Faculty of Dentistry

Student Research Experience Questionnaire Report

Trends and key issues: 2006 - 2010

May 2011

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EXECUTIVE SUMMARY

INTRODUCTION

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

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

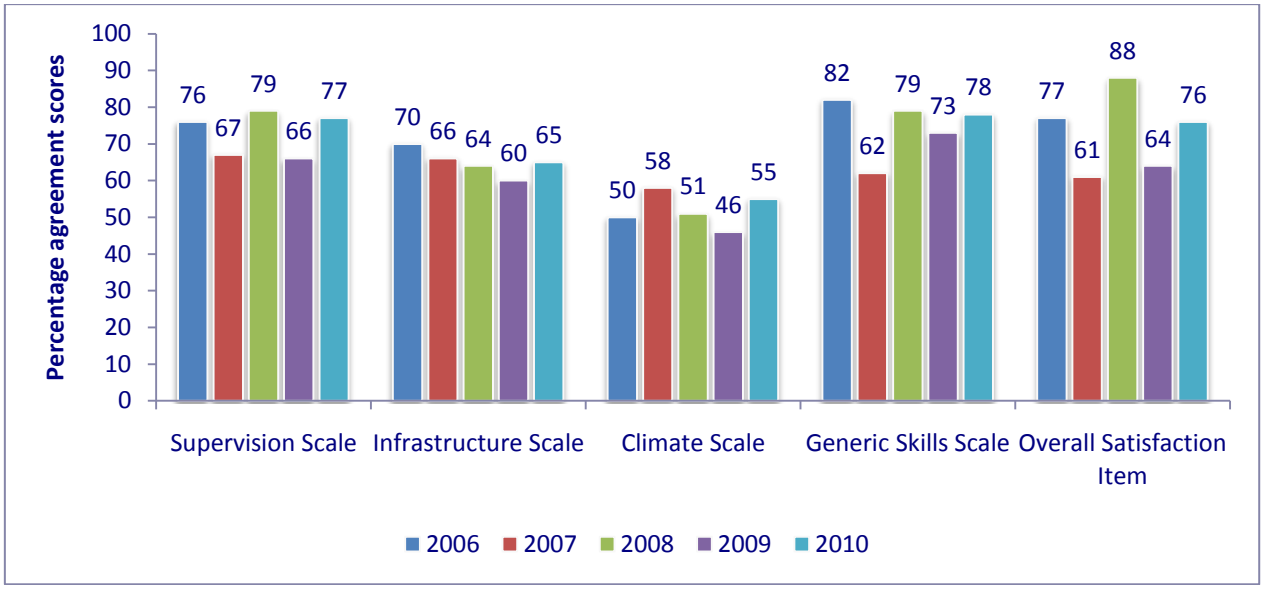
The analysis of qualitative data received between 2006 and 2010, and reported in this document, is based on written observations received from **all** respondents who answered the open questions in the SREQ.

COMPARATIVE DATA: 2006 – 2010[1]

Quantitative data

The following chart provides a comparison of the results of the SREQ percentage agreement results (i.e. respondents who either agreed or strongly agreed with the survey items relating to each scale) for the Faculty of Dentistry since 2006.

Figure 1: Faculty of Dentistry: Percentage agreement results: SREQ 2006 - 2010



Qualitative Data

Comparative data: 2006 – 2010

The charts on the following page provide an indication of those areas of the research higher degree student experience that respondents considered to be either of best practice or in need of improvement in their responses to the open questions in the SREQ 2006 – 2010. In 2010, 75% of respondents provided written observations on areas of best practice; whilst 80% suggested improvements.

[1] More detailed data, i.e. comparing the results from domestic and international students is available in the individual sections of the report. Statistical data regarding the number of students who responded to the SREQ, together with data on those who answered the open questions, can be found at Attachment One.

Figure 2: Faculty of Dentistry: Areas of best practice: SREQ 2006 - 2010

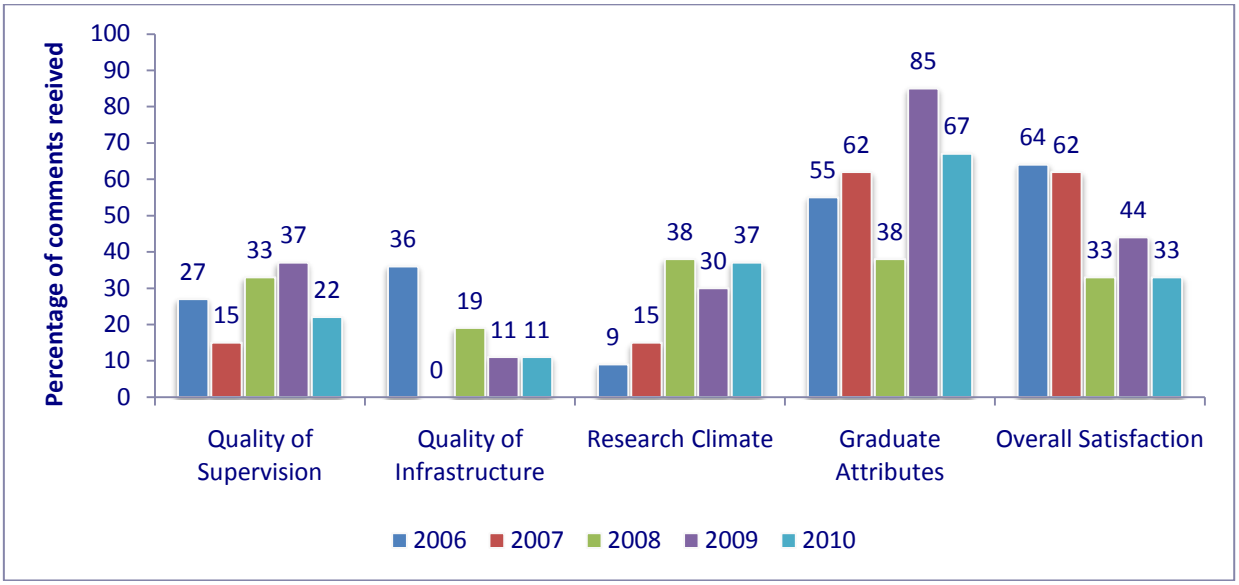
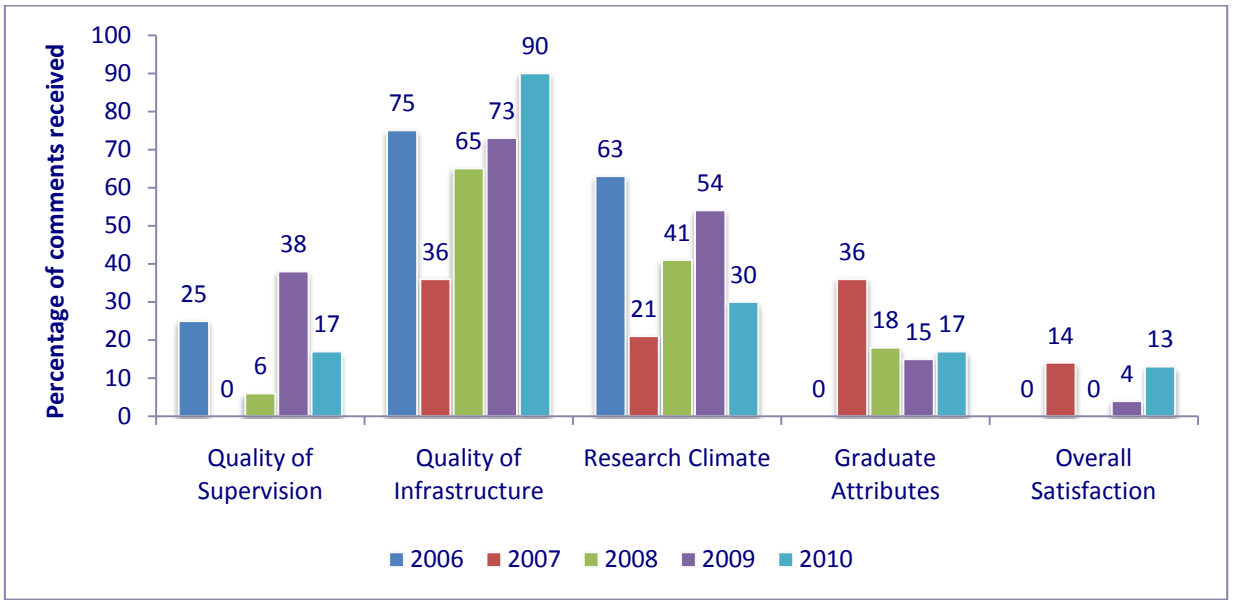


Figure 3: Faculty of Dentistry: Areas needing improvement: SREQ 2006 – 2010

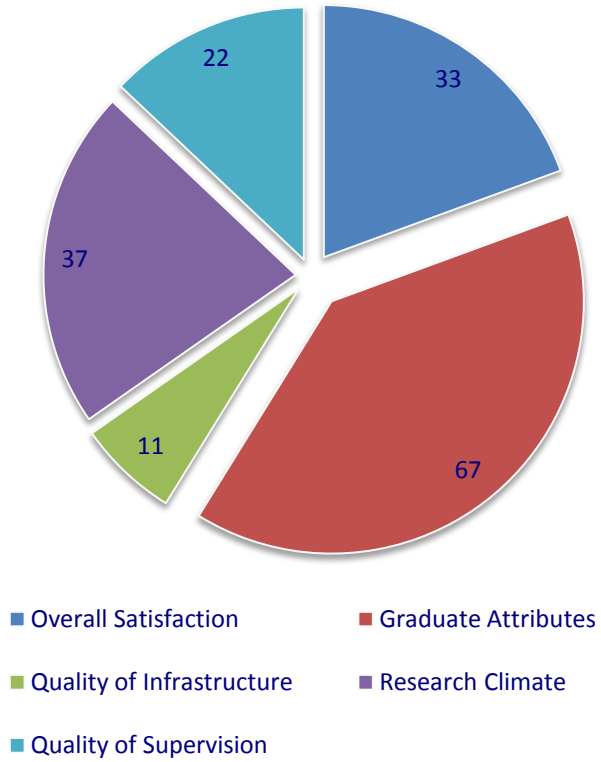


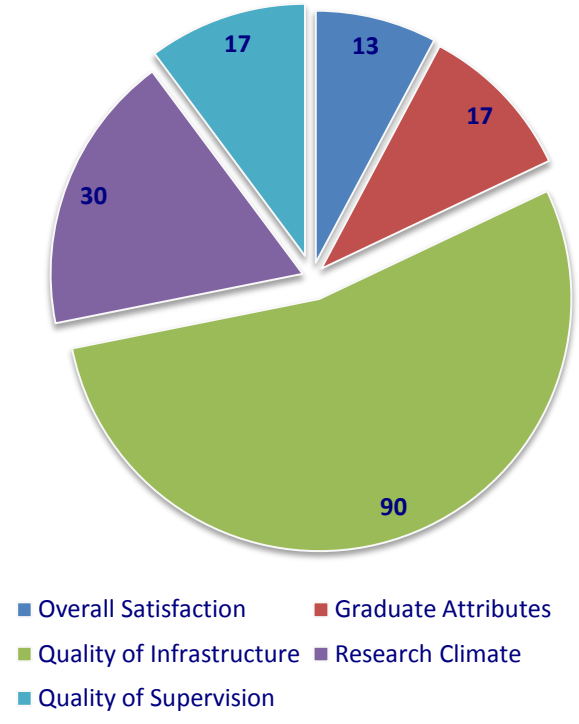
Key issues: 2010

The charts on the following page provide an overview of the issues that were of importance to research higher degree students in the Faculty in 2010.

Narrative and proportional chart data show the percentage of the total number of comments received from respondents for each of the main categories of the research higher degree student experience, together with an indication of those components that were mentioned most frequently. The statistical data indicates the distribution within each scale and category. Further detail is provided in Sections 1 – 6 of this report.

NB: the numbers in each of the pie slices add up to more than 100% because students often mention more than one aspect of their experience in their answers, each of which is counted once. *(see Attachment Two for explanation on analysis and counting of comments)*

Proportional distribution of comments	Focus of comments
Best Practice  	**Graduate Attributes** 67% ***Research & Inquiry:*** Analytical, problem solving, critical thinking, research skills, expand knowledge (48%) ***Personal and Intellectual Autonomy***: ability to work independently, tackling unfamiliar problems, time management, confidence (15%) **Research Climate** 37% ***Research community***: Conferences, seminars, research culture/ group etc, publishing (19%) ***Work environment***: Challenging, welcoming, supportive, induction, respect (11%) **Overall Satisfaction** 33% ***Satisfaction with research***: Topic, contribution to field etc (15%) ***Flexibility of program***: Freedom, independence (15%) **Quality of Supervision** 22% ***Supervisors***: Supervisor(s), feedback, meetings, understanding and empathy (19%) **Quality of Infrastructure** 11% ***Facilities:*** Equipment, instruments (7%)

Needs improvement  	**Quality of Infrastructure** 90% ***Facilities:*** Workspace, equipment, laboratories (47%) ***Funding***: for research, scholarships, grants, travel, conferences etc (37%) ***Support Services:*** Ethics Office; Learning Centre (7%) **Research Climate** 30% ***Research community***: Conferences, seminars, research culture/ group etc, publishing (10%) ***Location:*** off campus, isolation etc (13%) **Quality of Supervision** 17% ***Supervision process***: General comments (7%) ***Management of candidature:*** guidance, workload (7%) **Graduate Attributes** 17% ***Research & Inquiry:*** Analytical, problem solving, critical thinking, research skills, expand knowledge (13%) **Overall Satisfaction** 13% ***Quality of degree:*** coursework, structure etc (7%)

FOR MORE INFORMATION

On the analysis and reporting of qualitative data

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SREQ Faculty reports are at: http://sydney.edu.au/learning/evaluating/research_higher_degree_reports.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/

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 Dentistry between 2006 and 2010. The report also provides detailed information on the key issues highlighted in the analysis of the 2010 SREQ qualitative data.

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 2010 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.

ATTACHMENTS

The following attachments are provided at the end of the report:

1 Statistical data: number of respondents to the SREQ by Faculty and by School
2 Analysis and counting of comments
3 SREQ Factors

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

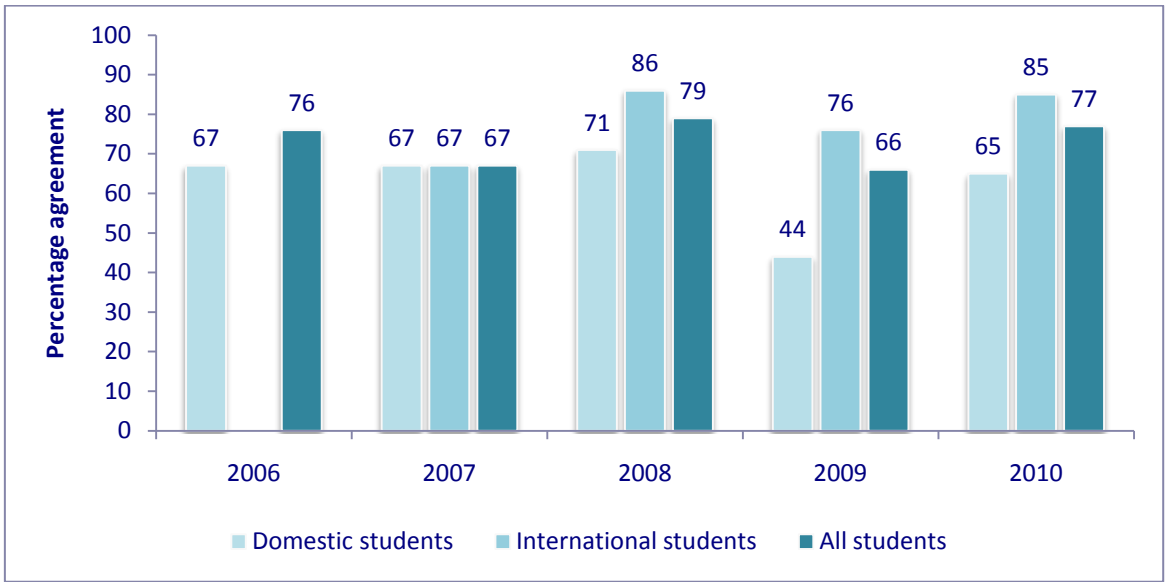
1.1 BACKGROUND INFORMATION

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: 2006 - 2010

The following graph shows the proportion of students who either agreed or strongly agreed with relevant Supervision Scale survey items in the SREQ between 2006 and 2010.

Figure 4: SREQ Supervision Scale: Percentage agreement results: 2006 - 2010



1.3 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS: 2006 – 2010

The following chart provides an indication of trends in the research higher degree student experience of the Quality of Supervision, as indicated in their responses to the open questions in the 2006 - 2010 SREQ. It demonstrates the relationship between areas of best practice, and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 5: Quality of Supervision: Focus of written observations: 2006 - 2010

1.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2010)

1.4.1 Areas of best practice

	Domestic (n=10)	International (n=17)	All (n=27)
Quality of Supervision	***30%***	***18%***	***22%***
- Supervisor(s)	20%	18%	19%

Sample comments

- The support from my supervisors has been fantastic. They have guided me with regards to identifying my research direction despite the high volume of students they supervise
- I've had good supervision, I'm really pleased with my supervisor and the head of department, they are very supportive
- Supervision is on the highest standard as my supervisor is very helpful
- my supervisor mostly supports my new ideas to guide my research

1.4.2 Areas needing improvement

	Domestic (n=13)	International (n=17)	All (n=30)
Quality of Supervision	***31%***	***6%***	***17%***
- Management of candidature	15%	0%	7%
- Supervision process	8%	6%	7%

Sample comments

- More careful selection of supervisors - they must want to be part of the project
- Supervision. Supervisor too busy. Not enough time allocated to students
- support and supervision as we sometimes do not have help that is needed
- I do not have sufficient control over the direction of my research because I didn't have enough experience in this field so I need more guideline about what is the next step

2 QUALITY OF INFRASTRUCTURE

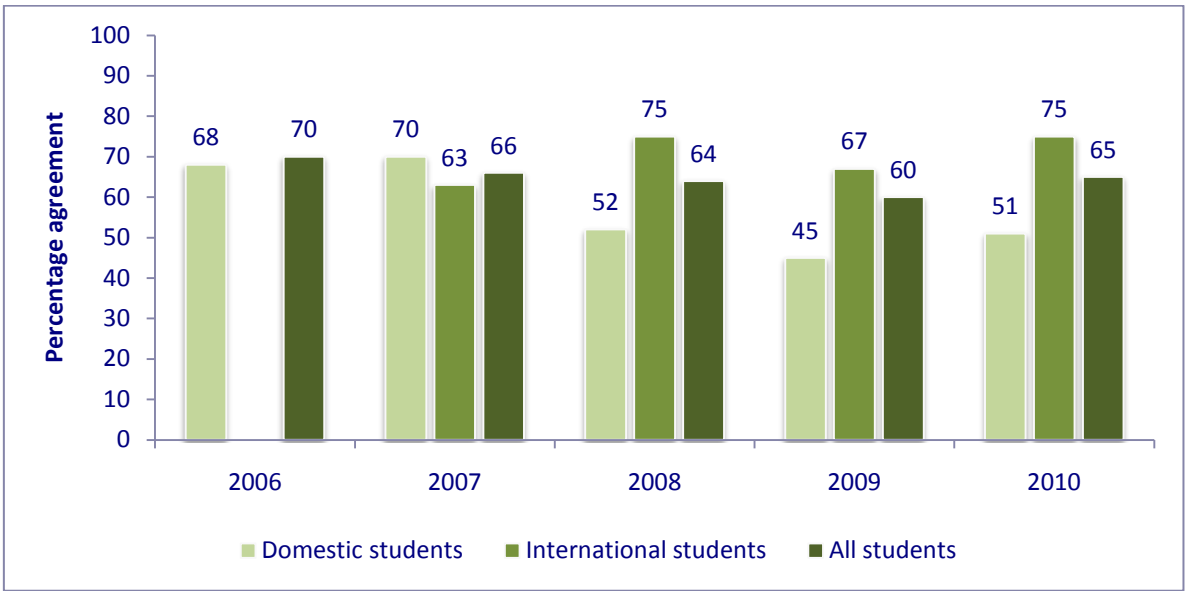
2.1 BACKGROUND INFORMATION

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: 2006 - 2010

The following graph shows the proportion of students who either agreed or strongly agreed with Infrastructure Scale survey items in the SREQ between 2006 and 2010.

Figure 6: Quality of Infrastructure: Percentage agreement results: SREQ 2006 - 2010



2.3 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS: 2006 – 2010

The following chart provides an indication of trends in the research higher degree student experience of the Quality of Infrastructure, as indicated in their responses to the open questions in the 2006 – 2010 SREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 7: Quality of Infrastructure: Focus of written observations: SREQ 2006 - 2010

2.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2010)

2.4.1 Areas of best practice

	Domestic (n=10)	International (n=17)	All (n=27)
Quality of Infrastructure	***10%***	***6%***	***7%***

Sample comments

- The admin support from my faculty has also been excellent
- I like the facilities in the university that I'm involved with. e.g. my study with facility at the electron microscope unit. many people instruct me and help me with my studies

2.4.2 Areas needing improvement

	Domestic (n=13)	International (n=17)	All (n=30)
Quality of Infrastructure	***92%***	***88%***	***90%***
- Facilities	54%	41%	47%
- Finance and funding	38%	35%	37%
- Support services (Ethics Office and Learning Centre)	8%	6%	7%

Sample comments

- Access to facilities and services at remote campus. We are the forgotten students
- Their needs to be more flexibility in the administration of APA/UPA scholarships. If students have been successful with external scholarship funding to complete part of their degree overseas then the full balance of their APA/UPA must be available to them on their return to Sydney regardless of how long the overseas component takes to complete. Limiting it to one year, as is the current situation, discriminates against those students who require more time than this to complete their overseas work. If postgrad students on a APA/UPA return after 1 year they are left with no funding from the university to complete their degree. This will lead to the need to work on a part-time basis to self-fund their degree which may lead to degrees being extended and possible non-completions. PRSS funding is minimal at best. All postgrad students should be given equal funding for their PRSS claim. The university should provide more funds to Faculties based on the number of postgrad students they have so that each student has access to similar dollar value amounts
- My department is in Westmead, Centre for Oral Health. There, I feel a bit isolated from whole university environment and other postgraduate students. In Westmead, even we are not able to use some common websites, such as facebook and youtube. I've seen that there is even a facebook account for Sydney uni students, but there is no access to this website at W.C.O.H. There are many useful videos related to research and for the improvement of general knowledge in youtube, but access to this site is also prohibited. I need this university to take an action towards that sort of limitations for students, and find some solutions to make students like me far less isolated from the events of Sydney Uni
- Physical conditions is poor. There is not enough space for students. I should not study at home like I am doing now

3 RESEARCH CLIMATE

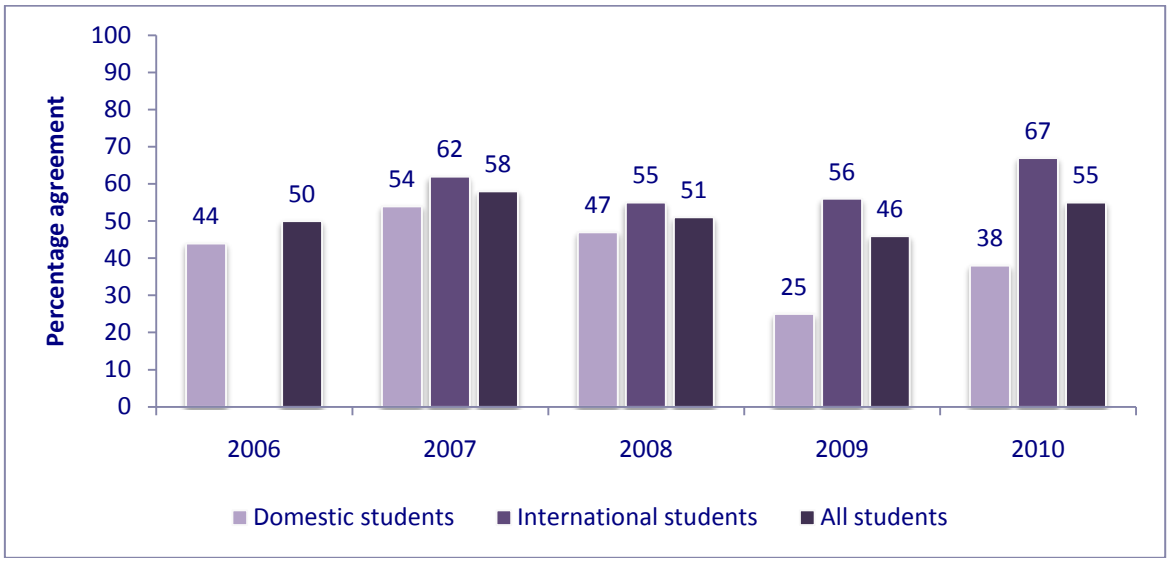
3.1 BACKGROUND INFORMATION

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: 2006 - 2010

The following graph shows the proportion of students who either agreed or strongly agreed with Climate Scale survey items in the SREQ between 2006 and 2010.

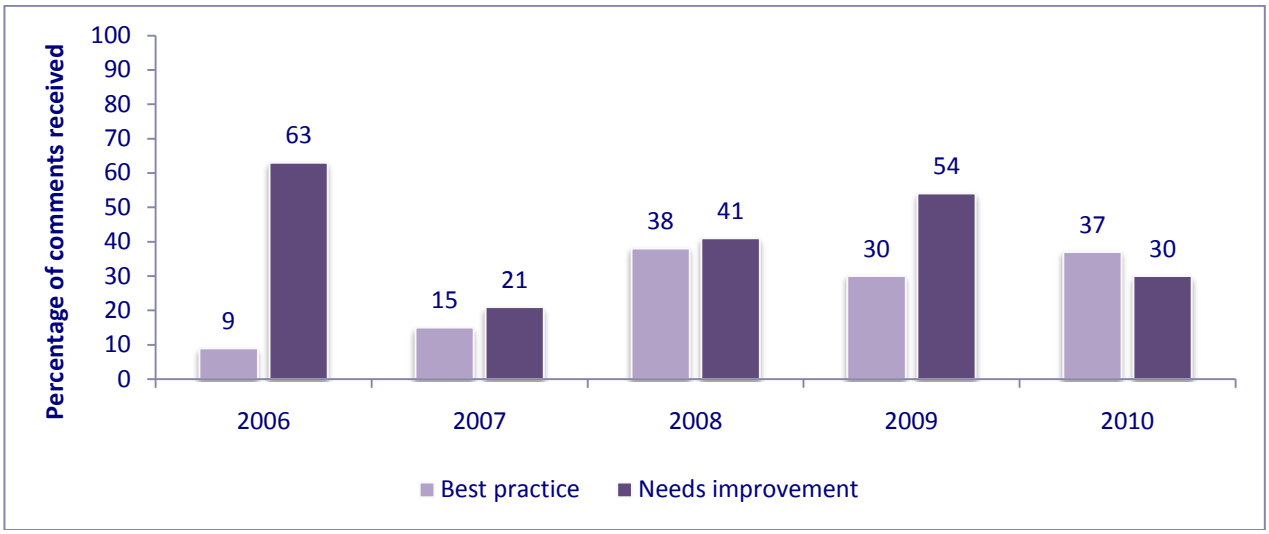
Figure 8: Climate Scale: Percentage agreement results: SREQ 2006 - 2010



3.3 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS: 2006 – 2010

The following chart provides an indication of trends in the research higher degree student experience of Research Climate, as indicated in their responses to the open questions in the 2006 – 2010 SREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 9: Research Climate: Focus of written observations: SREQ 2006 - 2010



3.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2010)

3.4.1 Areas of best practice

	Domestic (n=10)	International (n=17)	All (n=27)
Research Climate	***40%***	***35%***	***37%***
- Research community/ culture	10%	24%	19%
- Work environment	10%	12%	11%

Sample comments

- Working with multicultural, research scholars, also talented in different places
- I'm really pleased with my supervisor and the head of department, they are very supportive
- The best aspect is the collaborative research culture which contributes to a higher level of research output from all. And the guidance and learning that we can get in this sort of atmosphere is of immeasurable value
- The opportunity to interact and learn from the experts in this field who really open up my mind and make me see things from various angles

3.4.2 Areas needing improvement

	Domestic (n=13)	International (n=17)	All (n=30)
Research Climate	***23%***	***35%***	***30%***
- Research community/ culture	8%	12%	10%
- Location	8%	18%	13%

Sample comments

- Better networking opportunities
- For students who do not study in main campus. It is difficult to access to some facilities and trainings. Such as English training which is only in learning centre. Right now it would be great if uni can provide similar course in other campus
- More frequent formal seminars/forum to discuss with both supervisors and other postgraduates their research progress, problems encounter etc.
- organising seminar or discussion group in the department

4 GRADUATE ATTRIBUTES

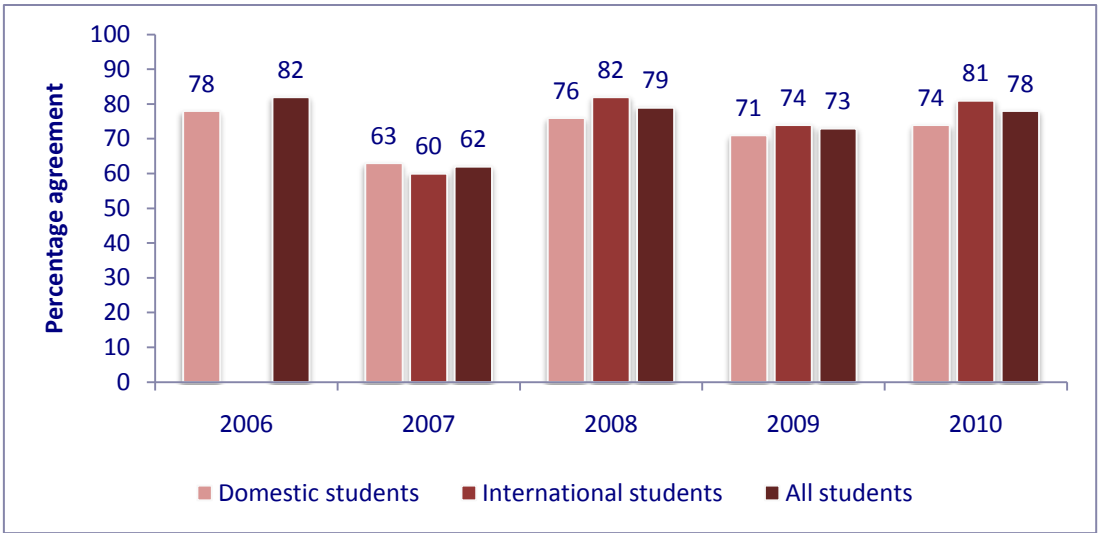
4.2 BACKGROUND INFORMATION

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: 2006 - 2010

The following graph shows the proportion of students who either strongly agreed or agreed with Generic Skills Scale survey items in the SREQ between 2006 and 2010.

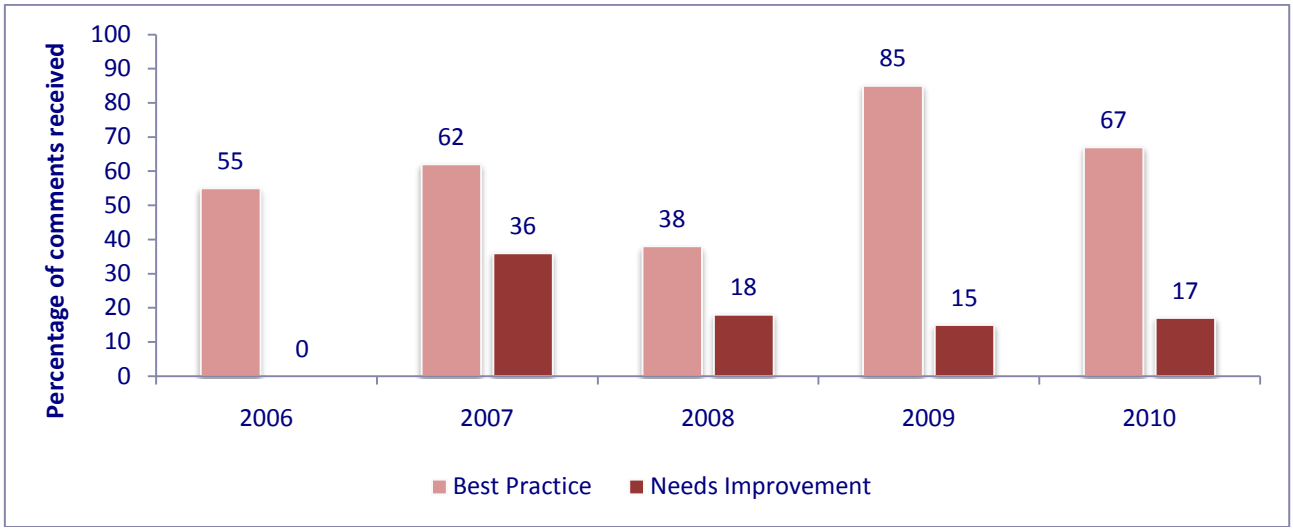
Figure 10: Generic Skills: Percentage agreement results: SREQ 2006 - 2010



4.4 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS: 2006 – 2010

The following chart provides an indication of trends in the research higher degree student experience relating to the enhancement of University Graduate Attributes, as indicated in their responses to the open questions in the 2006 – 2010 SREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 11: Graduate Attributes: Focus of written observations: 2006 - 2010



4.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2010)

4.4.1 Areas of best practice

	Domestic (n=10)	International (n=17)	All (n=27)
Graduate Attributes	***20%***	***94%***	***67%***
- Research and Inquiry	0%	76%	48%
- Personal and intellectual autonomy	20%	12%	15%

Sample comments

- As a result of my research I have developed the ability to learn independently and I can think about different aspect of doing research , finding new idea that should be done in future and try to discuss with others about new ideas I have in my mind
- Developed the ability to learn independently
- Always a lot of new things we can learn (knowledge, communication skill, how to deal with the problems) because you can feel challenge every day and improve your ability every day
- The development of analytical skills which could be used throughout the life and pave the way for a successful career in science

4.4.2 Areas needing improvement

	Domestic (n=13)	International (n=17)	All (n=30)
Graduate Attributes	***0%***	***29%***	***17%***
- Research and Inquiry	0%	24%	13%

Sample comments

- Exercises in writing research protocols and grant applications are a must as these skills are key to becoming independent and competent researchers. Also, a set amount of course work in advanced epidemiological and statistical methodology are required for researchers in the health field to further develop their research capabilities. This coursework should be made mandatory for all higher research degrees. For example, a PhD student in the faculty of dentistry at USYD will come into the program having done a masters' in public health or some such degree which teaches you the basics of research. However, at a PhD level you need to further enhance your skills. UNSW offers coursework- Advanced Epidemiology and Advanced Statistics which are not offered at USYD. In my opinion, higher research degree candidates need to have these advanced skills to make a more complete researcher.
- Analysis of data and more deeper sophisticated thinking in basic science

5 OVERALL SATISFACTION

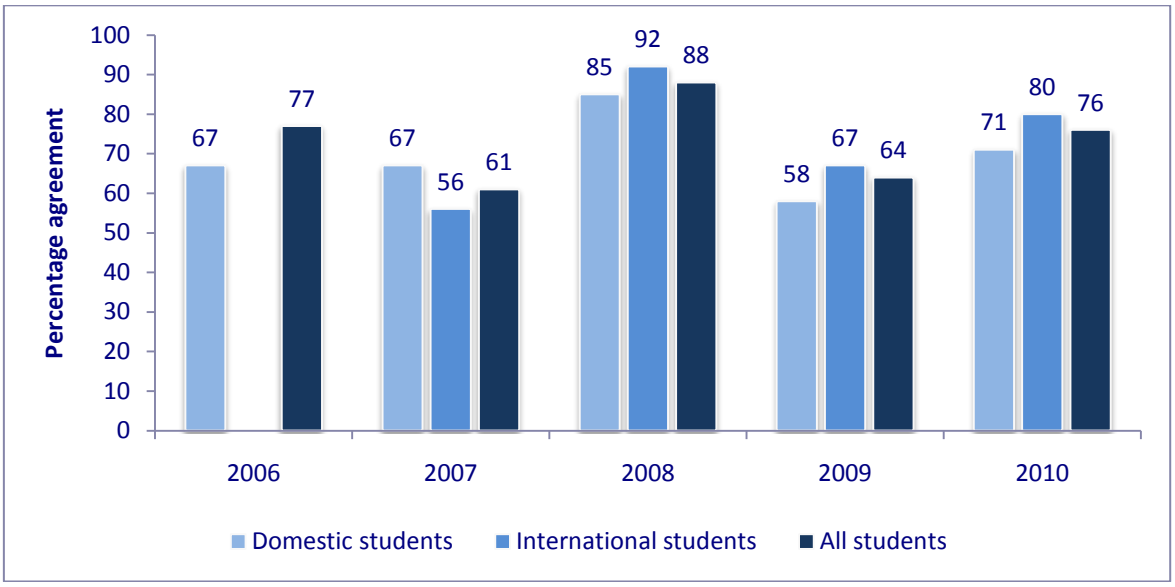
5.1 BACKGROUND INFORMATION

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, flexibility of programme, quality of degree (pressure to complete, coursework, field work, overseas research), and reputation of the university/ faculty.

5.3 COMPARATIVE RESULTS: QUANTITATIVE DATA: 2006 - 2010

The following graph shows the proportion of students who either strongly agreed or agreed with the Overall Satisfaction item in the SREQ between 2006 and 2010.

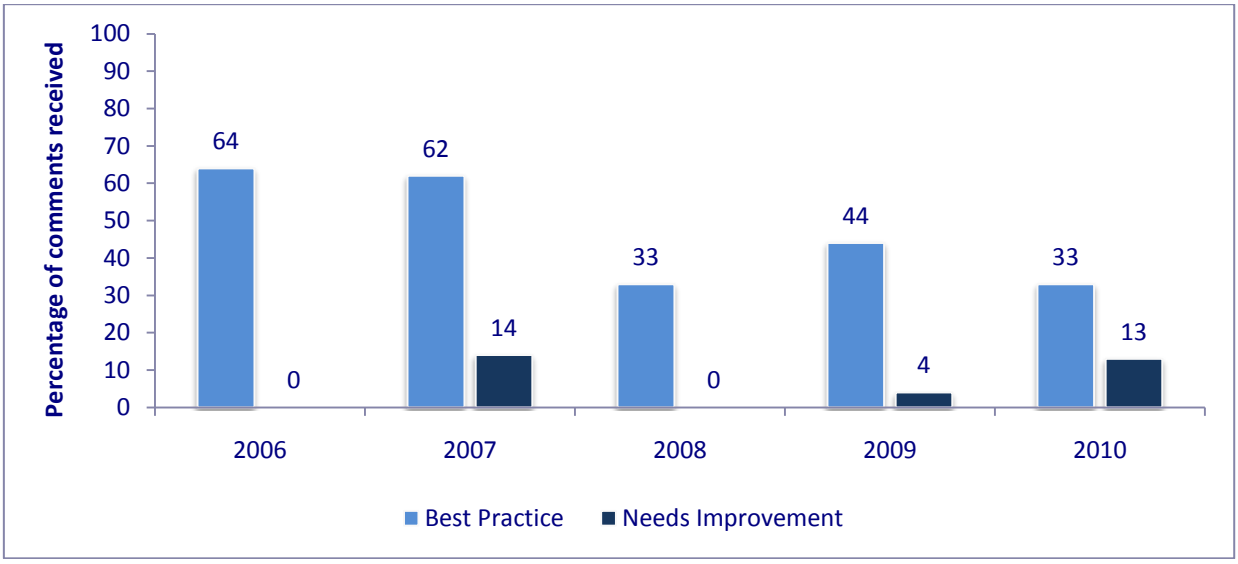
Figure 12: Overall Satisfaction Item: Percentage agreement results: SREQ 2006 - 2010



5.4 COMPARATIVE RESULTS: FOCUS OF WRITTEN OBSERVATIONS: 2006 – 2010

The following chart provides an indication of trends in the research higher degree student experience aspects which fall within the remit of Overall Satisfaction, as indicated in their responses to the open questions in the 2006 – 2010 SREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 13: Overall Satisfaction: Focus of written observations: SREQ 2006 - 2010



5.4 KEY ISSUES FOR RESEARCH HIGHER DEGREE STUDENTS (SREQ 2010)

5.4.1 Areas of best practice

	Domestic (n=10)	International (n=17)	All (n=27)
Overall Satisfaction	***50%***	***24%***	***33%***
- Satisfaction with research	40%	0%	15%
- Flexibility of program	10%	18%	15%

Sample comments

- Getting a result that will add to own existing evidence base and may help mould regulations
- I am trying some technically novice methods to prove my concept .If I succeed in that it will be an good opening for my further research in that field
- Flexibility in the program
- working with experts in my field and introduction of new ideas and using new techniques

5.4.2 Areas needing improvement

	Domestic (n=13)	International (n=17)	All (n=30)
Overall Satisfaction	***15%***	***12%***	***13%***
- Quality of degree (incl. coursework)	0%	12%	7%

Sample comments

- The university, in line with difficult financial climate for research, is functioning in a conservative mode which makes it difficult for the students to use the full potential of the university. For example, charging the student's department for using minimal facilities in main campus makes it quite difficult and at times impossible to utilize the full potential of the student and infrastructure
- Also, a set amount of course work in advanced epidemiological and statistical methodology are required for researchers in the health field to further develop their research capabilities. This coursework should be made mandatory for all higher research degrees. For example, a PhD student in the faculty of dentistry at USYD will come into the program having done a masters' in public health or some such degree which teaches you the basics of research. However, at a PhD level you need to further enhance your skills. UNSW offers coursework- Advanced Epidemiology and Advanced Statistics which are not offered at USYD. In my opinion, higher research degree candidates need to have these advanced skills to make a more complete researcher. Also, a certain number of credits should be allowed free across all schools and faculties to PhD students so that there is the option to further develop skills in this current system (where advanced coursework is not mandatory). For example, I wanted to take credits at the school of public health in more advanced statistical methods but could not as this was not free for students at the faculty of dentistry

ATTACHMENT ONE: STATISTICAL DATA

1 QUANTITATIVE DATA ANALYSIS

Number of research higher degree students surveyed/ enrolled 2006 – 2010					
	2006	*2007*	*2008*	*2009*	*2010*
	n=	n=	n=	n=	n=
Total	20	28	38	47	51

Number of respondents to the SREQ 2006 – 2010					
	2006	*2007*	*2008*	*2009*	*2010*
	n=	n=	n=	n=	n=
Domestic students	9	10	14	12	14
International students	4	9	14	27	22
Total	**13**	**19**	**28**	**39**	**36**
% who responded	*65%*	*78%*	*74%*	*83%*	*71%*

2 QUALITATIVE DATA ANALYSIS

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

Number of respondents who answered the open questions SREQ 2006 – 2010						
	Date of survey	*2006*	*2007*	*2008*	*2009*	*2010*
		n=	n=	n=	n=	n=
Areas of best practice	Domestic students	7	6	10	8	10
	International students	4	7	11	19	17
	Total	**11**	**13**	**21**	**27**	**27**
	% who provided comments	*85%*	*68%*	*75%*	*69%*	*75%*
Areas of improvement	Domestic students	6	6	8	8	13
	International students	2	8	9	18	17
	Total	**8**	**14**	**17**	**26**	**30**
	% who provided comments	*62%*	*74%*	*61%*	*67%*	*83%*

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 less than 5, results are excluded from the report as they are likely to be unreliable.

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

ATTACHMENT TWO: NOTES ON ANALYSIS AND COUNTING OF COMMENTS

1 ANALYSIS OF COMMENTS

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

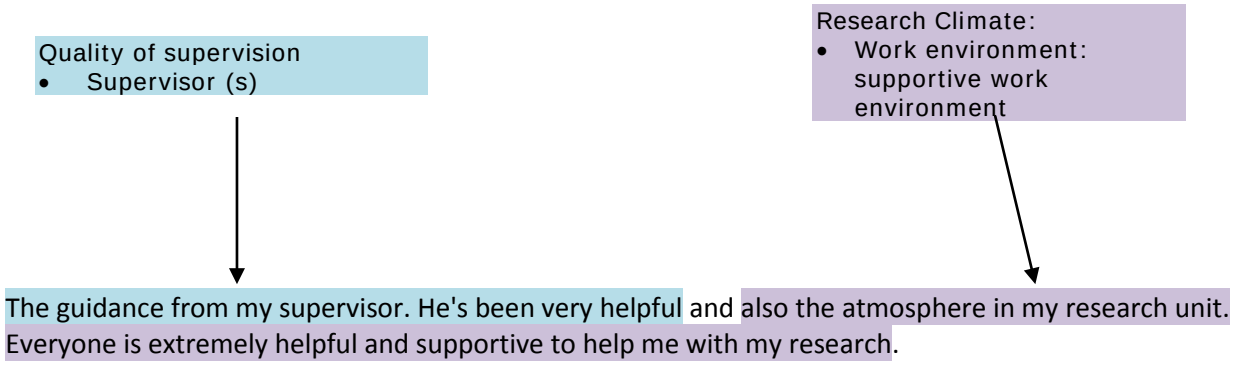
- Characteristics that define the area of the student experience
- SREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

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

2 COUNTING OF COMMENTS

Each comment is analysed according to the *Taxonomy for analysing qualitative data from the SREQ*, 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(s)); and Research Climate: Work environment), the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 2 aspects in one comment.



ATTACHMENT THREE: 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 (*PGARC*; *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*)

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 (*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, international 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 9 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, practical aspects, including field work and visits to other institutions in Australia and overseas)*
- 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*)
- Reputation/ prestige of university/ faculty/ department/ academic staff
- Quality of students
- Staffing issues and resources (*i.e. that affect students overall experience*)
- Writing and completing the thesis