Faculty of Pharmacy

Student Research Experience Questionnaire Report : 2005 - 2009

August 2010

Contents

Report compiled by

Rachel Symons
Quality Assurance Officer (Learning and Teaching)
Office of the DVC Education

rachel.symons@usyd.edu.au

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

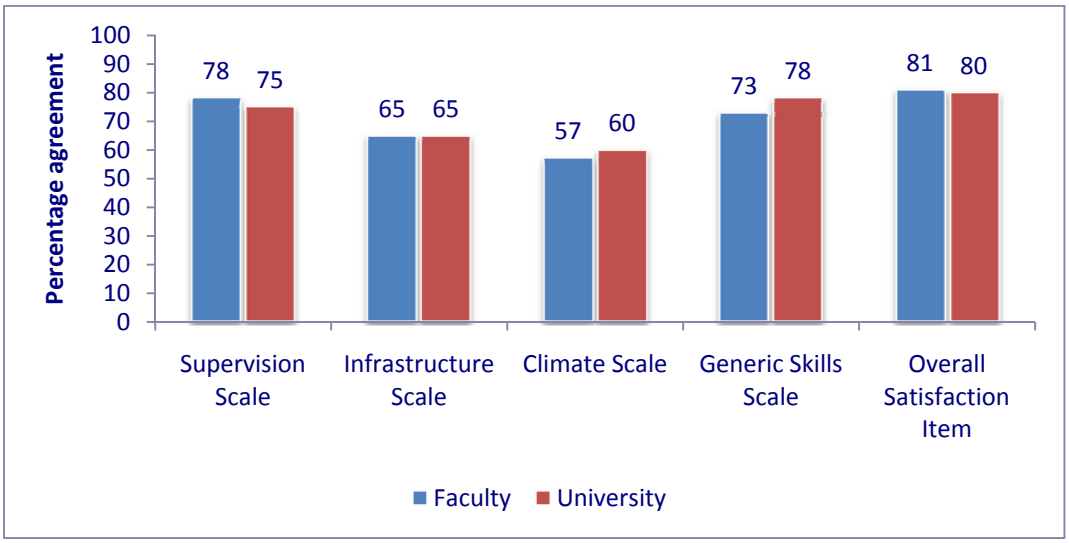
The following results are an indication of those areas of the student experience that were of significance to research higher degree students during 2009. The Faculty scores (percentage agreement results) reflect the experiences of respondents in relation to specific items in the survey; the qualitative 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.

54 research higher degree students (42 domestic and 12 international) responded to the 2009 SREQ.

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



As indicated in the above chart, Faculty scores are within 0-5% of the University scores for all of the SREQ Scales. Since 2008, results have increased in Infrastructure and Overall Satisfaction, decreased in Climate and Generic Skills, and remained identical in Supervision[1].

[1] 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. Please note that since the minimum number for reliable statistical analysis of SREQ results is 20, data within this report for international students should be interpreted with caution. See Attachment One for information on the reliability of statistical data

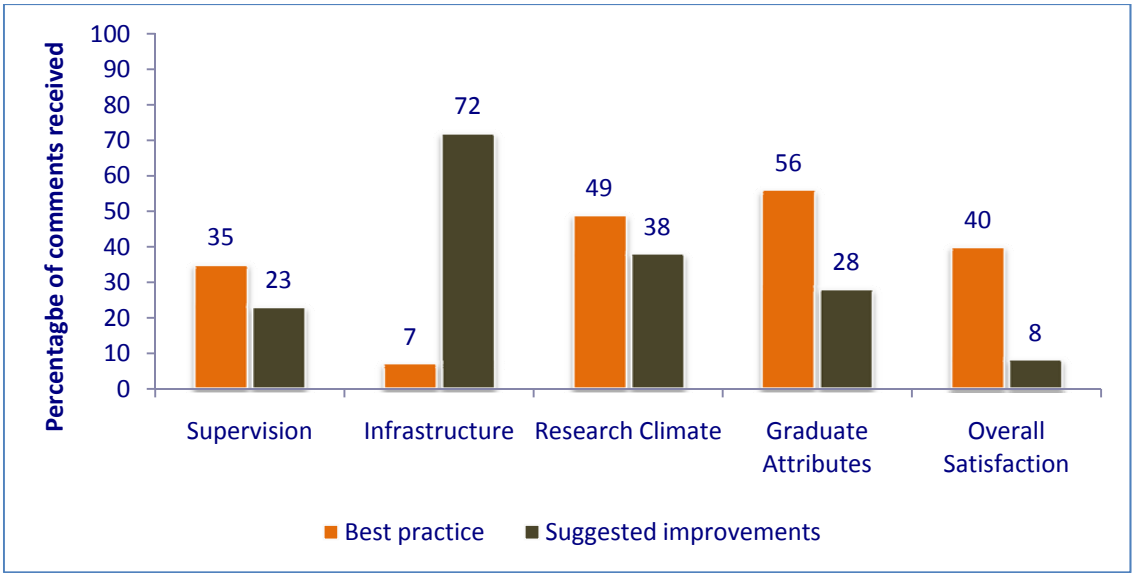
2 Focus of written observations SREQ 2009

43 respondents to the 2009 SREQ (34 domestic students; 9 international students) answered the open question requesting comments on areas of best practice in their research higher degree experience; 39 respondents (30 domestic students; 9 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 Pharmacy, 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.[2]

Figure 2: Faculty of Pharmacy: 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 respondents to the SREQ in 2009 included: supervisor(s) –usefulness of meetings, support and expertise of individual supervisors (30% of comments received).
- Aspects that were considered to be in need of improvement included: supervisor(s) - availability and frequency of meetings, support from (10%); the supervision process, including evaluation of supervisors (8%).

2.2.2 Quality of infrastructure

- Three respondents were happy with the Quality of infrastructure: research resources; facilities; and scholarships.
- Aspects that were considered to be in need of improvement included: facilities – workspace, computers, instrumentation (36%); funding, scholarships etc (28%); and administration (8%).

2.2.3 Research Climate

- Aspects of the Research Climate that were considered to be of best practice by respondents to the SREQ in 2009 included: experiencing a supportive work environment, that was challenging and stimulating (21%); being part of a research community (14% of comments received); and having contact with other research higher degree students (12%)
- Aspects that were considered to be in need of improvement included: the prevailing work environment – integration into faculty/ department, respect as a fellow researcher (21%); and equitable treatment for research higher degree students (8%).

[2] See Attachment 1: note 4 for an explanation of the analysis and counting of comments

2.2.4 Graduate Attributes

- Respondents to the 2009 SREQ mentioned the development or enhancement of tasks and abilities in four of the five University Graduate Attribute clusters: Communication skills (12% of comments received); Information literacy (9%); Personal and intellectual autonomy (7%); and Research and inquiry (28%).
- Aspects that were considered to be in need of improvement included: Communication skills (5%); Information literacy (8%); and Research and inquiry, including research and statistical skills (15%).

2.2.5 Overall Satisfaction

- Aspects of Overall Satisfaction that were considered to be of best practice by respondents to the SREQ in 2009 included: flexibility of program (14% of comments received); satisfaction with research (16%).
- 8% of respondents provided suggestions for improvement that fell within the remit of Overall satisfaction including: changes to the coursework part of the degree; promotion of postgraduate studies to undergraduate students and the public; and perception of the faculty as being non-research intensive.

FOR MORE INFORMATION

On the analysis and reporting of qualitative data

Ms Rachel Symons Quality Assurance Officer (Learning and Teaching), Office of the DVC Education
Phone: + 61 2 9351 6560
Email: rachel.symons@sydney.edu.au

SREQ Faculty reports (2003 – 2009) are at: 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

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 Pharmacy 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

SREQ Student Research Experience Questionnaire
Administered to postgraduate research students annually, during second semester

Supervision Scale
Infrastructure Scale
Climate Scale
Generic Skills Scale
Overall Satisfaction Item

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
- Infrastructure
- Climate
- Generic Skills
- Overall Satisfaction Item

Within the report, this naming convention is used to identify information relating to the analysis of the quantitative data (survey items)

Faculty Scores
Percentage agreement

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

Quality of Supervision
Quality of Infrastructure
Research Climate
Graduate Attributes
Overall Satisfaction

The University of Sydney Student Research Experience Questionnaire (SREQ) is based upon categories used in the SREQ Taxonomy:

- Quality of Supervision
- Quality of Infrastructure
- Research Climate
- Graduate Attributes
- Overall Satisfaction

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).

Qualitative data
Focus of written observations

Students' written observations received in response to open ended questions in the SREQ:

- 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

Percentage of comments received

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.

Key issues

As a general rule, only those aspects which receive over 5% of comments from the whole 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

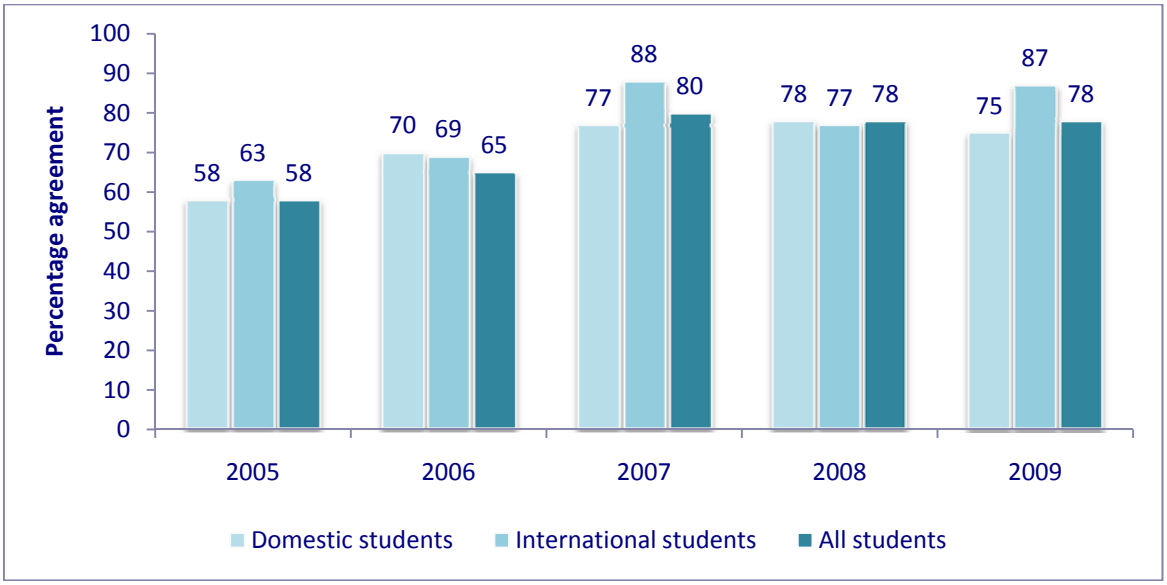
1.1 BACKGROUND INFORMATION

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*
Areas of best practice	Domestic		15%	30%	47%	35%
	International		20%	30%	6%	33%
	All	**16%**	**16%**	**30%**	**47%**	**35%**
Areas needing improvement	Domestic		26%	25%	16%	30%
	International		0%	0%	0%	0%
	All	**33%**	**20%**	**20%**	**13%**	**23%**

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

1.4.1 Areas of best practice

	Domestic (n=34)	International (n=9)	All (n=43)
Quality of Supervision	***35%***	***33%***	***35%***
- Supervisor(s)	35%	33%	30%

Sample comments

- *Having fantastic supervisors because quality guidance is important for a newbie researcher!*
- *Receiving expert supervision*
- *Working with my supervisor as I have the highest respect for her supervision skills*
- *The best aspects are my supervisor's sincere effort to help me*
- *My supervisors are very supportive*
- *my supervisors really encourage me*

1.4.2 Areas needing improvement

	Domestic (n=30)	International (n=9)	All (n=39)
Quality of Supervision	***30%***	***0%***	***23%***
- Supervisor(s)	13%	0%	10%
- Supervision process	10%	0%	8%

Sample comments

- *More structured supervision, especially as no other researchers work in my topic area*
- *More interaction between supervisor and students*
- *Supervisors acceptance that 'different style' (to their own) of presentation of information does not mean that information presented is incorrect. It is unethical that supervisors do not allow students to have any opinions of their own and prevent, or railroad, any effort to engage in academic discussion with other researchers*
- *Supervision: my primary supervisor moved overseas last year and although he was supposed to keep in close contact and continue monitoring my work I often find that he does not answer my emails and also fails to inform me when he is visiting Sydney although he organises meetings with other students in the lab. I have been left feeling very dissatisfied with his supervision as I feel that he ignores my project. My new primary supervisor offers good support in current work but doesn't have a good background knowledge of my project. Could there be a better way of monitoring students who have to change primary supervisors during their candidature? While I'm sure that other students have difficulties with changing primary supervisors, I'm sure it is not a widespread issue.*
- *More structure around developing the research topic and honing the conceptual model would be helpful*
- *Being realistic about my timelines. Things always take longer than anticipated*

2 QUALITY OF INFRASTRUCTURE

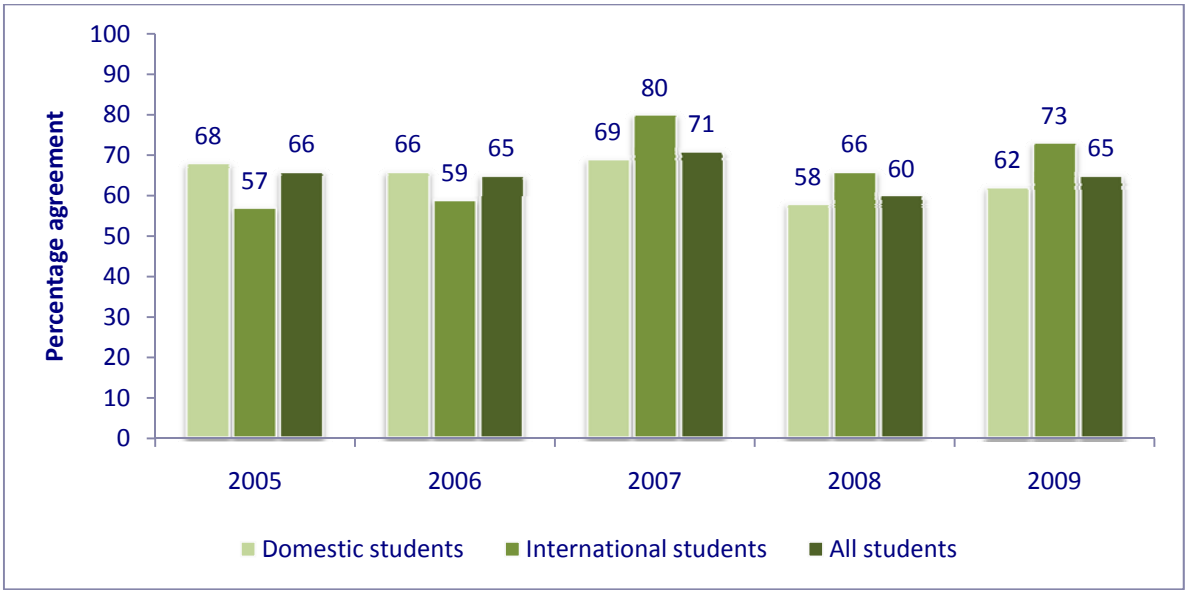
2.1 BACKGROUND INFORMATION

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		10%	3%	9%	3%
	International		40%	40%	22%	22%
	All	**11%**	**16%**	**19%**	**12%**	**7%**
Areas needing improvement	Domestic		63%	72%	72%	63%
	International		100%	100%	100%	100%
	All	**78%**	**72%**	**78%**	**78%**	**72%**

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

2.4.1 Areas of best practice

	Domestic (n=34)	International (n=9)	All (n=43)
Quality of Infrastructure	***3%***	***22%***	***7%***

Sample comments

- *Having easy access to resources such as software and journals is helpful*
- *PRSS*
- *Also, I am satisfied with the working place allotted for me; since my supervisor's assistance and the convenient workspace helps me to continue a convenient research*

2.4.2 Areas needing improvement

	Domestic (n=30)	International (n=9)	All (n=39)
Quality of Infrastructure	***63%***	***100%***	***72%***
- Facilities	37%	33%	36%
- Finance and funding (incl. scholarships)	23%	44%	28%
- Administration	3%	22%	8%

Sample comments

- *Financial support. would be nice to have more financial support so that more time can be spent concentrating on the project, rather than worrying about paying off bills. Everything is more expensive in Sydney*
- *Direct access to funds provided from the government in the student's name e.g. the $3000 per year per PhD student 'to facilitate the student's research'. At the moment this money is gate-kept by the supervisor and therefore not readily available to the student. The definition of what these funds are provided for is loosely translated and is often a gray zone in which a non-lab based student often looses out. Whilst I can appreciate the reasoning behind not allowing a student to directly administer these funds, I do not believe the current system is optimal and it is in fact not to the student's advantage*
- *Postgraduate workspace facilities are very poor. My office is actually located with the laboratory which, not only fails OHS requirements but also makes working on the computer very tiring.*
- *The way faculty scholarships are awarded needs revising. PhD students in their second year are not awarded scholarships to attend international conferences, only national. Only third year PhD students are awarded scholarships to attend international conferences. This really isn't a incentive to work hard and try to present your research at international conferences early in your degree*
- *Lab space for full-time research students should not be rudely intruded by some academic researchers -- better assignments and administration is needed if possible*
- *Organisation. Better communication is needed since everyone is busy, so difficult to meet up as a group*

3 RESEARCH CLIMATE

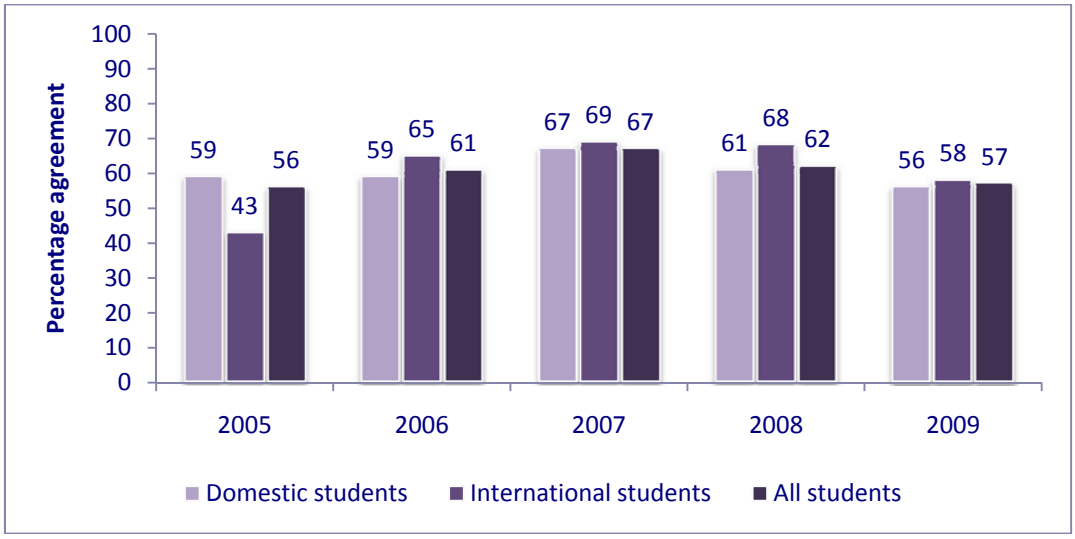
3.1 BACKGROUND INFORMATION

The *Climate Scale* is 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*
Areas of best practice	Domestic		40%	41%	26%	53%
	International		80%	100%	44%	33%
	All	**37%**	**48%**	**53%**	**30%**	**49%**
Areas needing improvement	Domestic		21%	25%	32%	50%
	International		17%	22%	1%	11%
	All	**22%**	**20%**	**24%**	**29%**	**38%**

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

3.4.1 Areas of best practice

	Domestic (n=34)	International (n=9)	All (n=43)
Research Climate	***53%***	***33%***	***49%***
- Work environment	26%	0%	49%
- Research community	12%	22%	14%
- Interaction with other students	12%	11%	12%

Sample comments

- *I think that best aspect is the collaboration that I find among my colleagues because contribute to create a very good environmental work place*
- *Meeting other students and supervisors and working through research problems to improve our work*
- *The support and comradeship from the other PG students - conversations with them normalizes the situation. As a PG student you are often isolated in your own thoughts and interpretations of those thoughts - voicing these thoughts and discussing with other students puts things (especially doubts) into perspective*
- *Networking - and meeting those leaders in your area of research that then inspires and encourages you*
- *The excellent research atmosphere and friendship with research colleagues in my department*
- *Engaging with other students and academics*

3.4.2 Areas needing improvement

	Domestic (n=30)	International (n=9)	All (n=39)
Research Climate	***50%***	***11%***	***38%***
- Work environment	27%	0%	21%
- Social inclusion	10%	0%	8%

Sample comments: domestic students

- *The faculty needs to change its culture from an insular, non-integrative one to one that embraces multidisciplinary research*
- *Students collaboration. Students tend to guard their research from each other, don't socialise.*
- *I also feel that the students who have obtained their base degree from this faculty are advantaged and at times favoured although quite subtly so*
- *Although there has been some effort to improve the research culture of the faculty I still do not think it is inclusive and nurturing of students*
- *The attitude towards research students in the faculty, it generally tends to be more negative and there is a focus on negative issues*
- *Respect from the Faculty to the PG students should also be improved. It is the PG students that are the ground researchers and therefore incredibly valuable to the faculty - this opinion is voiced by the faculty however, I perceive this as a voiced opinion only without consequent action. PG students are still mistreated on the basis of an out-of-date hierarchical system - you are clearly the 'bottom of the food-chain'. This area has no doubt improved over the years however more positive development is necessary*

4 GRADUATE ATTRIBUTES

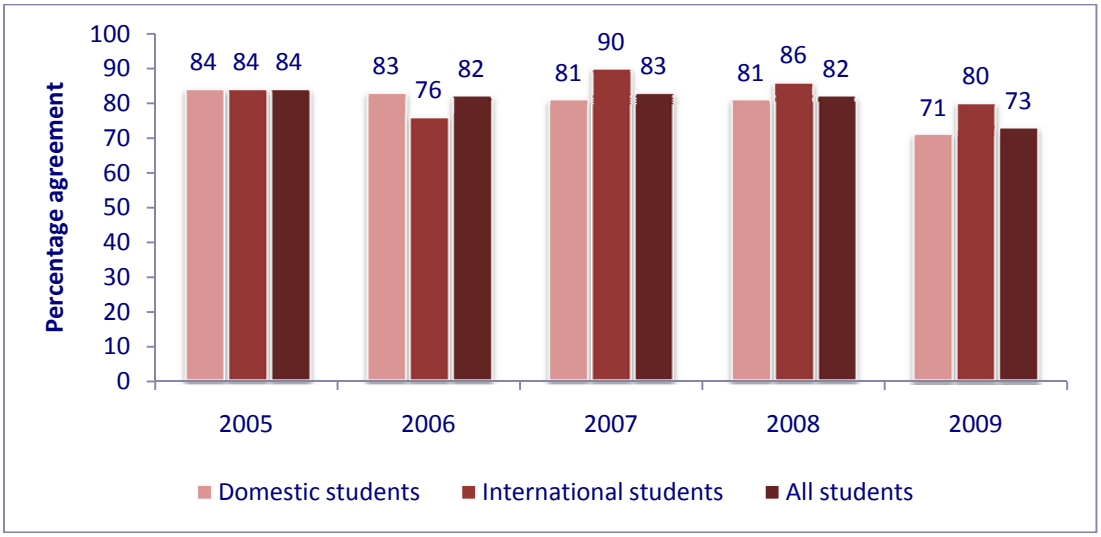
4.2 BACKGROUND INFORMATION

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*
Areas of best practice	Domestic		80%	38%	44%	53%
	International		40%	100%	33%	67%
	All	**53%**	**72%**	**51%**	**42%**	**56%**
Areas needing improvement	Domestic		16%	17%	19%	33%
	International		0%	0%	0%	11%
	All	**11%**	**12%**	**13%**	**16%**	**28%**

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

4.4.1 Areas of best practice

	Domestic (n=34)	International (n=9)	All (n=43)
Graduate Attributes	***53%***	***67%***	***56%***
- Research and inquiry	29%	22%	28%
- Communication skills	12%	11%	12%
- Information literacy	6%	22%	9%
- Personal and intellectual autonomy	6%	11%	7%

Sample comments

- *Developing communication, writing and problem-solving skills*
- *The development of analytical and communication skills (oral & written) was encouraged by my supervisors. These are skills which serve you well in all aspects of life, particularly important given the deliverable provision of misinformation in society*
- *To be able to develop into an independent and creative researcher. There are essential qualities for future jobs, both in universities and the industry*
- *I learned the importance of communication especially for team work*
- *Learning how to make a research plan is the best aspect of any research higher degree. Making my research in plan can make me more effective in my research job*
- *Builds confidence*

4.4.2 Areas needing improvement

	Domestic (n=30)	International (n=9)	All (n=39)
Graduate Attributes	***33%***	***11%***	***28%***
- Research and inquiry	17%	11%	15%
- Information literacy	10%	0%	8%

Sample comments

- *How to make adjustment in planned research job. Sometimes, job may face something difficult, make some adjustment can make the job easier and shorted time used*
- *Suggestions for courses include statistical analysis, literature review writing, public speaking, etc i.e. those skills that are a necessary part of the PG degree but also often difficult for many*
- *Help with literature reviews and literature writing*
- *Support of the use of statistical programs, advanced use of Microsoft word formatting, Endnote use to help with thesis writing*
- *A more structured program for developing generic skills e.g. research statistics and study design would have been very useful*
- *Improving my 'technical' skills, formatting, data management. Statistics*

5 OVERALL SATISFACTION

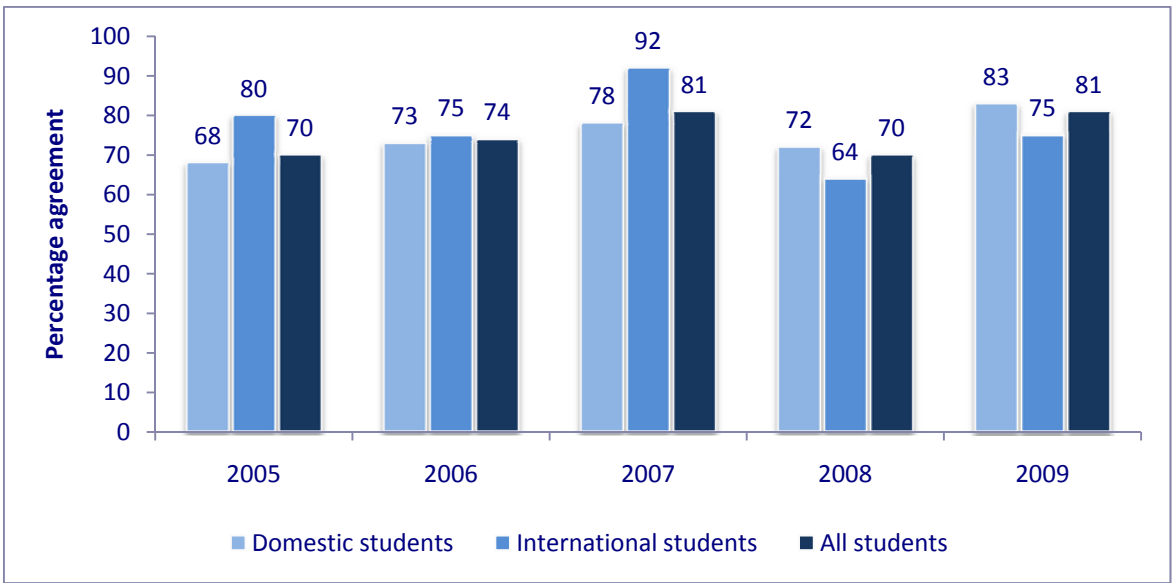
5.1 BACKGROUND INFORMATION

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*
Areas of best practice	Domestic		40%	35%	18%	44%
	International		20%	0%	11%	22%
	All	**11%**	**36%**	**28%**	**16%**	**40%**
Areas needing improvement	Domestic		0%	0%	0%	10%
	International		0%	0%	0%	0%
	All	**6%**	**0%**	**0%**	**0%**	**8%**

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

5.4.1 Areas of best practice

	Domestic (n=34)	International (n=9)	All (n=43)
Overall satisfaction	***44%***	***22%***	***40%***
- Satisfaction with research	21%	0%	16%
- Flexibility of program	12%	22%	14%

Sample comments: domestic students

- *Carry out research independently with minimal supervision*
- *I am free to schedule my work as long as my supervisors are happy with progress. This makes me feel less pressure but more productive*
- *I can work independently on my research topic. This allows me to develop my own ideas and organise my research activities*
- *Being able to research and develop my topic in the area which I am passionate about*
- *Being able to explore in depth my topic area to an extent that is unlikely in other situations is great*
- *Feeling that you are making a difference although it may take some time to translate into daily practice but, it must start somewhere*

5.4.2 Areas needing improvement

	Domestic (n=30)	International (n=9)	All (n=39)
Overall satisfaction	***10%***	***0%***	***8%***

Sample comments

- *A more structured approach to research based on compulsory coursework for PhD students as is now applicable to MPhil students (Faculty of Pharmacy). This should be based on the student's background and of course adjusted accordingly so. Has a student already completed their MPhil and hence the coursework involved then they should be exempt from certain coursework*
- *The reality is that the university is not perceived as one that supports research, contrary to its said mission/values aspirations*
- *Promotion of postgraduate studies to undergraduate students and the general public. Education breeds public support*

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[3]

Number of respondents to the SREQ 2005 – 2009

	2005	*2006*	*2007*	*2008*	*2009*
	n=	n=	n=	n=	n=
Domestic students	28	26	45	43	42
International students	5	8	13	11	12
Total	33	34	58	54	54

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	17	20	37	34	34
	International students	2	5	10	9	9
	Total	19	25	47	43	43
Areas of improvement	Domestic students	16	19	36	31	30
	International students	2	6	9	7	9
	Total	18	25	45	38	39

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 less than 5, results are excluded from the report as they are likely to be unreliable. For 2005, 2006 and 2008, written observations (qualitative data) received for both open questions are shown as a total.

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 been included in the sample comments. Supervisor(s) names, where included by the respondent, have been replaced by XXX, YYY or ZZZ.

[3] Retrieved from ITL SREQ website *Using the report page* at Hhttp://www.itl.usyd.edu.au/sreq/reportpage.htmH

5 ANALYSIS OF COMMENTS

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

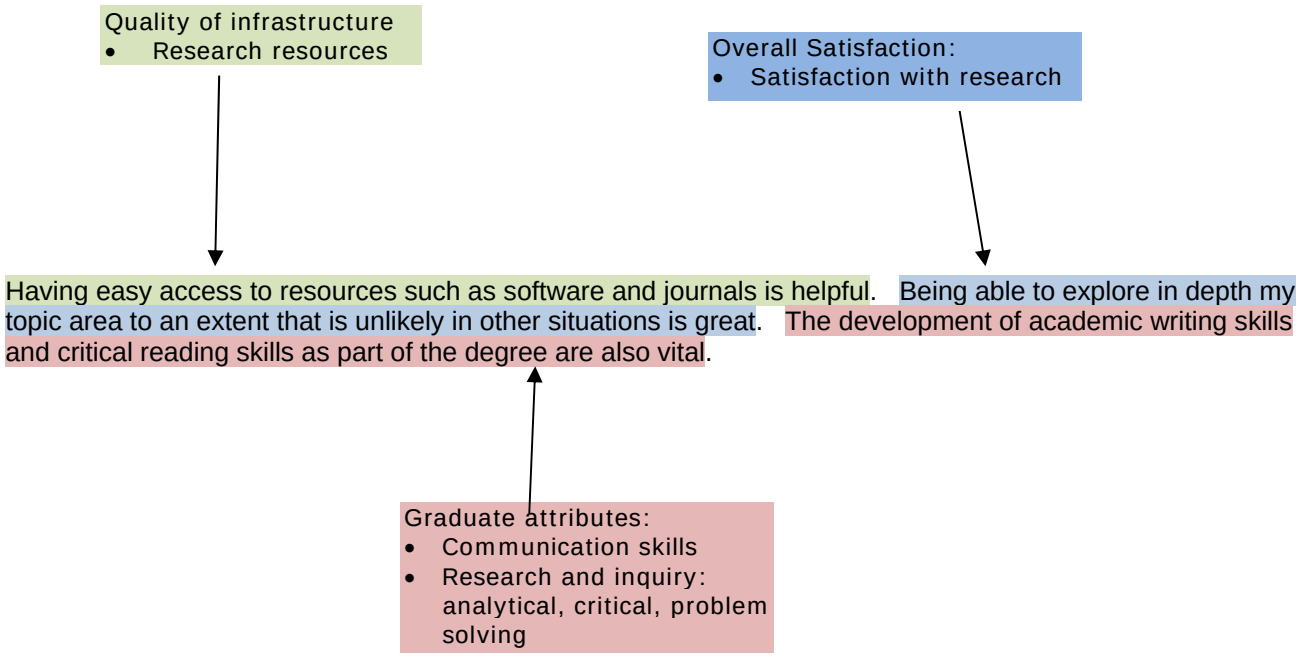
- Characteristics that define the area of the student experience
- SREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

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*[4], 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; Management of candidature/ guidance); and Research Climate (Work environment: challenging and stimulating), the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 3 aspects in one comment.



[4] 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 attachments 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 7 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