



The University of Sydney

Faculty of Engineering and Information Technologies

The Research Training Experience
(Research Higher Degree Students)

Student Research Experience Questionnaire Report

Includes:

- *Executive summary: Key results for 2008*
- *Comparative results: Quantitative data 2002 – 2008*
- *Comparative results: Focus of written observations from respondents 2002 – 2008*
- *Focus of written observations from respondents: 2008*

With attachment:

Postgraduate Research Experience Questionnaire (2006 – 2008)

- *Quantitative data 2006 – 2008 (2005 – 2007 graduates)*
- *Focus of written observations 2008 (2007 graduates)*

July 2009

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Executive summary

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 suggested improvements, during their research training experience.

The analysis of qualitative data reported in this document is based on written observations received from **all** respondents to the SREQ. Faculties are advised that if they are interested, it is possible to supply copies of the written observations in the following groupings¹:

- by subject matter: general (Quality of Supervision) to specific (Supervisor(s))
- by degree
- by code

Key results for 2008

The following results are an indication of those areas of the student experience that were of significance to research higher degree students during 2008. The KPI linked 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.

Quality of Supervision (Section 1, pp 10 – 12)

FACULTY SCORES

Faculty scores for the Supervision Scale have remained consistently in the high 60s to low 70s percentage agreement since the beginning of the SREQ. The current score of 69% is marginally higher than the 2007 score (67%). International students have consistently rated their experiences higher than their domestic counterparts. The University average for the Supervision Scale is 75%.

QUALITATIVE DATA

Areas of best practice

- 27% of respondents who answered the open questions in the survey expressed satisfaction with their supervisor and/or co-supervisors
- 19% appreciated the freedom to pursue their own research and the flexibility of their working hours.
- Sample comment: *"The best aspects are having good supervision and well defined objectives. Given the short candidature period of 3-4 years, clearly defined objectives allow productive work to be carried out from the beginning. Having supportive and good supervision helps me to focus on the aims"*

Suggested improvements

- 21% of respondents to the SREQ, and who provided written observations suggested improvements to this area of their experience
- Of these, 21% were unhappy with various aspects of their supervision, including: the supervisor(s); feedback on their work; availability and frequency of meetings; and the need for evaluation of the supervision process.
- 10% of students who provided comments would like more guidance in the management of their project including: topic selection, literature review, setting of guidelines.
- Sample comment: *"Progress reviews. They are effectively meaningless. They rely too heavily on the supervisors assessment and if the advice still happens to be contrary to the view of the supervisor it can, and usually is, ignored. There is no follow up on progress reviews and things continue as if they never happened"*

¹ Please contact Rachel Symons (r.symons@usyd.edu.au or 9351 6560) to discuss your requirements.

Quality of Infrastructure (Section 2, pp 13 – 15)

FACULTY SCORES

Faculty scores for the Infrastructure Scale have remained in the 70th percentile since the commencement of the SREQ in 2002. The current score of 73% agreement is marginally higher than the 2007 score but lower than those of 2004 – 2006. International students have consistently experienced similar or better outcomes than their domestic counterparts. The University average for this scale is 64%.

QUALITATIVE DATA

Areas of best practice

- 19% of respondents were satisfied with this area of their experience
- 10% of respondents expressed satisfaction with the facilities provided by the Faculty (office space, desk, computers); whilst 6% were happy with library services and the availability of relevant electronic journals and databases.
- The new School of IT building was mentioned favourably
- Sample comment: *"The design of the new School of Information Technologies building is very usable. Easy access to amenities. Private meeting rooms available for meeting visitors who collaborate with my project. Natural lighting indoors. All made a very comfortable environment to work within"*

Suggested improvements

- 50% of respondents suggested improvements in this area of their experience
- Comments were divided between:
 - Funding and scholarships, including: PRSS availability; and funding for conferences; (20%)
 - Physical facilities, including: office space; computer resources; and equipment (20%)
- Sample comment: *"Investing in computational resources (shared or private), NOT in expensive "courtyards", "fancy landscaping"."*

Research Climate (Section 3, pp 16 – 19)

FACULTY SCORES

The current score of 58% agreement for the Climate Scale is identical to the 2006 score and 4% higher than the 2007 score. International students have consistently rated their experiences slightly higher than domestic students. The University average for the Climate Scale was 59%.

QUALITATIVE DATA

Areas of best practice

- 44% of respondents who provided written observations on their experiences expressed satisfaction with this area of their experience.
- 7% valued the opportunities to interact with other research higher degree students
- 21% felt part of a research community, and considered that this stimulated their work
- A supportive and welcoming work environment was experienced by 12% of respondents
- Sample comment: *"Independence and opportunity to collaborate with academics from different disciplines. They are essential for developing a good scientists and these are the things that I am really grateful about my supervisors for giving me"*

Suggested improvements

- 45% of respondents were dissatisfied with this area of their experience
- 10% thought that the more opportunities could be provided for interacting with their fellow students
- Opportunities for networking and collaborative projects; together with participation in the research culture of the faculty and an increase in seminars would be appreciated by 15% of respondents.
- The lack of a supportive work environment, and a feeling of isolation from staff and students within the faculty/ department was the focus of 11% of comments received.
- Sample comment: *"Research community should be more emphasized in the department, not only from the same group. Research student can share experience and difficulties, so that keep in path of the research"*

Generic Skills (Section 4, pp 20 – 22)

FACULTY SCORES

Faculty scores for the Generic Skills Scale have remained in the mid to high 70s since 2002, and currently sit at 76% agreement. Since 2005, international students have consistently rated their experience better than or similar to their domestic counterparts. The University average for the Generic Skills Scale is 79%.

QUALITATIVE DATA

Areas of best practice

- 37% of respondents who answered the open questions in the survey considered that they were developing relevant generic skills
- 14% mentioned that their skills in problem solving, analysis, and written and oral communication had improved.
- 8% of respondents considered that their ability to work independently had been enhanced.
- Sample comment: *"Developing problem solving and research skills in areas which are totally unfamiliar to the individual"*

Suggested improvements

- 9% of respondents expressed dissatisfaction with this area of their experience, including: oral and written communication skills; organisational skills; research skills; and help in English language proficiency for international students.
- Sample comment: *"I have found that there is little emphasis on improving communication skills in the particular group that I work in. I think it is extremely important to be able to clearly explain to people what it is you're doing, why you're approaching it in a certain way, what methods you're using, etc."*

Overall Satisfaction (Section 5, pp 23 – 24)

FACULTY SCORES

After the low of 68% agreement recorded in 2007, faculty scores for the Overall Satisfaction Item, have returned to the high scores recorded in 2002 – 2006 (77% - 80%). The current score is 75%. The University score for the Overall Satisfaction Item is 80%. International students rated this area of their experience higher than domestic students in 2003, 2005 – 2006, and 2008.

QUALITATIVE DATA

Areas of best practice

- 22% of respondents who answered the open questions expressed satisfaction with this area of their experience
- The majority of these (16% of comments received) were satisfied with their research, its topic, and its contribution to the field.
- Sample comment: *"Opportunity to contribute new knowledge to science, learning about new scientific fields; generally, very satisfying intellectual pursuits"*

Suggested improvements

- 7% of respondents were dissatisfied with their overall degree experience
- Sample comment: *"lack of coursework - not competitive enough with people from overseas. Research period of 3 years too short - affects quality of work"*

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July 2009

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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
PREQ	Postgraduate Research Experience Questionnaire Administered to graduates in the year after completion of studies
Supervision Scale Infrastructure Scale Climate Scale Generic Skills Scale	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">• Supervision• Climate• Infrastructure• Generic Skills 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
Qualitative data Focus of written observations	Students' written observations received in response to open ended questions in the SREQ: <ul style="list-style-type: none">• 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.

Conceptual framework

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 Engineering and Information Technologies between 2002 and 2008. The report also provides detailed information on the key issues highlighted in the analysis of the 2008 SREQ qualitative data.

Information is arranged by the SREQ Factor Scales (Supervision; Infrastructure; Climate; Generic Skills; and Overall Satisfaction), which, taken together, comprise the student experience of research training in the Faculty.

Focus of written observations from respondents

By examining the foci of the students' comments in the 2008 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.

Postgraduate Research Experience Questionnaire (PREQ) 2006-2008

Faculty scores from the 2006 – 2008 Postgraduate Research Experience Questionnaire (PREQ); together with a list of comments received in answer to the open response questions in the 2008 survey, are provided as an attachment to this report. The broad area(s) by which each comment has been analysed are indicated alongside each comment.

Notes

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 CEO and SCEQ. In aggregated 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 caution².

Number of respondents to the SREQ 2002 – 2008³

	SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
	n=	n=	n=	n=	n=	n=	n=
Domestic students	78	87	97	108	97	126	167
International students	0	41	40	45	59	56	89
Overall	78	128	137	153	156	182	256

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 2002 - 2008

Areas of best practice	SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
	n=	n=	n=	n=	n=	n=	n=
Domestic				85	64	94	126
International	56	99	100	12	44	47	57
Total				97	108	141	183

Suggested improvements	SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
	n=	n=	n=	n=	n=	n=	n=
Domestic				70	55	92	117
International	50	80	88	11	41	42	58
Total				81	96	134	175

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

NB: Separate qualitative data for international students did not become available until 2005

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:

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

² Retrieved from ITL SREQ website *Using the report page* at <http://www.itl.usyd.edu.au/sreq/reportpage.htm>

³ Data retrieved from the ITL SREQ website results and reports for the Faculty of Engineering and Information Technologies on 16.07.09 <http://www.itl.usyd.edu.au/sreq/secure/rrr.cfm>

3 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 Engineering and Information Technologies, YYY or ZZZ.

4 Analysis of comments

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

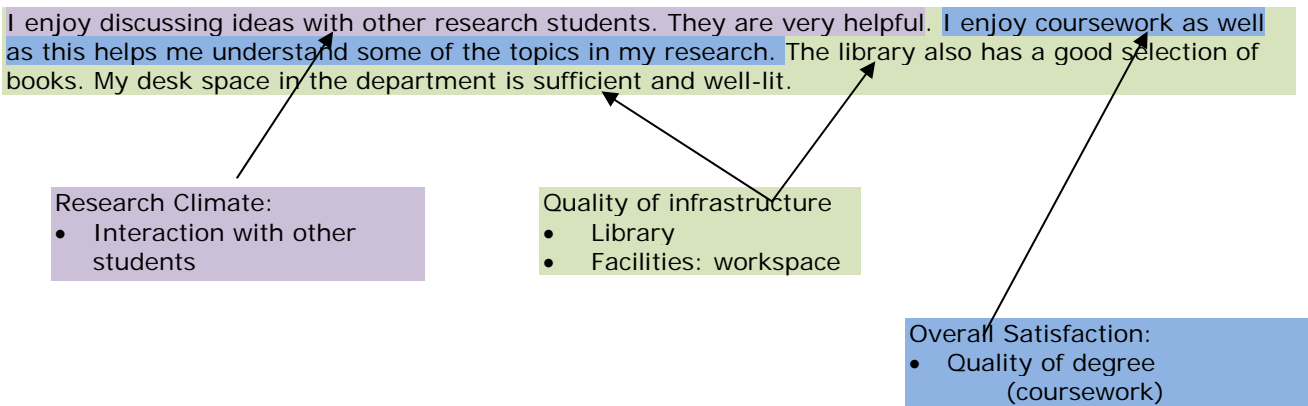
- Characteristics that define the area of the student experience
- SREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

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

5 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 Research Climate (Work environment: supportive; Interaction with other students); and Quality of Supervision (Supervisor; Management of candidature: guidance; Flexibility of program); the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 5 aspects in one comment.



⁴ Available from Quality Assurance Officer (Learning and Teaching)

1 Quality of Supervision

Coverage

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.

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

Qualitative data analysis

There are 5 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

- Supervision (Supervisor/ Associate Supervisor; availability and frequency; evaluation of supervisor by student; feedback on work)
- Management of Candidature (guidance on thesis, literature review; topic etc; workload)
- Progress reports (value of process; structure)
- Flexibility of program
- Pressure to complete (e.g. within set time frame)

Summary

FACULTY SCORES

Faculty scores for the Supervision Scale have remained consistently in the high 60s to low 70s percentage agreement since the beginning of the SREQ. The current score of 69% is marginally higher than the 2007 score (67%). International students have consistently rated their experiences higher than their domestic counterparts. The University average for the Supervision Scale is 75%.

QUALITATIVE DATA

Areas of best practice

- 27% of respondents who answered the open questions in the survey expressed satisfaction with their supervisor and/or co-supervisors
- 19% appreciated the freedom to pursue their own lines of research and the flexibility of their working hours.

Suggested improvements

- 21% of respondents to the SREQ, and who provided written observations suggested improvements to this area of their experience
- Of these, 21% were unhappy with various aspects of their supervision, including: the supervisor(s); feedback on their work; availability and frequency of meetings; and the need for evaluation of the supervision process.
- 10% of students who provided comments would like more guidance in the management of their project including: topic selection, literature review, setting of guidelines.

1.1 Comparative results: Quantitative data 2002–2008

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

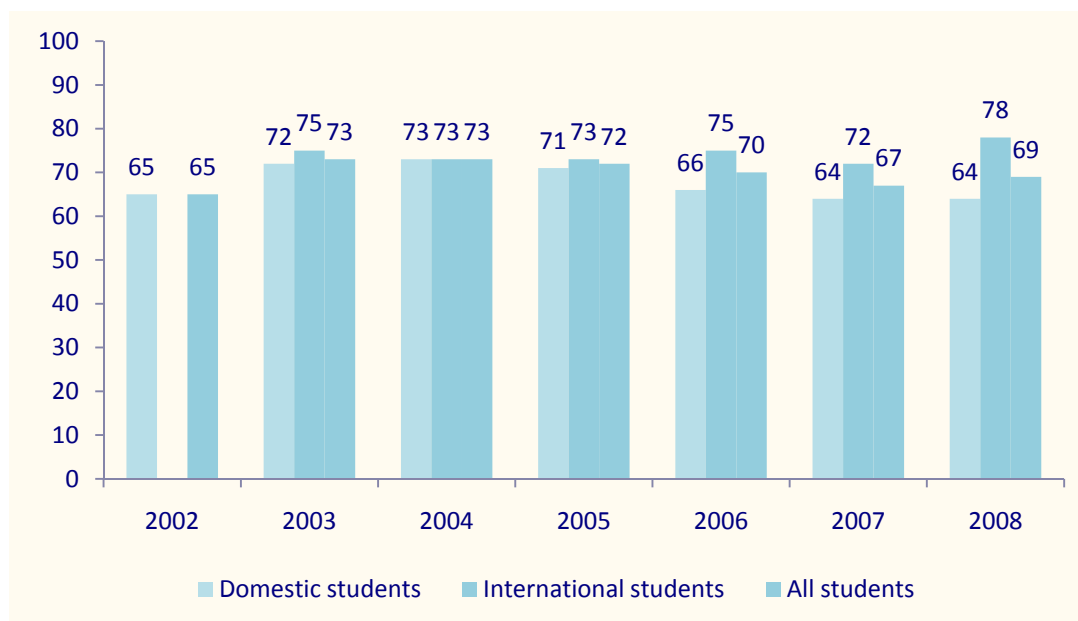


Figure 1: SREQ Supervision Scale: percentage agreement results: 2002 - 2008

1.2 Comparative results: Focus of written observations 2002–2008

The following table includes the percentage of comments received from respondents to the surveys, that can be classified as areas of best practice or areas for improvement under the heading of Quality of Supervision. The trends provide an indication of student satisfaction with this area of their experience between 2002 and 2008.

	SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
Areas of best practice	Domestic			44%	47%	27%	46%
	International			25%	43%	30%	51%
	All	11%	27%	17%	41%	45%	28%
Suggested improvements	Domestic			24%	29%	30%	38%
	International			0%	20%	26%	22%
	All	28%	21%	28%	21%	25%	29%

1.3 Key issues for research higher degree students (SREQ 2008)

1.3.1 Areas of best practice

	Domestic (n=126)	International (n= 57)	All (n= 183)
Supervision			
- Satisfied with performance of supervisor(s)	23%	35%	27%
- Supervisor(s) available for regular meetings			
- Supervisor(s) provide feedback on work			
Flexibility of program			
- Freedom to pursue own research interests appreciated	21%	12%	19%
- Flexibility of working hours appreciated			

	Domestic (n=126)	International (n= 57)	All (n= 183)
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Sample comments: domestic students

- *Independent research and contribute to scientific community. Flexible hours, freedom of research area. These aspects make life more enjoyable than regular 9-5 job*
- *Supervision. I am allowed to be independent in my own research, but there is always guidance when I need it*
- *My supervisor's input and ongoing guidance is the best thing about the higher degree. Having access to such a wealth of knowledge is important to me*

Sample comments: international students

- *My supervisor shows me the whole picture of the field and I work independently to explore the details. It makes me plan my research better and know the right way I should go*
- *Full supportive from supervisor, to make research objective can be achieved*
- *My supervisor is one of the best supervisors I have ever met. He is very warm-hearted and focusing on research. I am very enjoying my time talking with him.*

1.3.2 Suggested improvements

	Domestic (n=117)	International (n=58)	All (n=175)
--	----------------------	--------------------------	-----------------

Supervision

- | | | | |
|---|-----|-----|-----|
| - Performance of supervisor(s) unsatisfactory | | | |
| - Supervisor(s) unavailable for regular meetings | 26% | 10% | 21% |
| - Supervisor(s) do not provide feedback on work | | | |
| - Process for evaluating supervisor performance suggested | | | |

Management of candidature

- | | | | |
|--|----|-----|-----|
| - additional information relevant to the thesis topic not provided | 9% | 10% | 10% |
| - insufficient guidance in topic selection and refinement | | | |
| - lack of good guidance in literature search | | | |

Sample comments: domestic students

- *Training for supervisors and coordinators, including effective supervision, dealing with problems and the important elements of university policy. For example; authorship guidelines, intellectual property, supervisor and student responsibilities, etc (in my experience, these policies were either unknown or ignored). I believe that there is some sort of training available as this came up in a research group meeting a long time ago, but many supervisors joked that they hadn't done it*
- *Ensure important stages in research have been achieved. For instance, that the student has defined a (at least preliminary) topic or research area and that a literature review is done on which to base planned research. Currently, it is very easy to get through 2 or more years of the PhD without a research area by doing aimless research. Since there are low expectations for publishing in the first year or two, this doesn't register as a problem until it's too late*
- *Supervision- supervisor needs to show interest in students and their work not just take them on to get more research funding and their name on their student's papers published! My supervisor never contacts me unless I contact him*

Sample comments: international students

- *Although minor, I believe that there are some specific aspects of my supervision that could be improved. For instance, I feel that my supervisors should become more involved in my work. Quite often I perceive that my supervisor merely lays out the problems that my research should address and does not provide me with any guidance as to how to approach them. But then again, these are minor issues compared to all the benefits and experience I have drawn so far in my first six months as a research student.*
- *Lack of useful guidance and feedback from supervisor (who is frequently unavailable)*
- *There wasn't enough emphasis on quickly coming to one thesis research topic. Within the first 6 months, every student should have a really good idea of what their thesis topic is. The department should have a tougher policy with a one year process of defining their topics for research with tougher review processes to make sure every student is on track*

2 Quality of Infrastructure

Coverage

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.

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

Qualitative data analysis

There are 5 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.

- Finance and funding (funding for resources, equipment etc; scholarships, PRSS, APA etc)
- Facilities (computer hardware and software; equipment; workspace, building, parking etc)
- Research resources (provided by faculty; provided by library)
- Support (IT; technical; laboratory)
- Administration (enrolment and admission; communication between faculty and students; general comments on administration (faculty and university)

Summary

FACULTY SCORES

Faculty scores for the Infrastructure Scale have remained in the 70th percentile since the commencement of the SREQ in 2002. The current score of 73% agreement is marginally higher than the 2007 score but lower than those of 2004 – 2006. International students have consistently experienced similar or better outcomes than their domestic counterparts. The University average for this scale is 64%.

QUALITATIVE DATA

Areas of best practice

- 19% of respondents were satisfied with this area of their experience
- 10% of respondents expressed satisfaction with the facilities provided by the Faculty (office space, desk, computers); whilst 6% were happy with library services and the availability of relevant electronic journals and databases.
- The new School of IT building was mentioned favourably

Suggested improvements

- 50% of respondents suggested improvements in this area of their experience
- Comments were divided between:
 - Funding and scholarships, including: PRSS availability; and funding for conferences; (20%)
 - Physical facilities, including: office space; computer resources; and equipment (20%)

2.1 Comparative results: Quantitative data 2002–2008

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

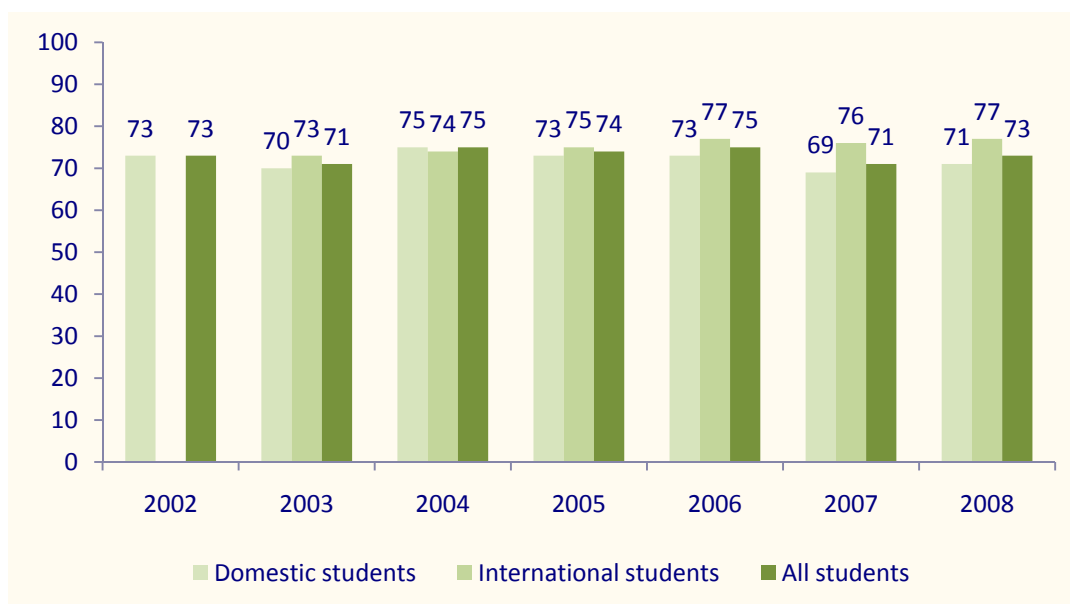


Figure 2: SREQ Infrastructure Scale: Percentage agreement results: 2002 - 2008

2.2 Comparative results: Focus of written observations 2002–2008

The following table includes the percentage of comments received from respondents to the survey, that can be classified as areas of best practice or areas for improvement, providing an indication of trends in students' perceptions of the quality of infrastructure between 2002 and 2008.

	SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
Areas of best practice	Domestic			24%	19%	24%	16%
	International			8%	36%	17%	26%
	All	18%	23%	19%	22%	26%	22%
Suggested improvements	Domestic			51%	67%	51%	41%
	International			91%	54%	57%	67%
	All	46%	51%	55%	57%	61%	50%

2.3 Key issues for research higher degree students (SREQ 2008)

2.3.1 Areas of best practice

	Domestic (n= 126)	International (n=57)	All (n=183)
Facilities			
- Computers are provided by faculty	8%	16%	10%
- Workspace, office, provided by faculty			
- Equipment provided is up to date and functional			
Research resources			
- Research resources are provided by faculty	6%	5%	6%
- Library services satisfactory			

	Domestic (n= 126)	International (n=57)	All (n=183)
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Sample comments: domestic students

- *My desk space in the department is sufficient and well-lit*
- *The library also has a good selection of books*
- *availability of excellent facilities (good computer equipment, access to upgrades/repairs and IT support, especially for configuration to serve individual needs).*

Sample comments: international students

- *I have got good access to computing facilities*
- *Library (staff, website,): they are one of the most powerful and important factor which affect on research activity*
- *The projects that I am working on are fully funded. Which means we can get whatever equipment is necessary*

2.3.2 Suggested improvements

	Domestic (n=117)	International (n=58)	All (n=175)
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Finance and funding

- | | | | |
|--|-----|-----|-----|
| - Funding for research unavailable | 22% | 16% | 20% |
| - Scholarships unavailable or unsatisfactory | | | |
| - PRSS, APA provisions unsatisfactory | | | |

Facilities

- | | | | |
|--|-----|-----|-----|
| - Computers are not provided by faculty | 15% | 31% | 20% |
| - Workspace, office, not provided by faculty | | | |
| - Equipment provided is not up to date or functional | | | |
| - Would like a postgraduate common room | | | |

Sample comments: domestic students

- *In addition there needs to be a huge simplification to the process to access of funds for research equipment or other expenses. Accessing funds and purchasing equipment is a frustrating and timely activity yet it is vital to the development of the thesis*
- *Postgraduate support, i.e. the facilities that they are getting: there is no common room for postgraduates in the department*
- *There has been quite a lot of noise relating to earthworks and landscaping in the engineering area for several hours a day, many days a week/fortnight over a large period of the first half of the year. While it is no doubt important that this work get done, and for reasons it is necessary to do this work at the time it is being done, it has been very distracting for trying to work*

Sample comments: international students

- *IT service both in school and university really needs improvement, especially I am disappointed at the ICT services*
- *There is no place in the world that you push to research without any facilities. Most of the workshop are totally old, out of order, and even accessing to these workshops for continuous working is impossible because of lack of money which must be spend by your supervisor, out of ordering the devices because the maintenance of devices was not enough(may be you can add a lot of reasons for it but where is solution?).*
- *Also, the postgraduate travel fund is not sufficient for PhD students to travel to conferences. Being an active researcher, I attended an international conference this year, and have another one coming up at the end of the year. However, the faculty only provides AUD 2000 travel fund per year, I already have to cover for AUD 700 from my own pocket, I strongly recommend the raise of PhD student travel fund to be raised to higher than AUD 2000 limit per year.*

3 Research Climate

Coverage

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.

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

Qualitative data analysis

There are 6 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.

- Interaction with other research higher degree students (study related; social; support of peers)
- Research culture (part of research community; conference participation; networking)
- Work environment (integration into faculty/ department/ school; supportive environment; stimulating; induction/ orientation programme; respect as fellow researcher; support for students)
- Cultural diversity and equity
- Preparation for academia (e.g. availability of tutoring, lecturing)
- Location and physical environment

Summary

FACULTY SCORES

The current score of 58% agreement for the Climate Scale is identical to the 2006 score and 4% higher than the 2007 score. International students have consistently rated their experiences slightly higher than domestic students. The University average for the Climate Scale was 59%.

QUALITATIVE DATA

Areas of best practice

- 44% of respondents who provided written observations on their experiences expressed satisfaction with this area of their experience.
- 7% valued the opportunities to interact with other research higher degree students
- 21% felt part of a research community, and considered that this stimulated their work
- A supportive and welcoming work environment was experienced by 12% of respondents

Suggested improvements

- 45% of respondents were dissatisfied with this area of their experience
- 10% thought that the more opportunities could be provided for interacting with their fellow students
- Opportunities for networking and collaborative projects; together with participation in the research culture of the faculty and an increase in seminars would be appreciated by 15% of respondents.
- The lack of a supportive work environment, and a feeling of isolation from staff and students within the faculty/ department was the focus of 11% of comments received.

3.1 Comparative results: Quantitative data 2004–2008

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

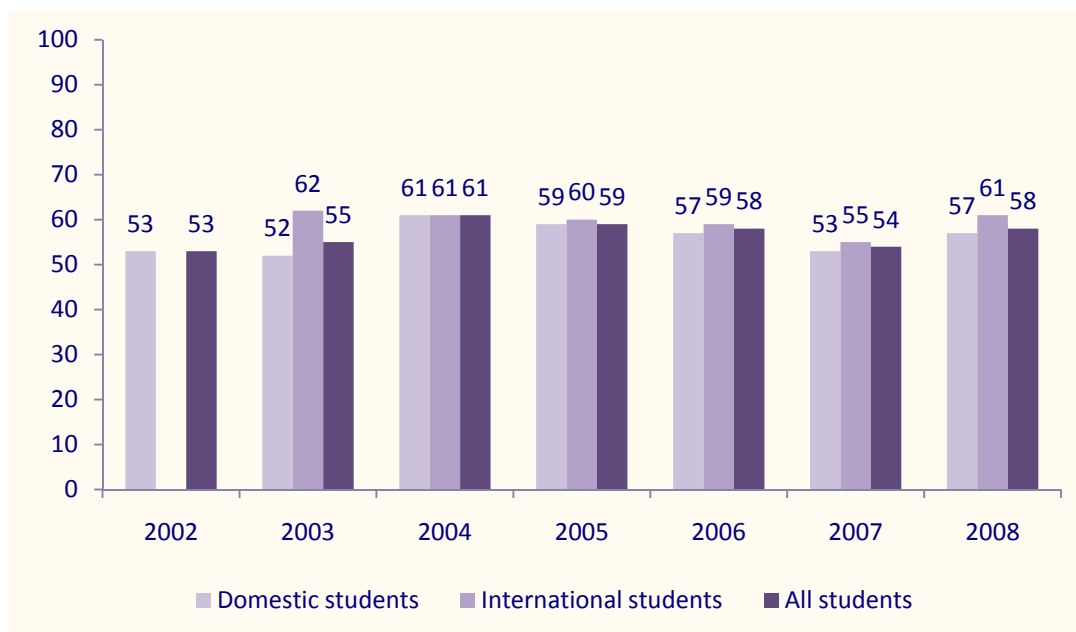


Figure 3: SREQ Climate Scale: Percentage agreement results: 2002 - 2008

3.2 Comparative results: Focus of written observations 2002–2008

The following table includes the percentage of comments received from respondents to the surveys, that can be classified as areas of best practice or areas for improvement, providing an indication of trends in the students experiences of the prevailing research climate in the faculty between 2002 and 2008, as indicated in the responses to open questions in the SREQ.

		SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
Areas of best practice	Domestic				44%	38%	34%	41%
	International				58%	45%	34%	49%
	All	38%	35%	49%	45%	41%	34%	44%
Suggested improvements	Domestic				40%	25%	42%	47%
	International				18%	54%	31%	41%
	All	42%	41%	30%	37%	38%	39%	45%

3.3 Key issues for research higher degree students (SREQ 2008)

3.3.1 Areas of best practice

	Domestic (n=126)	International (n= 57)	All (n=183)
Interaction with other research students			
- Opportunities are provided to discuss research with other students	7%	5%	7%
- Opportunities are provided for social contact with other students			
- Other students are supportive			
Research culture			
- Opportunities provided to participate at conferences	21%	19%	21%
- Networking opportunities available			
- Feel part of a research community			
- Seminar program provided by faculty			

	Domestic (n=126)	International (n= 57)	All (n=183)
Work environment			
- Research ambience stimulating, challenging			
- Satisfactory induction or orientation programme is provided	10%	18%	12%
- Feel part of / welcomed by the faculty/ department			
- Respected as a fellow researcher			
- Support is provided for students (especially part-time, external)			
- Presence of a supportive work environment			

Sample comments: domestic students

- *International conferences - a good way to see how your research actually interacts with the wider academic community, and to physically meet other experts in your field*
- *The people in my research group made me feel welcomed in their group, more like a family than just a group of researchers*
- *The environment. The department provides an interesting and challenging work place that is at the same time relaxed and welcoming. For me this is a really good thing*

Sample comments: international students

- *Organisation of group meetings keeping the lab alive, and meeting between different groups having similar research interests. Very good atmosphere within the research group*
- *The department stimulates student interaction via seminars, courses and reading groups and provides a friendly working environment with many common places that encourage social contact*
- *In my opinion, the most positive aspect of my research so far is the fact that I find myself constantly surrounded by other postgraduate research students. This is both stimulating and reassuring because it allows me to discuss my progress and to share my insecurities with others, let alone establish friendships with people from all corners of the world. The department stimulates student interaction via seminars, courses and reading groups and provides a friendly working environment with many common places that encourage social contact*

3.3.2 Suggested improvements

	Domestic (n=117)	International (n=58)	All (n=175)
Interaction with other research students			
- Opportunities are not provided to discuss research with other students	10%	9%	10%
- Opportunities are not provided for social contact with other students			
- Other students are not supportive			
Research culture			
- Opportunities not provided to participate at conferences	15%	17%	15%
- Networking opportunities unavailable			
- Do not feel part of a research community			
- Seminar program not provided by faculty			
Work environment			
- Research ambience is not stimulating, challenging			
- Induction or orientation programme is not provided			
- Do not feel part of / welcomed by the faculty/ department	14%	7%	11%
- Are not respected as a fellow researcher			
- Support is not provided for students (especially part-time, external)			
- Supportive work environment not present			

Domestic (n=117)	International (n=58)	All (n=175)
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Sample comments: domestic students

- *More could be done to foster communication among post grad students and between students and academic staff outside the student-supervisor relationship. e.g. seminars, reading groups*
- *My school do not actively engage postgraduates as tutor or teaching assistant in undergraduate teaching. I think this is a big mistake by the school since I feel I lack the necessary teaching experience compared to PhD graduates from other leading international universities. As I aim to stay in academia, this is a critical issue*
- *Student support. Important issues (e.g. supervision, bullying, health issues) are not treated seriously when raised within the department even if there is supporting evidence. It is fortunate that the student support services and SUPRA are very helpful*

Sample comments: international students

- *Collaboration with other students that have similar interest. e.g. doing project together in a group. Because nowadays, we have to collaborate to achieve a better result*
- *Definitely the interaction between postgrad students, I've found that common activities like inter-group seminars and others are not encouraged by most supervisors, therefore we've found these activities completely useless. Even though I know there are Ph.D. students in similar research areas, with sometimes similar projects*
- *Inter-group contact is minimal in the school; groups seem isolated from each other. Very few school events*

4 Generic Skills

Coverage

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

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

Qualitative data analysis

There are 8 sub-categories within *Generic Skills*, against which students comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) which are based on the SREQ survey items together with recurring themes in students' comments.

- Graduate Attributes (includes: problem solving, analytical skills, oral and written communication, presentation, and planning)
- Technical skills (statistics, thesis/ academic writing, disciplinary, and training in use of equipment)
- Research skills
- Publishing skills (writing for publication; opportunities for publication provided)
- Collaboration with other researchers
- Expansion of knowledge base (i.e. on research topic and associated subjects)
- Working independently
- English language skills for NESB/ international students (proficiency, support with academic writing, proof reading etc)

Summary

FACULTY SCORES

Faculty scores for the Generic Skills Scale have remained in the mid to high 70s since 2002, and currently sit at 76% agreement. Since 2005, international students have consistently rated their experience better than or similar to their domestic counterparts. The University average for the Generic Skills Scale is 79%.

QUALITATIVE DATA

Areas of best practice

- 37% of respondents who answered the open questions in the survey considered that they were developing relevant generic skills
- 14% mentioned that their skills in problem solving, analysis, and written and oral communication had improved.
- 8% of respondents considered that their ability to work independently had been enhanced.

Suggested improvements

- 9% of respondents expressed dissatisfaction with this area of their experience, including: oral and written communication skills; organisational skills; research skills; and help in English language proficiency for international students.

4.1 Comparative results: Quantitative data 2002–2008

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

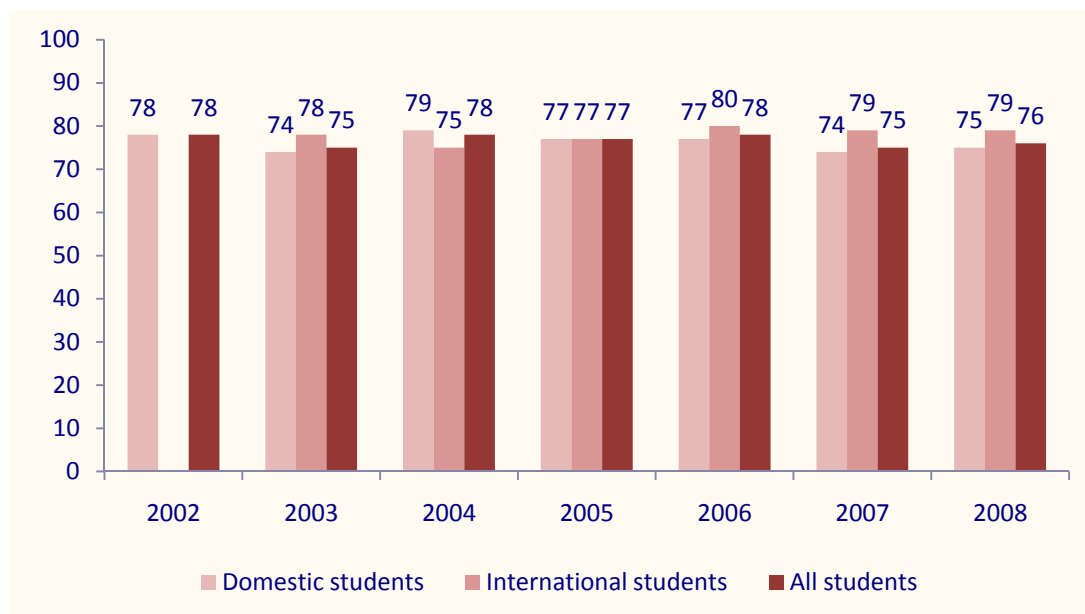


Figure 4: SREQ Generic Skills Scale: Percentage agreement results: 2002 - 2008

4.2 Comparative results: Focus of written observations 2002–2008

The following table includes the percentage of comments received from respondents to the surveys, that can be classified as areas of best practice or areas for improvement, providing an indication of trends in the development of Generic Skills by respondents between 2002 and 2008.

	SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
Areas of best practice	Domestic			49%	27%	40%	30%
	International			75%	64%	66%	51%
	All	66%	48%	65%	53%	42%	49%
Suggested improvements	Domestic			13%	11%	8%	6%
	International			0%	24%	19%	16%
	All	12%	14%	17%	11%	17%	9%

4.2 Key issues for research higher degree students (SREQ 2008)

4.2.1 Areas of best practice

	Domestic (n=126)	International (n=57)	All (n=183)
Graduate Attributes			
- Problem solving skills are being developed	10%	21%	14%
- Analytical skills are being developed			
- Oral and written communication, and presentation skills are being developed			
Working independently			
- Ability to plan own work developed	%	%	%
- Ability to learn independently developed			

Domestic (n=126)	International (n=57)	All (n=183)
----------------------	--------------------------	-----------------

Sample comments: domestic students

- *Developing the ability of independent working, researching; collaborating with other researchers or groupmates when necessary; getting more and more familiar with the general research steps, problem defining, solving...etc, because these are crucial for the success of the whole project, and through which procedures, the concrete fundamentals are built up in the early stage of research*
- *The best aspects in my research are improving the verbal and written communication skills besides the great knowledge and experience that can be obtained through the research process*
- *To acquire independence and problem solving skills which are applicable and crucial in a lot of other situations*

Sample comments: international students

- *Aspects: Independent and communication (discussion) training skill. The aspects are necessary to enhance our wider capabilities in working at any field of responsibly, not only for our formal (professional) tasks but also in our daily life*
- *It's a very good training for the following skills: problem solving, learn independently, presentation/communication both oral and written. Those are important skills to be successful in real life*
- *Doing my research has developed my ability to plan my own work and can explore unfamiliar topic independently*

4.2.2 Suggested improvements

9 % of students (i.e.16 /175 comments received) who responded to the SREQ considered that improvements were needed in this area of their experience.

Sample comments: domestic students

- *Research & presentation skills: I feel that the unit Research Methods is insufficient to develop the necessary skills of a good researcher. In particular, there is little emphasis on presentation skills i.e. communicating ideas*
- *More help for new students from other countries to improve their spoken English*
- *Coursework: I had to research and develop the necessary technical skills independently. It was time-consuming and probably more efficient had it been delivered via coursework. Make elective coursework more accessible! Research & presentation skills: I feel that the unit Research Methods is insufficient to develop the necessary skills of a good researcher. In particular, there is little emphasis on presentation skills i.e. communicating ideas*

Sample comments: international students

- *I need to improve my English skill as my mother tongue is not English, which will hinder my communication with other people to some extent. In the following semesters, I will make use of Learning centre's information to improve my language skill.*
- *Convey our ideas into writing paper. It need to be improve and may be get more training solution due to difficulties to have abstract or mind ideas to be convert into documentation. It really necessitate more training practise to make our writing as well as our propose ideas*
- *I need to become more willing to solve problems by myself. There are so many postgraduate students in my office and experts in some area. So I am always prone to discuss with them, which means the time I think by myself will be relatively short. So I need to think more independently*

5 Overall Satisfaction

Coverage

This single item asks students about their overall level of satisfaction with their research higher degree experience.

SREQ Survey items

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

Qualitative data analysis

There are 3 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
- Satisfaction with research (topic, contribution to field)

Summary

FACULTY SCORES

After the low of 68% agreement recorded in 2007, faculty scores for the Overall Satisfaction Item, have returned to the high scores recorded in 2002 – 2006 (77% - 80%). The current score is 75%. The University score for the Overall Satisfaction Item is 80%. International students rated this area of their experience higher than domestic students in 2003, 2005 – 2006, and 2008.

QUALITATIVE DATA

Areas of best practice

- 22% of respondents who answered the open questions expressed satisfaction with this area of their experience
- The majority of these (16% of comments received) were satisfied with their research, its topic, and its contribution to the field.

Suggested improvements

- 7% of respondents were dissatisfied with their overall degree experience

5.1 Comparative results: Quantitative data 2002–2008

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

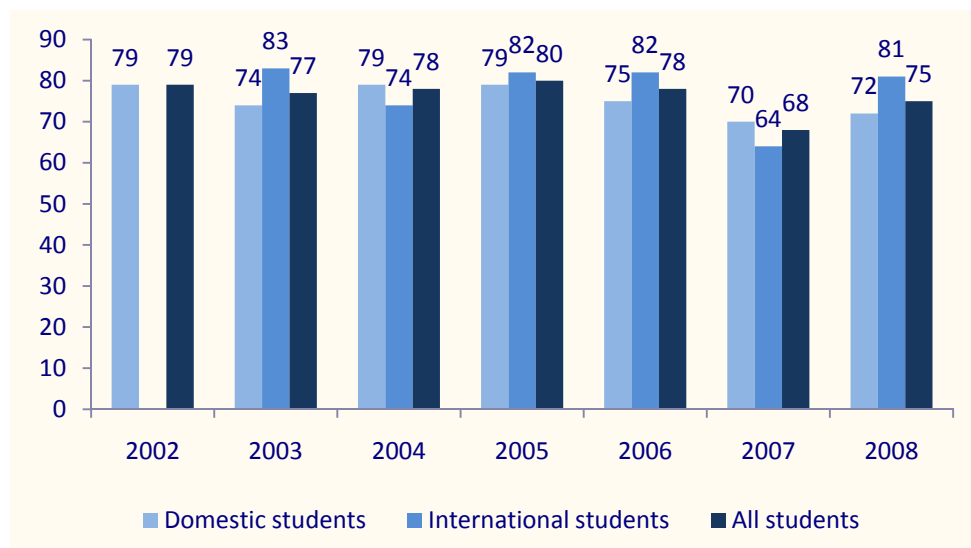


Figure 5: SREQ Overall Satisfaction Item: Percentage agreement results: 2002 - 2008

5.1 Comparative results: Focus of written observations 2002–2008

The following table includes the percentage of comments received from respondents to the survey, that can be classified as areas of best practice or areas for improvement, providing an indication of trends in research higher degree students' overall satisfaction between 2002 and 2008.

		SREQ 2002	SREQ 2003	SREQ 2004	SREQ 2005	SREQ 2006	SREQ 2007	SREQ 2008
Areas of best practice	Domestic				13%	16%	24%	26%
	International				36%	15%	24%	14%
	All	21%	23%	13%	16%	16%	24%	22%
Suggested improvements	Domestic				7%	9%	7%	8%
	International				0%	12%	10%	7%
	All	0%	0%	0%	6%	10%	7%	7%

5.2 Key issues for research higher degree students (SREQ 2008)

5.2.1 Areas of best practice

	Domestic (n= 126)	International (n= 57)	All (n= 183)
Satisfaction with research			
- Research topic will contribute to field	19%	11%	16%
- Researching topic that have always been interested in			
- Research is worthwhile			

Sample comments: domestic students

- *Getting the opportunity to contribute research to an interesting field*
- *See my final project working as expect. Because it means that my ideas is correct and I have cover everything that could occur*
- *Also able to see how your research can contribute to the work put forward by other researchers on a relevant topic. Personal development*

Sample comments: international students

- *Everything: As far as I'm concern, the whole experience has been very good*
- *I am able to work on a subject that is dear to me and bring a contribution to it.*
- *It will be a good contribution to society!*

5.2.3 Suggested improvements

7% of students (i.e. 13 /175 comments received) who responded to the SREQ considered that improvements were needed in this area of their experience. There were no comments from international students on this topic.

Sample comments: domestic students

- *lack of coursework - not competitive enough with people from overseas. Research period of 3 years too short - affects quality of work*
- *Some way to encourage myself to do more work.*
- *I have been disgusted by my whole post-graduate experience at Sydney University and dissuade others from doing a degree in my Faculty*

Sample comments: international students

- *I think if our University wants to improve its University ranking in the world, we should not only focus on the coursework students. As a matter of fact, Australian Government currently is encouraging more and more foreign students come to Australia to take many kinds of coursework degrees. But I think the research level is the foundation of a University. You will never be admitted as a fabulous university in the world without a solid foundation of research level. So, if possible, our University should increase the number of scholarships, including University's and Faculty's scholarships, to attract more and more good overseas research student to come here. I feel that the scholarships are too lacking for the international students to apply for. But without international research students, how can a University be said as 'one of the famous universities in the world'?*

- *Subject of projects: most of projects in comparison with the rest of world even another universities are old. University and faculty expect miracle from you and your research without any support! Most of the time you should spend your time on filling formal forms, sending formal e-mail, writing minute of meeting, filling survey and without any result. It's time to ask is that exactly mean research?(As far as I know, It doesn't mean research. Research means : Investigation, study, testing, discussion, finding new ideas, being familiar with new devices for analysis, (you might be now better than me, might be write better than me, or even might be say better than me, but question: when does the action happen?)*
- *The University of Sydney has been a huge disappointment. I don't feel like there is any idea about student life here*

Attachment A Postgraduate Research Experience Questionnaire (PREQ 2008)

The survey

In 2002 the Institute for Teaching and Learning (ITL) began collecting data for The University community on research higher degree graduates' perceptions of their research training experiences. This data is gathered each year using a national survey specifically developed for this task, the "Postgraduate Research Experience Questionnaire" (PREQ). The purpose of the PREQ 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 PREQ also provides data for benchmarking between similar programmes in different universities.

The survey gathers data on students' perceptions of the quality and frequency of supervision, intellectual and social climate, infrastructure, approaches to research, quality of thesis examination, and generic skills development in their research higher degree. The ITL analyses this data and provides a range of reports to staff and students of the university through their web site⁵

The ITL use responses obtained from graduates of the University of Sydney who completed their courses in the previous year (i.e. the 2008 reports are for students who completed in 2007). As an example: the 2008 reports are for graduates who completed their degree in 2007.

Quantitative data 2006 – 2008 (2005 – 2007 graduates)

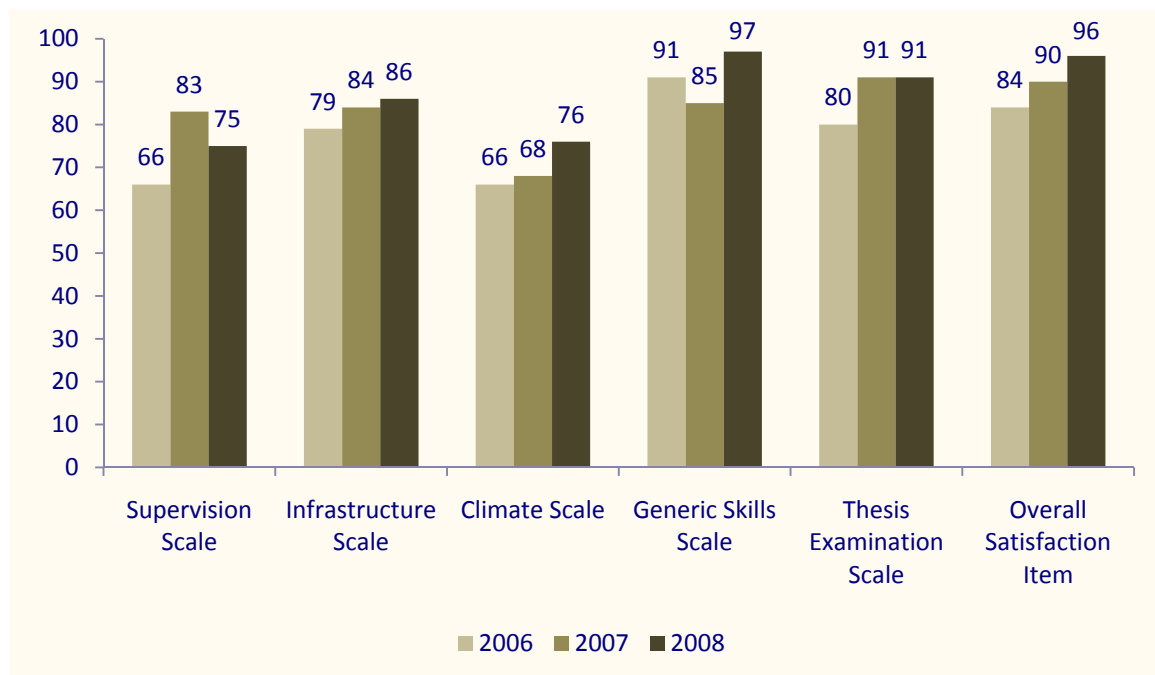


Figure 6: PREQ Factor Scales: 2006 - 2008

NB: In 2006 less than 20 graduates from the Faculty of Engineering and Information Technologies responded to the PREQ. Since this is below the minimum number recommended for statistical analysis of PREQ data (20) the results for 2006 in the above graph should be viewed with caution.

⁵ For more information on the PREQ, and results and reports 2002 - 2008 see <http://www.itl.usyd.edu.au/preq/>

Focus of written observations 2008 (2007 graduates)

The following written observations were received from research higher degree graduates in response to the open questions in the 2008 PREQ. The broad area(s) by which each comment has been analysed is indicated in the second column

Areas of best practice

Domestic students

COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
Other post-graduates/people and getting something done.	OVERALL SATISFACTION CLIMATE
Self directed research.	SUPERVISION
Conducting experiments and attending conferences. Submitting journal paper.	OVERALL SATISFACTION GENERIC SKILLS CLIMATE
Strong research community.	CLIMATE
Aeronautical Engineering Department support.	CLIMATE
Well regarded lab (The ACFR) with significant funding, equipment and opportunities. Great computing facilities and equipment. Great social life with numerous international students.	INFRASTRUCTURE CLIMATE
Good research colleagues.	CLIMATE
Camaraderie with colleagues.	CLIMATE
I have very much enjoyed my research study at Sydney University, from my project and all the way to collaboration with my supervisor who is no doubt a great leader and a great intellectual mind. I was happy that I had my own working space as well. The best aspect was the freedom to explore coupled with fantastic learning process on the way. I also have to comment on our library electronic resources. These are fantastic and I am glad they expand all the time, including purchasing new institutional licences and continually upgrading our resources.	OVERALL SATISFACTION INFRASTRUCTURE SUPERVISION
Equipment available, quality of supervision.	INFRASTRUCTURE SUPERVISION
The opportunity to develop my technical, writing and presentation skills further.	GENERIC SKILLS
Help me to develop my problem-solving skill, expose myself to different types of problems related to my topics.	GENERIC SKILLS
Exposure to research experience, interaction with like-minded individuals and experts in the field.	CLIMATE

International students

COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
Exploring new ideas in Bioinformatics, design and implement a Computer Algorithm to address these ideas and addressing some Biological and mathematical issues during my Research.	OVERALL SATISFACTION
Supervision was fair, independent research.	SUPERVISION
Research in the area of cutting edge technologies. Publication of the results in peer reviewed journals. Industrial application of the research.	OVERALL SATISFACTION
Finishing. Meeting other international students. Getting enough of a taste for research to convince me that it is not what I want to do with the rest of my life. Studying overseas has broadened me.	CLIMATE OVERALL SATISFACTION
Interesting topic.	OVERALL SATISFACTION
Develop my own technical skills and good communication skills with others.	GENERIC SKILLS

COMMENT

AREAS OF RESEARCH TRAINING EXPERIENCE

Developing new ideas and the ability to make a good plan for my research.

GENERIC SKILLS

Experienced what the outside world is and how you have to prepare to face challenges.

*CLIMATE
GENERIC SKILLS*

Suggested improvements

Domestic students

COMMENT

AREAS OF RESEARCH TRAINING EXPERIENCE

Financial support. Lack of financial support and funding in general is or has been my biggest concern. On all occasions I had to pay for my entire conference expenses overseas. I am very much surprised how insufficient support exists to help doctoral students in presenting their work at important meetings, yet alone represent Sydney University at these meetings as well. I do have to mention that I was not an APA recipient, if it matters. On one occasion I was fortunate to have my research supervisor support me directly, on the other occasion I have had good papers accepted after extended review for prestigious world symposia, only to find myself withdrawing it due to lack of support, not only to attend this meeting but just to pay the registration costs for the paper. Lack of office technical and quality equipment. I have spent 4 years of my post grad study only to find myself with an old Lexmark grayscale single sided and 3 page per minute paper output capacity. Even that was considered lucky. It would have been much nicer if I had a better printer and perhaps a scanner...but wow this would be a real luxury then!3. PRSS scheme used at School of EIE is somewhat misleading. Once I submitted my final bound thesis copy, I have found out that I am no longer eligible to claim any possible expenses including thesis binding copies. How ironic... the PRSS form clearly says that PRSS is meant to cover some expenses during your study, and including thesis binding copies...but only to find out inaccuracy in such information upon submission. Engineering should desperately be placed on a list to include collaboration and support from industrial partners. While I have very much enjoyed my research, it isolated me from reality in many ways, especially when we talk electrical engineering systems. It would be much nicer to have some industrial support or a form of consulting. At least the job search would be easier too. I find it very difficult now to get a job. This would not have been the case if I had 4 years of experience in industry, in comparison to recognition of my research experience. There is just a huge gap that needs to be addressed by university, community and industry in general terms. There should exist funds for supporting post grad students in book purchases. I have spent nearly 2000 dollars on ordering books which could not be found in the library. If these funds exist then they should be announced publicly and not kept in the darkness. Centrelink payments. I was very much surprised to find myself cut off from any Youth allowances because I decided to pursue research post grad studies in engineering. Student life is hard as it is already, yet alone not to be even supported by the government. Instead I had to dedicate my time to race and survive together with doing my research. Of course not everyone succeeds in obtaining an APA, but everyone seems to ignore this important fact. After all we all collectively strive to support and contribute to our national infrastructure.

*INFRASTRUCTURE
CLIMATE*

Guidance, planning and funding by supervisor. No planning of the development or the simulator made work and studying difficult.

SUPERVISION

Department administration/paperwork.

INFRASTRUCTURE

Guidance from supervisor. Guidance in topic selection/refine.

SUPERVISION

Need more interaction grad students - professors. Stronger focus on coursework.

*CLIMATE
OVERALL SATISFACTION*

Examination process and time line thesis was mislaid for many months delaying marking.

THESIS EXAMINATION

Better social organisation within postgraduates.

CLIMATE

Communication between cliques.

CLIMATE

COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
More structure in terms of 4 or 6-monthly progress evaluations would have been good.	<i>SUPERVISION</i>
Better research environment would be good (e.g. invite more people to give talks, etc).	<i>CLIMATE</i>
Supervisor was a problem. Politics in the lab meant that various groups controlled the equipment, got priority use and nearly stopped me from using it at all. Poor culture in the lab. Political and ego driven in parts rather than mutually beneficial. Remaining parts, particularly the international students were great. Not meaning to draw comparisons or rub it in, but UTS has a better research 'culture'.	<i>SUPERVISION INFRASTRUCTURE CLIMATE</i>
<i>International students</i>	
COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
Computational software was not really available all the time and has some weaknesses. Theoretical and practical Biological fact can be integrated into Computer Science to achieve Better Solution.	<i>INFRASTRUCTURE</i>
Fees very high!	<i>INFRASTRUCTURE</i>
The social interaction within the department was lacking, though this was due in equal parts to the department head not really making it a priority, and the students being socially awkward. The head of department for the second half of my time in the department was untrustworthy. I didn't feel I could go to him with problems, especially when he was causing the problems. The research standards within the department weren't that great, lots of crap work being done. Not saying mine was great mind you, but I was aiming a little higher than some of the students. The dept seems to have fallen into a quantity over quality mode, but that is just my opinion. Maybe the new HOD will change that. I also felt that international students got pumped with having to pay a fortune in union fees. I know this has changed now, but it left a really bitter taste. We got none of the benefits of undergrads, but we still had to pay a lot. Just because I was a full fee paying student (I had a scholarship and a departmental fee waiver) doesn't mean that I had \$500 to spend on union fees every year.	<i>INFRASTRUCTURE CLIMATE</i>
Worked sometimes very isolated from others. Due to the topic which didn't interest the others too much.	<i>CLIMATE</i>
Thesis examining takes too long.	<i>THESIS EXAMINATION</i>
Doing more research.	<i>OVERALL SATISFACTION</i>
Good as they are.	<i>N/A</i>