</b>
<i>Areas needing improvement</i>	Domestic	49%	38%	35%	36%	43%
	International	67%	26%	23%	70%	33%
	<b>All</b>	<b>50%</b>	<b>36%</b>	<b>33%</b>	<b>41%</b>	<b>42%</b>

### 3.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2009)

#### 3.4.1 Areas of best practice

	Domestic (n=126)	International (n=14)	All (n=140)
<b>Research Climate</b>	<b>45%</b>	<b>43%</b>	<b>45%</b>
- Work environment	18%	21%	19%
- Research community	17%	14%	17%
- Interaction with other students	6%	7%	6%

#### Sample comments

- *Sharing the 'journey' with other postgrad students - makes the experience less isolating and is a good forum for sharing ideas in a non-threatening environment*
- *Going on conferences to present my work, I have done this both internationally and within Australia. This provides feedback on the areas that I am working on, to provide further idea that I need to explore before I publish my work in a peer reviewed journal. It also allows me to learn about other research that is new that is being conducted in my field. Another aspect is it assists with collaboration with other researchers, as those that are interested in my area will approach me, and I may approach them when they are presenting a poster or presentation*
- *I enjoy being part of a dynamic research group who are all doing very different yet related topics of research. I find this exciting and rewarding*
- *I am at the beginning of my masters by research but have been very impressed by so many aspects of the process. I have felt respected and valued throughout and I have felt my supervisor, research team and university services have provided a supportive environment which has increased by confidence and enthusiasm for research*

#### 3.4.2 Areas needing improvement

	Domestic (n=116)	International (n=15)	All (n=131)
<b>Research Climate</b>	<b>43%</b>	<b>33%</b>	<b>42%</b>
- Work environment	20%	7%	18%
- Research community	12%	20%	13%
- Interaction with other students	7%	7%	7%

#### Sample comments: domestic students

- *As a distance student I do not feel there is opportunity to link in with other students. When I first started there were student workshops that were over a few days that I would travel up for. Now there are only one off tutorials which don't necessitate travelling [long distances]. When I am at the uni I spend time working with my supervisor and don't see any other students except for occasionally in passing*
- *Feeling very isolated in the research department, lack of opportunity to discuss research problems or ideas with other students and researchers, lack of collaboration with other students in research*
- *I think an orientation day (not just a 1 hour meeting) would be useful to show new PhD students the library, meet librarians, explain what workshops and when they will be available, show around campus - what each building houses, where admin is, where deans office is etc with a map*
- *Among PG student integration. My first year on PG studies is a bit dull and 'all work and no play' kind of situation*

## 4 GRADUATE ATTRIBUTES

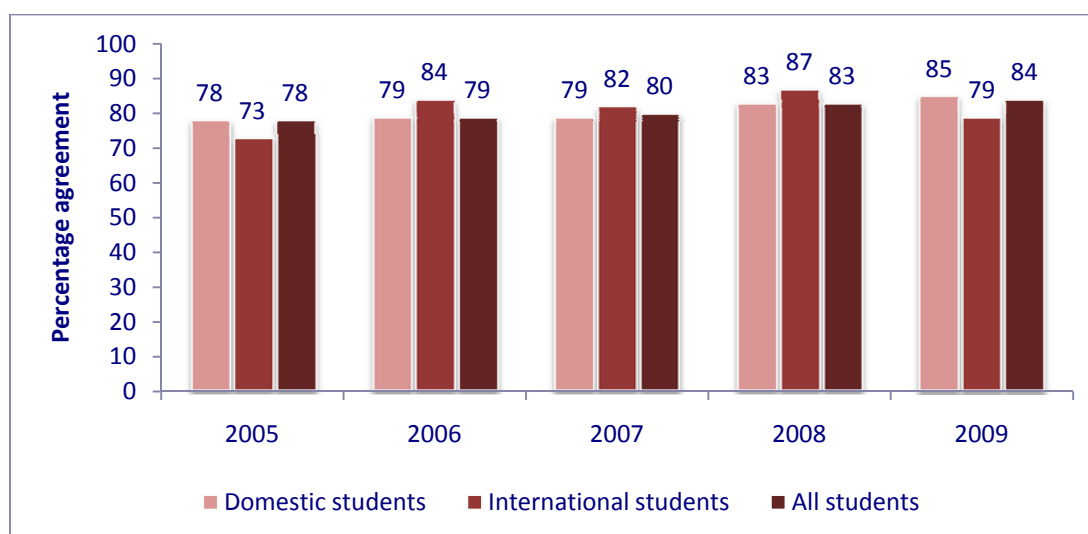
### 4.2 BACKGROUND INFORMATION

The *Generic Skills* scale reflects the extent to which students perceive their studies to have fostered the development of the generic skills recognised by the university as being a valuable outcome of university education, in addition to discipline specific skills and knowledge. Skills include problem solving; oral and written communication; development of ideas and their written presentation; collaboration with other researchers; analytical skills; planning; confidence in tackling unfamiliar problems; and ability to learn independently

### 4.3 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

The following graph shows the proportion of students who either strongly agreed or agreed with Generic Skills Scale survey items in the SREQ between 2005 and 2009.

Figure 6: SREQ Generic Skills Scale: Percentage agreement results: 2005 - 2009



### 4.4 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS 2005–2009

The following table shows the percentage of comments, received from respondents to the survey, which can be classified as either areas of best practice or areas for improvement, providing an indication of trends in the focus of students' comments relating to the expansion of Graduate Attributes between 2005 and 2009.

		2005	2006	2007	2008	2009
<i>Areas of best practice</i>	Domestic	45%	44%	42%	51%	45%
	International	30%	46%	49%	50%	36%
	<b>All</b>	<b>44%</b>	<b>44%</b>	<b>43%</b>	<b>51%</b>	<b>44%</b>
<i>Areas needing improvement</i>	Domestic	5%	18%	12%	16%	10%
	International	0%	23%	26%	17%	33%
	<b>All</b>	<b>14%</b>	<b>19%</b>	<b>15%</b>	<b>16%</b>	<b>13%</b>

#### 4.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2009)

##### 4.4.1 Areas of best practice

	Domestic (n=126)	International (n=14)	All (n=140)
<b>Graduate Attributes</b>	<b>45%</b>	<b>36%</b>	<b>44%</b>
- Research and inquiry	25%	14%	24%
- Personal and intellectual autonomy	12%	7%	11%
- Information literacy	6%	0%	6%

##### Sample comments

- *The learning process of how to organise a large scale research study. Being exposed to new technologies in the field of study*
- *The knowledge and skills I have gained in research design, implementation and evaluation and how to communicate results to the wider scientific community, as I now have the confidence to help design other research projects and comment on publications. Also the ability to work independently and solve problems has been great, as these will be handy for future work*
- *Also, I did not have all the skills for my current research before I started. However I was given many opportunities for learning new skills*
- *Developing a critical and analytical mind when reading journals. Developing my ability to use scientific writing /language skills*

##### 4.4.2 Areas needing improvement

	Domestic (n=116)	International (n=15)	All (n=131)
<b>Graduate Attributes</b>	<b>10%</b>	<b>33%</b>	<b>13%</b>

##### Sample comments

- *Structured program/lecture series in research methods, writing, etc. It's very important that RHD students are confident in what they are doing. Currently only available as workshops and irregular*
- *statistics as researchers need to understand the meanings of certain expressions when reading papers*
- *Further guidance from supervisor on writing skills and how to perform a systematic literature review*
- *Knowledge of statistics. Access to statistical analytical assistance*

## 5 OVERALL SATISFACTION

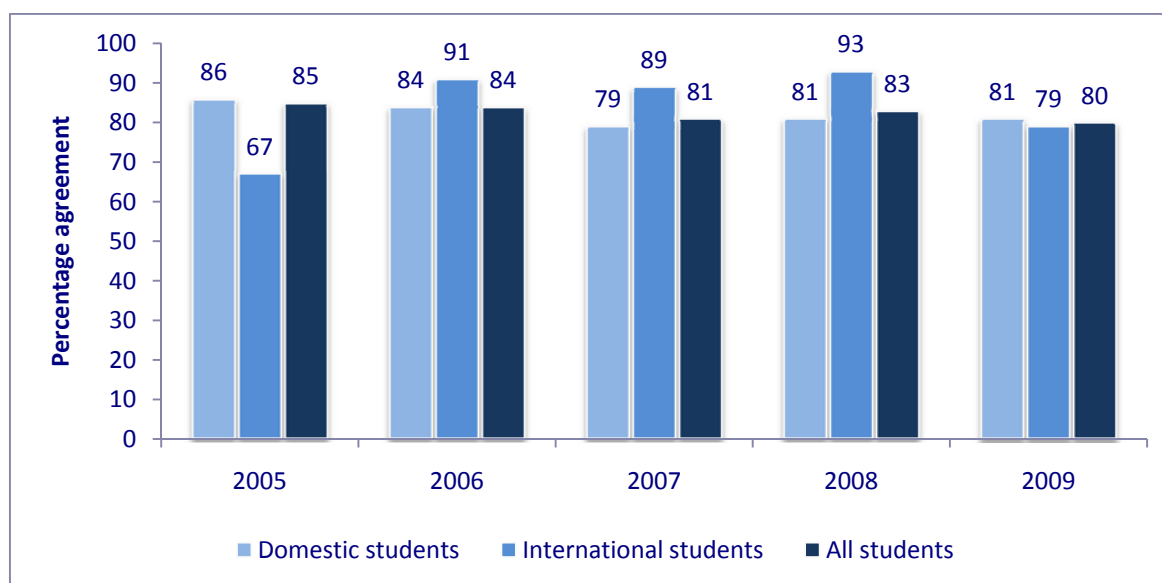
### 5.1 BACKGROUND INFORMATION

This single item asks students about their overall level of satisfaction with their research higher degree experience. In the analysis of the qualitative data, additional aspects, which are not covered in other areas of the survey, but which contribute to the overall satisfaction of the research higher degree student experience area included e.g. satisfaction with research, quality of degree (pressure to complete, flexibility of program), and reputation of the university/ faculty.

### 5.3 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

The following graph shows the proportion of students who either strongly agreed or agreed with the Overall Satisfaction item in the SREQ between 2005 and 2009.

Figure 7: SREQ Overall Satisfaction Item: Percentage agreement results: 2005 - 2009



### 5.4 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS 2005–2009

The following table shows the percentage of comments, received from respondents to the survey, which can be classified as either areas of best practice or areas for improvement, providing an indication of trends in the focus of students' comments relating to overall satisfaction with the degree experience between 2005 and 2009.

		2005	2006	2007	2008	2009
<i>Areas of best practice</i>	Domestic	32%	32%	25%	28%	33%
	International	30%	11%	14%	29%	50%
	<b>All</b>	<b>32%</b>	<b>28%</b>	<b>23%</b>	<b>28%</b>	<b>34%</b>
<i>Areas needing improvement</i>	Domestic	6%	4%	6%	6%	9%
	International	0%	4%	3%	0%	13%
	<b>All</b>	<b>5%</b>	<b>4%</b>	<b>5%</b>	<b>5%</b>	<b>10%</b>

## 5.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2009)

### 5.4.1 Areas of best practice

	Domestic (n=126)	International (n=14)	All (n=140)
<b>Overall satisfaction</b>	<b>33%</b>	<b>50%</b>	<b>34%</b>
- Satisfaction with research	15%	14%	15%
- Flexibility of program	10%	14%	10%
- Quality of degree (incl. coursework component)	6%	21%	8%

#### Sample comments: domestic students

- *My supervisor(s) have been flexible, patient and very encouraging. This has helped me become more focused and confidence*
- *That an avenue/environment is provided for me to develop my potential as a researcher and aid my professional and personal development. That avenue or environment is a University. I value further education and learning experiences from both a personal and professional development perspective. I enjoy meeting and engaging with people with similar values*
- *The best aspects of my higher research degree has been the practical application of my research topic and working in the field actively using the equipment to determine outcomes*
- *The best aspect of the research experience is the support given by the University. I enjoy finding the answer to the question "why" and the university provides and encourages this*

### 5.4.2 Areas needing improvement

	Domestic (n=116)	International (n=15)	All (n=131)
<b>Overall satisfaction</b>	<b>9%</b>	<b>13%</b>	<b>10%</b>

#### Sample comments

- *I also think there is an attitude among some university staff, that because they had it hard when they did their degree, current students are expected to do the same e.g. stay up all night writing to get it done. I think instead of carrying on these bad aspects of higher degrees, staff should be working to ensure that projects are of a manageable size to complete in the time frame (for a PhD this is 3-4years) not plan for a 4 year project that then typically goes for 5-6. The best planning I've seen is for masters students, who get a project designed to complete in 2 years, which extends to 3-4 due to the typical reasons, and they then swap to a PhD. This is not fair to those who enrol in a PhD and then are still going 6 years later with no financial help because the project was too big to start with. University staff should do more to stop this from happening*
- *Educational knowledge. Access to more relevant course work subjects*
- *Research Method and Statistics class - offered in gaps, not in a continuous course/workshop*
- *My primary problem relates to working full time while trying to write up my PhD*

## ATTACHMENT ONE: NOTES ON ANALYSIS AND COUNTING OF COMMENTS

### 1 QUANTITATIVE DATA ANALYSIS

#### *Minimum sample size for reporting*

The minimum recommended sample size for SREQ reporting is 20 valid responses. This is the same convention applied to reporting the CEQ and SCEQ. In degrees where less than 20 valid responses have been received a report is still provided however a warning message notes that the results should be interpreted with caution<sup>3</sup>

#### **Number of respondents to the SREQ 2005 – 2009**

	2005	2006	2007	2008	2009
	n=	n=	n=	n=	n=
Domestic students	200	191	189	183	157
International students	15	22	38	29	24
Total	215	213	227	212	181

### 2 QUALITATIVE DATA ANALYSIS

The analysis of the qualitative data is based on responses to the open questions received from respondents to the SREQ.

#### **Number of respondents who answered the open questions SREQ 2005 - 2008**

	Date of survey	2005	2006	2007	2008	2009
		n=	n=	n=	n=	n=
Areas of best practice	Domestic students	168	146	166	145	126
	International students	10	28	35	24	14
	Total	178	174	201	169	140
Areas of improvement	Domestic students	168	146	166	145	116
	International students	10	28	35	24	15
	Total	178	174	201	169	131

n=the number of comments received in answer to the relevant 'open response' question

### 3 RELIABILITY OF QUANTITATIVE AND QUALITATIVE DATA

The following information on the reliability of statistical data in the above tables should be taken into consideration when reading this report:

#### Quantitative and qualitative data

Where the number of respondents is between 5 and 20 results should be viewed with caution. The minimum sample size recommended for statistical analysis is 20

### 4 ILLUSTRATIVE SAMPLE COMMENTS

Comments are recorded as they appear in the original documents. However, minor spelling, grammatical and transcription errors have been corrected. [sic] indicates that the word appears exactly as provided by the student, and that it is not possible to ascertain an exact interpretation of the original meaning. To preserve student confidentiality, sample comments are only provided if there are six or more comments relating to that aspect in the responses. Comments that may possibly identify the student are not included in the sample comments. Supervisor(s) names, where included by the respondent, have been replaced by XXX, YYY or ZZZ.

<sup>3</sup> Retrieved from ITL SREQ website *Using the report page* at <http://www.itl.usyd.edu.au/sreq/reportpage.htm>

## 5 ANALYSIS OF COMMENTS

The components of categories and sub-categories used in the analysis of qualitative data are based on:

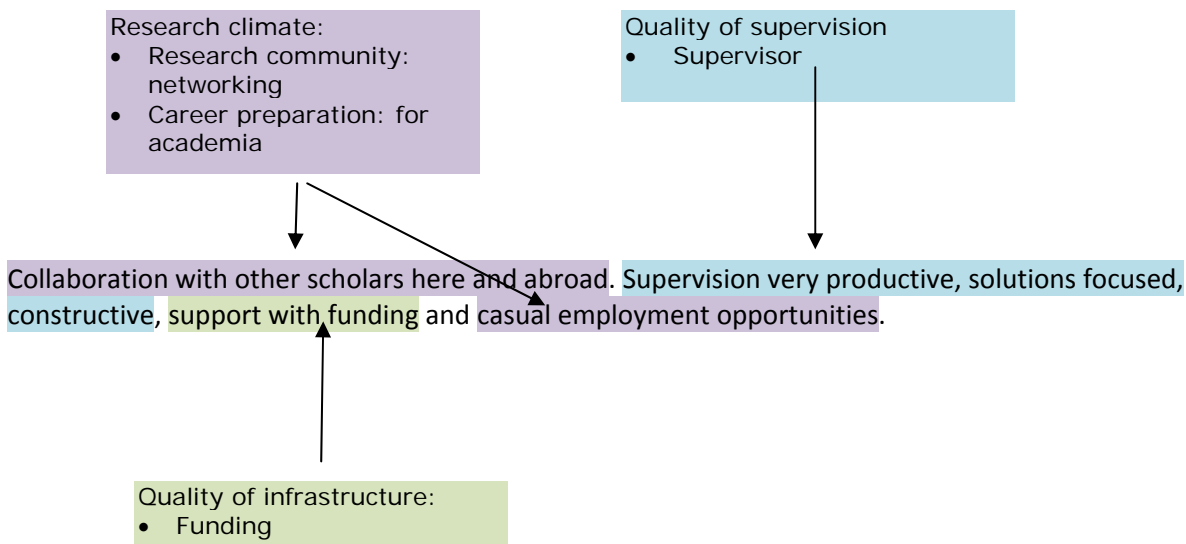
- Characteristics that define the area of the student experience
- SREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

Together, they represent the range of features of each aspect which are considered to be essential to student satisfaction with their research training experience

## 6 COUNTING OF COMMENTS

Each comment is analysed according to the *Taxonomy for analysing qualitative data from the SREQ*<sup>4</sup>, which is based on the Factors used in the SREQ. Based on the premise that a comment is what is written by an individual respondent in response to one of the open response questions, and a tally in the statistics being a specific phrase or sentence referring to one aspect of the student experience, the total number of times an aspect is mentioned in any one set of comments is calculated as a percentage of comments received in the year of the survey. As a general rule, only those aspects which receive over 5% of comments from the whole cohort (i.e. domestic and international combined) are considered significant enough to be included as specific issues in the report.

For example, the following comment is counted as ONE COMMENT RECEIVED; but as it is mentioned in Quality of Supervision (Supervisor); Research Climate (Research community; Career preparation) and Quality of infrastructure (Funding), the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 4 aspects in one comment.



<sup>4</sup> Available from Quality Assurance Officer (Learning and Teaching)

## ATTACHMENT TWO: SREQ SCALES: COVERAGE OF QUANTITATIVE AND QUALITATIVE DATA

The University of Sydney Student Research Experience Questionnaire (SREQ) is based upon the items included in the nationally administered Postgraduate Research Experience Questionnaire (PREQ). These items have been shown to cluster together to form factor scales: Supervision, Climate, Infrastructure, and Generic Skills. These items, together with recurring themes in students' comments are used as the basis for categories, sub-categories and components for the analysis of qualitative data. This attachment lists the relevant survey items and sub-categories and components used in the analysis of qualitative and quantitative data from the SREQ.

### 1 SUPERVISION SCALE/ QUALITY OF SUPERVISION

#### 1.1 SREQ Survey items

- 1 Supervision is available when I need it
- 5 My supervisor(s) make(s) a real effort to understand difficulties I face
- 13 My supervisor(s) provide(s) me with additional information relevant to my topic
- 18 I am given good guidance in topic selection and refinement
- 22 My supervisor(s) provide(s) helpful feedback on my progress
- 26 I have received good guidance in my literature search
- 36 Overall, I am satisfied with the quality of my supervision

#### 1.2 Qualitative data analysis

There are 4 sub-categories within *Quality of Supervision*, against which students' comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) of the research student experience of Supervision. The components of these sub-categories are based on the SREQ survey items together with recurring themes in students' comments:

- Supervisor(s) (*supervisor/ associate supervisor; usefulness of sessions with; availability and frequency of meetings with; feedback on work; understanding and empathy*)
- Supervision processes within faculty (*general comments on supervision; evaluation of supervisors by faculty; training*)
- Management of Candidature (*guidance on thesis, literature review; topic etc; workload; progress reports*)
- IP and plagiarism

### 2 INFRASTRUCTURE SCALE/ QUALITY OF INFRASTRUCTURE

#### 2.1 SREQ Survey items

- 2 I have access to a suitable working space
- 6 I have good access to the technical support I need
- 10 I have access to a common room or a similar type of meeting place
- 12 I am able to organise good access to necessary equipment
- 19 I have good access to computing facilities and services
- 28 There is appropriate financial support for research activities
- 35 Overall I am satisfied with the quality of the services and facilities

#### 2.2 Qualitative data analysis

There are 7 sub-categories within *Quality of Infrastructure*, against which students' comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) of the research students' perceptions of the quality of infrastructure. The components of these sub-categories are based on the SREQ survey items together with recurring themes in students' comments.

- Administration (*enrolment and admission; communication between faculty and students; general comments on administration (faculty and university); postgraduate coordinator*)
- Facilities (*common room; workspace, buildings, etc; computer hardware and software; equipment; transport and parking*)
- Finance and funding (*funding for resources, equipment etc; scholarships and grants; travel grants*)
- Research resources (*provided by faculty; provided by internal and external libraries and archive centres*)
- Student support services (*Ethics Office; Research Office; International Office etc*)
- Support (*IT; technical; laboratory*)
- Resource issues that affect students' overall experience (*under-resourced infrastructure at a faculty level*)

### 3 CLIMATE SCALE/ RESEARCH CLIMATE

#### 3.1 SREQ Survey items

- 3 The department / school provides opportunities for social contact with other postgraduate students  
8 I feel integrated into the department's / school's community  
15 The department / school provides opportunities for me to become involved in the broader research culture  
16 I feel that other postgraduate students in my department / school are supportive  
20 I tend to feel isolated within this department / school  
23 Interaction with other postgraduate students is actively encouraged in this department / school  
24 A good seminar program for postgraduate students is provided  
25 The research ambience in the department / school or faculty stimulates my work  
29 I feel that this department / school provides a supportive working environment  
31 I feel respected as a fellow researcher within my department / school

#### 3.2 Qualitative data analysis

There are 7 sub-categories within *Research Climate*, against which students comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) of the student experience of the prevailing research climate within the faculty. The components of these sub-categories are based on the SREQ survey items together with recurring themes in students' comments.

- Social inclusion (*cultural diversity; equity, discrimination, and harassment*)
- Research community (*internal and external to faculty (general comments; faculty seminars, workshops, and discussion groups; networking/ collaborating; participation in conferences; opportunities for and encouragement to publish)*)
- Work environment (*challenging and stimulating; induction/ orientation programme; integration into faculty/ department/ school; isolation (emotional); respect as fellow researcher; supportive environment; support for part-time, distance, students*)
- Interaction with other research higher degree students (*academic; social; support of peers*)
- Location and physical environment
- Interaction with industry partners e.g. ARC projects
- Career preparation (*academic (e.g. availability of tutoring, lecturing); general comments*)

### 4 GENERIC SKILLS SCALE/ GRADUATE ATTRIBUTES

#### 4.1 SREQ Survey items

- 4 My research has further developed my problem-solving skills  
7 Doing my research has helped to develop my written communication skills  
9 I have learned to develop my ideas and present them in my written work  
11 As a result of my research, I have developed the ability to work collaboratively with other researchers  
14 My research has sharpened my analytical skills  
17 Doing my research has helped to develop my oral communication skills  
21 Doing my research has developed my ability to plan my own work  
27 As a result of my research I feel confident about tackling unfamiliar problems  
30 As a result of my research I have developed the ability to learn independently

#### 4.2 Qualitative data analysis

There are 5 sub-categories within Graduate Attributes, against which students comments are analysed. These match the five main University Generic Graduate Attributes. The components of these sub-categories are allied to the skills and abilities for each attribute provided in the University policy framework for Graduate Attributes.

- Communication (*oral communication; written communication*)
- Ethical, social, professional understanding (*collaboration/ team work; ethical, social, cultural understanding; professional skills including academic*)
- Information literacy (*retrieval and use of information; computing skills e.g. using endnote, searching databases etc; referencing*)
- Personal and intellectual autonomy (*independent learning; planning own work; intellectually curious; new ways of thinking, etc*)
- Research and inquiry (*analytical, critical, problem solving; expanding knowledge base; creativity and imagination; statistical skills; research skills*)

## 5 OVERALL SATISFACTION

### 5.1 SREQ Survey item

43 Overall, I am satisfied with the quality of my research higher degree experience.

### 5.2 Qualitative data analysis

There are 8 sub-categories within Overall Satisfaction. They represent the range of aspects of the postgraduate research student experience which are considered to have a major influence on the quality of the research degree experience, and which are not covered elsewhere.

- General comments
- Quality of degree/ program (*length; inclusion of coursework, etc*)
- Pressure to complete (*i.e. within time frame set by APA conditions etc*)
- Satisfaction with research (*topic, contribution to field*)
- Flexibility of the program (*freedom to follow own research; choose own topics; compared to undergraduate degree; flexible working hours*)
- Practical aspects of the degree (*field work, interviews etc*)
- Reputation/ prestige of university/ faculty/ department/ academic staff
- Quality of students