

University of Sydney

Student Research Experience Questionnaire Report : 2005 - 2009

October 2010

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EXECUTIVE SUMMARY

INTRODUCTION

Data on research higher degree students' perceptions of their research training experiences are gathered each year using the Student Research Experience Questionnaire (SREQ). The purpose of the SREQ is to provide the University community with a basis for strategic, faculty level academic development and curriculum review to further enhance the quality of research higher degrees. Analysis of this data provides a comprehensive picture of trends in the student experience, and the performance of the University 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 Skills¹.

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

KEY RESULTS FOR 2009

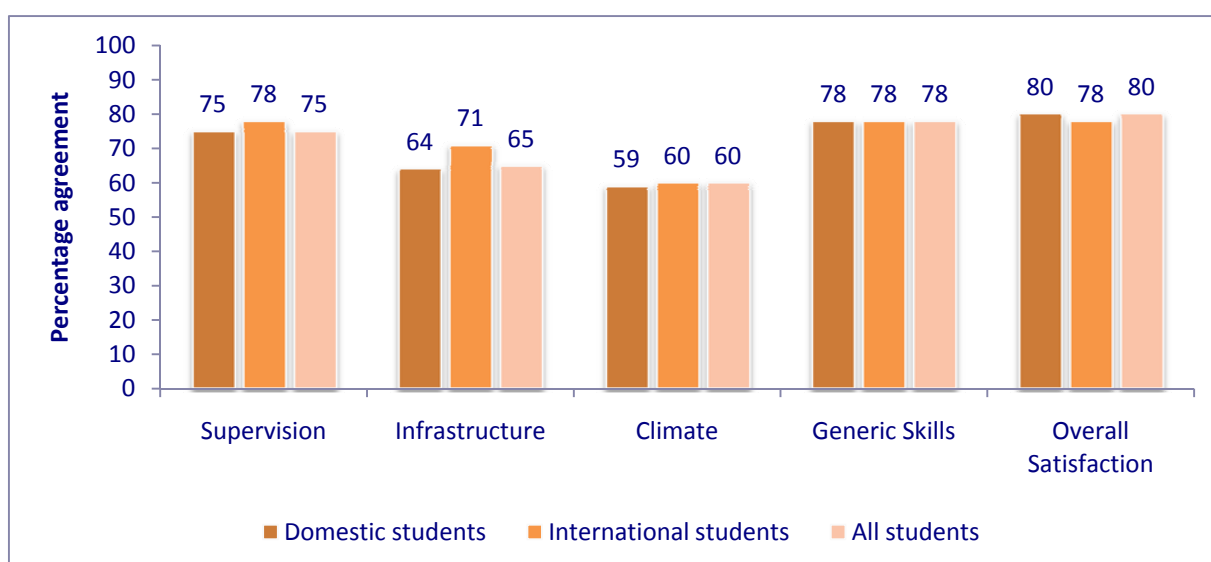
The following results are an indication of those areas of the student experience that were of significance to research higher degree students during 2009. The quantitative data (percentage agreement results) reflect the experiences of respondents in relation to specific items in the survey; the qualitative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

NB: Sections 1-5 of the report provide further information on trends in the results of the analysis of both quantitative and qualitative data for each SREQ Scale since 2005, together with key issues from 2009.

QUANTITATIVE DATA

The following chart shows the 2009 SREQ percentage agreement results (i.e. respondents who either agreed or strongly agreed with the survey items relating to each scale) for the University, divided into domestic, international and all respondents. Of the 4020 research higher degree students who were surveyed in September 2009, 61% submitted completed questionnaires.

Figure 1: University of Sydney: Percentage agreement results: SREQ 2009



There has been little change in the above scores since 2005; however it should be noted that during this time there has been a steady increase in research higher degree student enrolments (3375 in 2005; 4020 in 2009).

¹ Individual faculty reports are available at http://www.usyd.edu.au/learning/evaluating/sreq_or.shtml

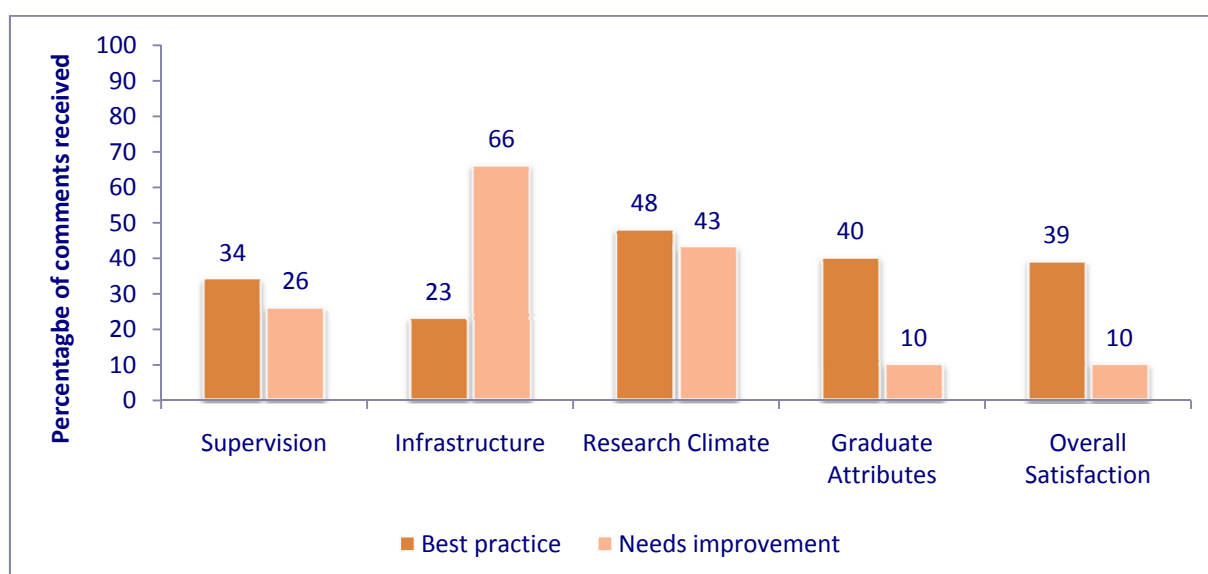
FOCUS OF WRITTEN OBSERVATIONS SREQ 2009

1876 or 77% of respondents to the 2009 SREQ (1535 domestic students; 341 international students) answered the open question requesting comments on areas of best practice in their research higher degree experience; 1653 or 67% of respondents (1338 domestic students; 315 international students) suggested areas in need of improvement.

1 An overview

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

Figure 2: University of Sydney: Focus of written observations: SREQ 2009



The distribution of comments between areas of best practice and areas in need of improvement shown in the above table for 2009, are a reflection of the results of the analysis of qualitative data since 2006.

2 Key issues

2.1 Quality of Supervision

Respondents to the SREQ have consistently provided more positive than negative comments on the Quality of Supervision. As a general rule, the majority of comments, both positive and negative, refer to individual supervisors, rather than the supervision process, or management of the candidature. In 2009:

34% of respondents mentioned aspects of Supervision as an **Area of best practice**. Of these:

- 21% appreciated the support of their **Supervisors**, together with their availability for consultation, and the provision of networking opportunities.

26% of respondents mentioned aspects of Supervision as an **Area needing improvement**. Of these:

- 12% were dissatisfied with their **Supervisors**. Areas of concern included: unavailability for meetings; lack of constructive feedback on work; and lack of relevant knowledge in relation to the research topic.
- Dissatisfaction with the **Supervision process**, including evaluation and training of supervisors, was mentioned in 7% of comments received.
- A further 7% of respondents would appreciate more guidance in literature review, research proposal, structure of the degree program and related topics within the remit of **Management of candidature**

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

2.2 Quality of infrastructure

Respondents to the SREQ have consistently mentioned aspects of Infrastructure as an area in need of improvement rather than one of best practice. Whilst comments expressing satisfaction focus mainly on physical facilities and research resources, those expressing dissatisfaction centre around funding, facilities and administration. In 2009:

23% of respondents mentioned aspects of Infrastructure as an **Area of best practice**. Of these:

- 9% appreciated the **Physical facilities** provided (workspace, computers, equipment etc).
- 7% were satisfied with the **Research resources** provided. The majority of comments referred to library services.

66% of respondents mentioned aspects of Infrastructure as an **Area needing improvement**. Of these:

- 26% were dissatisfied with the **Physical facilities** provided, particularly the provision of dedicated work spaces and desks
- 22% would appreciate better **Funding** for research and travel, and more scholarships and an increase in the PRSS and related grants.
- 8% were unhappy with aspects of **Administration**.

2.3 Research Climate

Since 2006, respondents have provided more comments relating to Research Climate as an area of best practice, rather than one needing improvement. Three main aspects of this area of the research higher degree student experience feature in both positive and negative comments: interaction with other students; feeling part of a research community; and being part of a welcoming and supportive work environment. In 2009:

48% of respondents mentioned aspects of the Research Climate as an **Area of best practice**. Of these:

- 21% were happy with the prevalent **Research community** present in the University, especially the opportunities to attend and present at conferences and seminars, being part of a research group, and the networking opportunities these afforded. Of note is the fact that all faculties recorded twice as many positive comments than negative comments on this aspect of their experience.
- 17% of respondents considered that they belonged to a welcoming and supportive **Work environment**.
- 7% appreciated opportunities to **Interact with other research higher degree students**, both academically and socially, finding this provided much needed support in the research training experience.

43% of respondents mentioned aspects of the Research Climate as an **Area needing improvement**. Of these:

- 17% considered that their **Work environment** was neither welcoming nor supportive, leading to feelings of isolation.
- 11% expressed concern about the **Research community**. The majority of comments related to attendance at conferences, and the concomitant networking opportunities that were missed due to a lack of financial support to attend the same.
- 8% of respondents felt isolated from their peers, especially when faculties did not actively encourage **Interaction between research higher degree students**.

2.4 Graduate Attributes

A change in the focus of comments relating to Graduate Attributes is evident when comparing written observations from coursework students (SCEQ) and research higher degree students (SREQ) on this topic. Whereas coursework students tend to focus on tasks and abilities within the Ethical, Social and Professional Understanding cluster, research higher degree students' comments focus mainly around Research and Inquiry, and Personal and Intellectual Autonomy. Historically very few comments are received on this topic in answers to the question on areas needing improvement. In 2009:

40% of respondents to the 2009 SREQ mentioned one or more of the University Graduate Attributes as an **Area of best practice**. Of these:

- 21% mentioned tasks and abilities within the **Research and inquiry** cluster. The majority of these focused on the development of analytical, problem solving, and research skills, critical thinking, and expansion of the knowledge base. Where present, students appreciated research methodology and similar courses.

- 8% of respondents appreciated the fact that they were developing the ability to tackle unfamiliar problems, together with learning how to work independently with confidence, all tasks and abilities within the **Personal and intellectual autonomy** cluster.
- 6% of international students considered that their **Communication skills** had improved as a result of the research higher degree experience.

10% of respondents mentioned tasks and abilities within one or more of the University Graduate Attributes as an **Area needing improvement**.

- The majority of these (4%) related to tasks and abilities within the **Research and inquiry** cluster, and referred to both research and statistical skills.
- The improvement of written and oral **Communication skills**, particularly in relation to proficiency in the English language, was raised as an area of concern by 6% of international students.

2.5 Overall Satisfaction

The majority of comments that fell within the remit of Overall satisfaction related to Satisfaction with research, and Flexibility of the research higher degree program. Historically very few comments are received on this topic in answers to the question on areas needing improvement. In 2009:

39% of respondents mentioned aspects of Overall Satisfaction as an **Area of best practice**. Of these:

- 19% were **Satisfied with their research** and/or its contribution to the field.
- 13% appreciated the **Flexibility of the program**, including the freedom to concentrate on research on a topic of their own choosing, and flexible working hours.

10% of respondents mentioned aspects of Overall Satisfaction as an **Area in need of improvement**.

- The majority of these (4%) referred to the **Quality of the degree**, including coursework, the length of the degree, and related pressure to complete within a specific time frame.

FOR MORE INFORMATION

On the analysis and reporting of qualitative data

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

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

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

INTRODUCTION

STUDENT RESEARCH EXPERIENCE QUESTIONNAIRE (SREQ)

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

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

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

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

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

FOCUS OF THE REPORT

Based on the answers to the SREQ, this report seeks to provide an analysis of observable trends in the postgraduate research student experience in the University of Sydney between 2005 and 2009³.

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

FOCUS OF WRITTEN OBSERVATIONS FROM RESPONDENTS

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

It is important to remember, when looking at the results of the analysis of this data, that the absence of favourable comments on a particular aspect of learning and teaching does not reflect that this is not an area of best practice. Rather, it could be interpreted that the students were happy with their experiences, and prefer to focus on commenting about areas in need of improvement. It should also be noted that research higher degree respondents to the SREQ, have consistently provided more comments relating to areas of best practice than those requiring improvement.

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

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

³ Individual faculty reports are available at http://www.usyd.edu.au/learning/evaluating/sreq_or.shtml

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: <ul style="list-style-type: none">• 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: <ul style="list-style-type: none">• 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: <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.
Key issues	As a general rule, only those aspects which receive over 5% of comments from the <u>whole</u> cohort (i.e. domestic and international combined) are considered significant enough to be included as key issues in the report.

1 QUALITY OF SUPERVISION

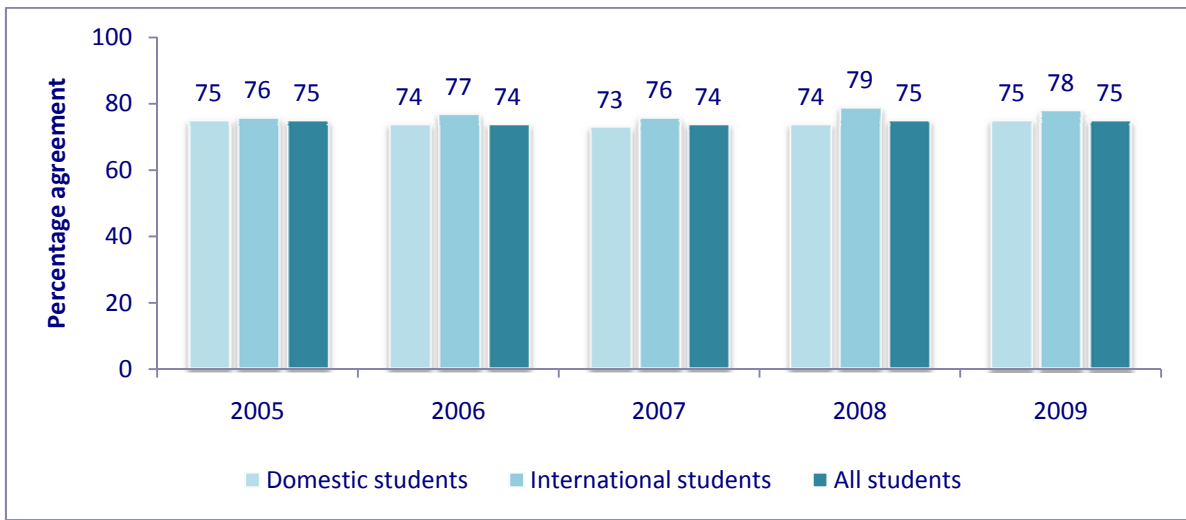
1.1 BACKGROUND INFORMATION

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

1.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

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

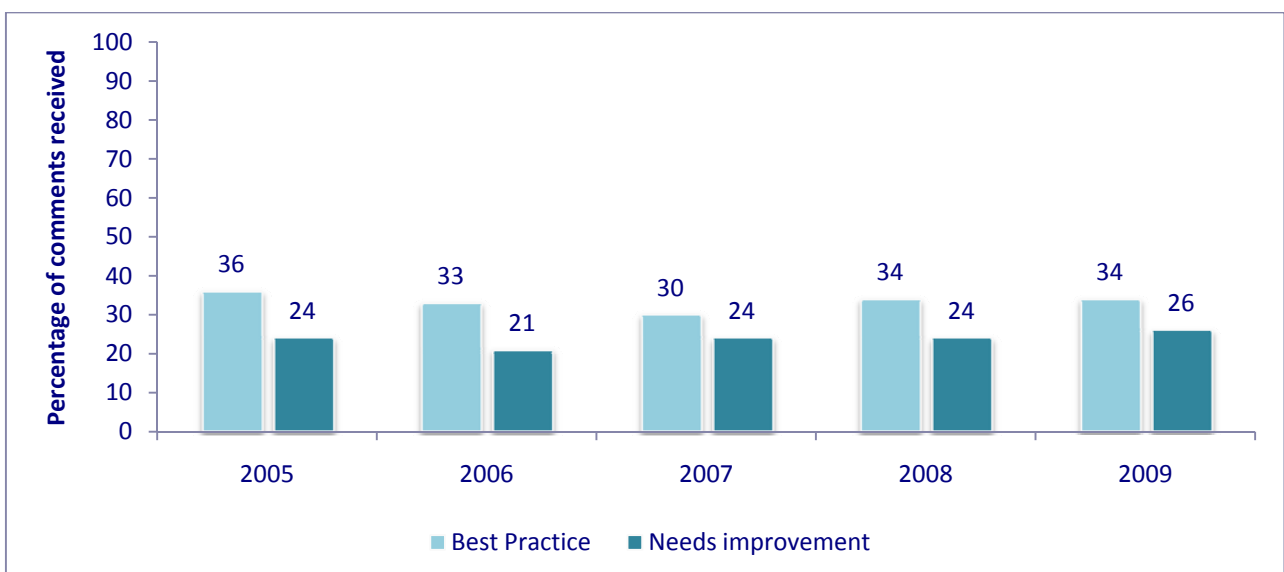
Figure 3: Supervision Scale: Percentage agreement results: SREQ 2005 - 2009



1.3 FOCUS OF WRITTEN OBSERVATIONS: 2005 - 2009

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 2005 - 2009 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 4: Quality of Supervision: Focus of written observations: SREQ 2005 - 2009



1.4 KEY ISSUES: SREQ 2009

This section provides information on the aspects of Supervision that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the students who provided written observations in their responses to the 2009 SREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all students.

Respondents to the SREQ have consistently provided more positive than negative comments on this area of their experience. As a general rule, the majority of comments, both positive and negative, refer to individual supervisors, rather than the supervision process, or management of the candidature.

1.4.1 Areas of best practice

	<i>Domestic</i>	<i>International</i>	<i>All</i>
Supervisor(s)	26%	31%	27%
<p>Respondents from fourteen faculties recorded a higher percentage of comments mentioning satisfaction with individual supervisors, than those expressing dissatisfaction, thereby indicating a high degree of satisfaction with this area of the research higher degree student experience. Supervisors who were appreciated by their students made time for meetings, supported them throughout their candidature, and provided networking opportunities.</p> <p>Nine faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed satisfaction with individual supervisors was 63%, the lowest was 10%</p>			

1.4.2 Areas needing improvement

	<i>Domestic</i>	<i>International</i>	<i>All</i>
Supervisor(s)	13%	9%	12%
<p>Areas of concern included: unavailability for meetings, lack of constructive feedback on work, and lack of relevant knowledge in relation to the research topic.</p> <p>Six faculties recorded results equal to or higher than the University average. The lowest percentage of comments received which expressed dissatisfaction with the individual supervisor was 4%, the highest was 31%.</p>			
Supervision process	7%	4%	7%
<p>Dissatisfaction with the supervision process was the subject of comments from students in 13 faculties, with eight of these recording results higher than the University average. Comments which did not specifically mention or refer to individual supervisors were included in this sub-category of the Quality of Supervision.</p> <p>The lowest percentage of comments received which suggested improvement in the supervision process, including training and evaluation of supervisors was 2%, the highest was 10%.</p>			
Management of candidature	8%	5%	7%
<p>The management of their candidature, including guidance and advice relating to constructing the thesis, literature review, and other planning aspects were of concern to students in most faculties, with eight recorded results higher than the University average.</p> <p>The lowest percentage of comments received which suggested improvements in the management of their candidature was 2%, the highest 31%.</p>			

2 QUALITY OF INFRASTRUCTURE

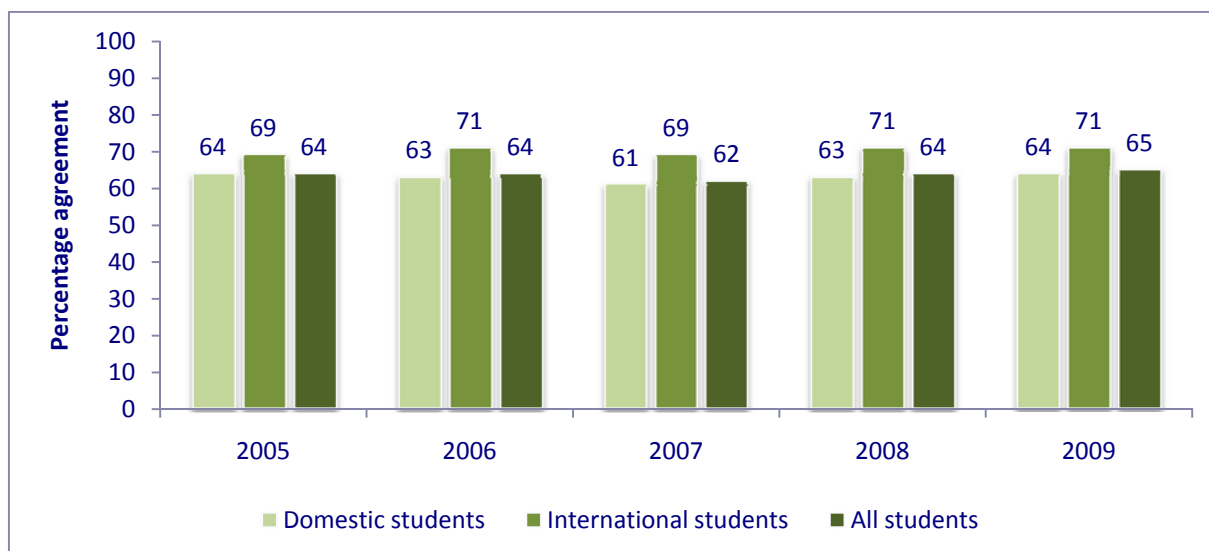
2.1 BACKGROUND INFORMATION

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

2.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

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

Figure 5: Infrastructure Scale: Percentage agreement results: SREQ 2005 - 2009



2.3 FOCUS OF WRITTEN OBSERVATIONS: 2005–2009

2.3.1 Overview: all students

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 2005 – 2009 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 6: Quality of Infrastructure: Focus of written observations: SREQ 2005 - 2009



2.4 KEY ISSUES: SREQ 2009

This section provides information on the aspects of Infrastructure that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the students who provided written observations in their responses to the 2009 SREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all students.

Respondents to the SREQ have consistently mentioned aspects of Infrastructure as an area in need of improvement rather than one of best practice. Whilst comments expressing satisfaction focus mainly on physical facilities and research resources, those expressing dissatisfaction centre around funding, facilities and administration.

2.4.1 Areas of best practice

	<i>Domestic</i>	<i>International</i>	<i>All</i>
Facilities (computers, equipment, workspace)	9%	11%	9%
Six faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed satisfaction with physical facilities, including faculty provided research centres, office space, and provision of computers, was 40%; the lowest was 1%. Respondents from one faculty provided considerably more positive than negative comments on this aspect of their research higher degree experience (BP: 24%; NI: 10%)			
Research resources, including library services	7%	10%	7%
Nine faculties recorded results equal to or higher than the University average. The highest percentage of comments received was 22%; the lowest was 2%. The majority of comments related to the services provided by the library, including interlibrary loan and document delivery.			

2.4.2 Areas needing improvement

	<i>Domestic</i>	<i>International</i>	<i>All</i>
Facilities (computers, equipment, workspace)	26%	29%	26%
Whilst the lack of computers, up to date equipment and related resources formed the subject of some comments, the majority related to the lack of dedicated work spaces and desks, particularly in the writing up phase. Hot desk arrangements were not considered to be satisfactory, especially when books and other resources needed to be placed in safekeeping when not required by the student.			
Eight faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed dissatisfaction with the facilities provided by the University was 59%; the lowest was 10%).			
Finance and funding (incl. scholarships)	21%	25%	22%
The PRSS, and the length of the APA/UPA were a particular cause of concern. For international students, the lack of transport concessions was a feature of their comments.			
Eight faculties recorded results equal to or higher than the University average. The highest percentage of comments received considered that improvements were needed in research and resources funding, scholarships, the APA and other awards, and travel related expenses was 31%; the lowest was 9%.			
Administration	8%	5%	8%
In relation to administration (faculty and university) 50% of faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed dissatisfaction with various aspects of administration was 21%; the lowest was 3%. Comments ranged from dissatisfaction with 'bureaucratic' administrative procedures, to communication, to enrolment, and the postgraduate coordinator.			

3 RESEARCH CLIMATE

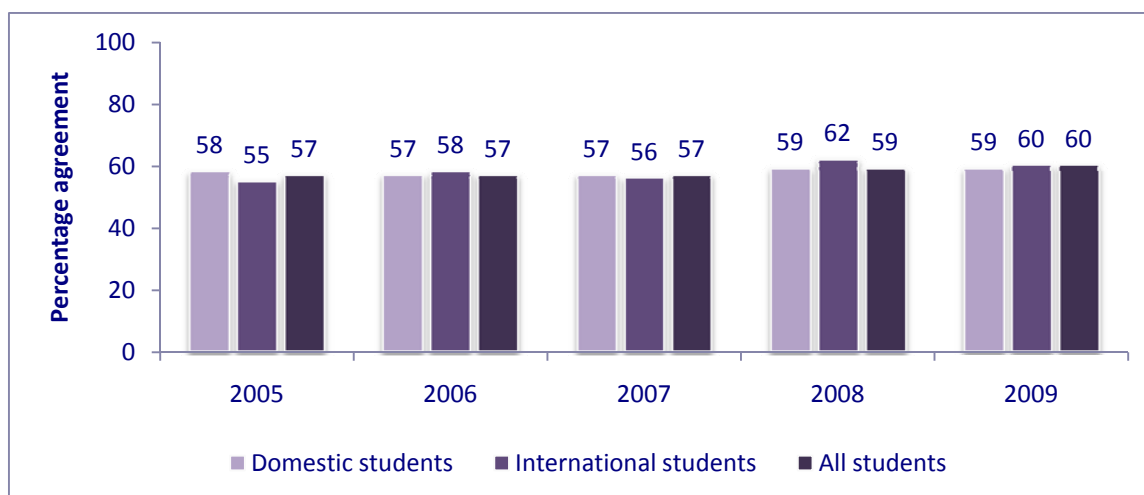
3.1 BACKGROUND INFORMATION

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

3.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

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

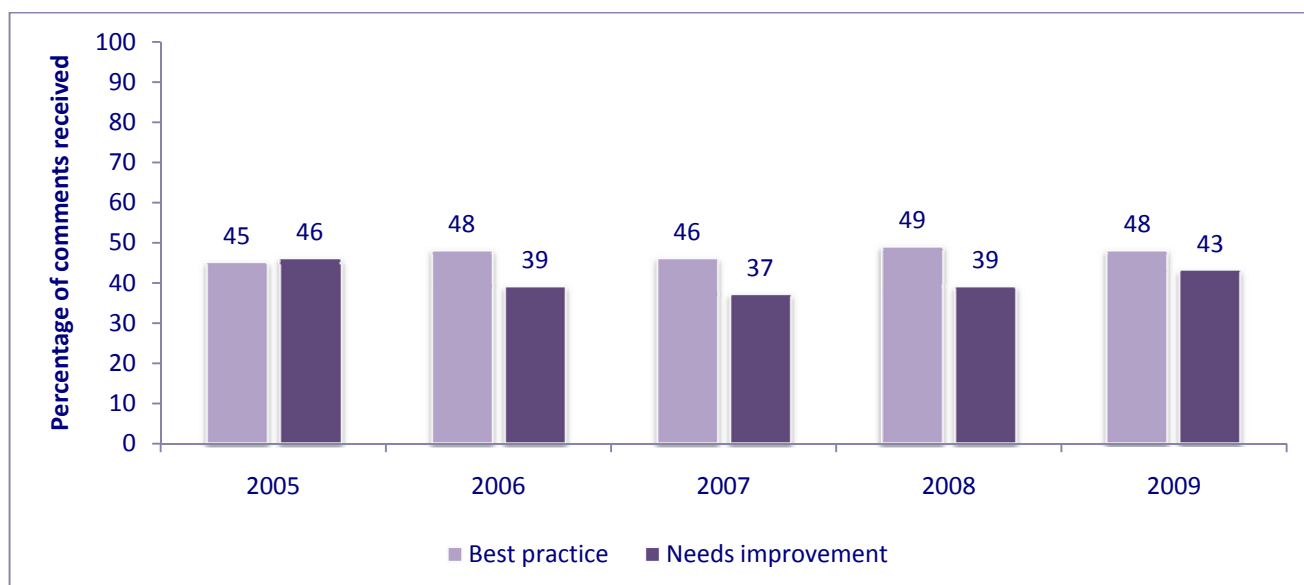
Figure 7: Climate Scale: Percentage agreement results: SREQ 2005 - 2009



3.3 FOCUS OF WRITTEN OBSERVATIONS: 2005–2009

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 2005 – 2009 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 8: Research Climate: Focus of written observations: SREQ 2005 - 2009



3.4 KEY ISSUES : SREQ 2009

This section provides information on the aspects of the Research Climate that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the students who provided written observations in their responses to the 2009 SREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all students.

Since 2006, respondents have provided more comments relating to aspects of the Research Climate as an area of best practice, than one requiring improvement. Three main aspects of Research Climate feature in both positive and negative comments: interaction with other research higher degree students; feeling part of a research community; and being part of a welcoming and supportive work environment. Whilst considerably more positive comments relating to the prevailing research community were received, those mentioning the work environment and interaction with other research higher degree students were fairly evenly divided between those expressing satisfaction and those suggesting improvements.

3.4.1 Areas of best practice

	<i>Domestic</i>	<i>International</i>	<i>All</i>
<p>Research community</p> <p>A high level of satisfaction with the prevalent research community in the University is demonstrated by the fact that all faculties recorded twice as many positive comments than negative comments on this aspect of the research higher degree student experience. Students appreciated opportunities to attend and present at conferences and seminars, being part of a research group, and the networking opportunities that these afforded.</p> <p>Nine faculties recorded results equal to or higher than the University average. The highest percentage of comments received which recorded satisfaction with the research community was 31%; the lowest was 7%.</p>	20%	24%	21%
<p>Work environment</p> <p>Comments relating to the presence of a welcoming and supportive work environment were evenly divided between those expressing satisfaction and those suggesting improvements. The majority of comments related to acceptance and integration into the faculty, together with respect as a fellow researcher.</p> <p>Nine faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expresses satisfaction with the work environment recorded was 44%; the lowest was 5%.</p>	19%	9%	17%
<p>Interaction with other research higher degree students</p> <p>Comments relating to interaction with other students were evenly divided between those expressing satisfaction and those suggesting improvements. Respondents appreciated opportunities to interact with their peers, finding that this provided much needed support in the research training experience.</p> <p>Nine faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed satisfaction with this aspect of their experience was 20%; the lowest was 4%.</p>	7%	6%	7%

3.4.2 Areas needing improvement

	<i>Domestic</i>	<i>International</i>	<i>All</i>
<p>Work environment</p> <p>Twelve faculties recorded results equal to or higher than the University average. The highest percentage of comments received which considered that the work environment was neither supportive or welcoming was 31%; the lowest 11%.</p>	19%	11%	17%

	<i>Domestic</i>	<i>International</i>	<i>All</i>
<p>Research community</p> <p>The majority of comments related to attendance at conferences, and the concomitant networking opportunities which were missed due to a lack of financial support to attend the same.</p> <p>Nine faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed satisfaction with the prevailing research community was 24%; the lowest was 3%.</p>	11%	11%	11%
<p>Interaction with other research higher degree students</p> <p>Students felt isolated from their peers and their support, especially when faculties did not actively encourage interaction with other postgraduate students</p> <p>Seven faculties recorded results equal to or higher than the University average. The highest percentage of comments received that considered that there was little or no interaction with their fellow research students was 21%; the lowest was 3%.</p>	8%	8%	8%

4 GRADUATE ATTRIBUTES

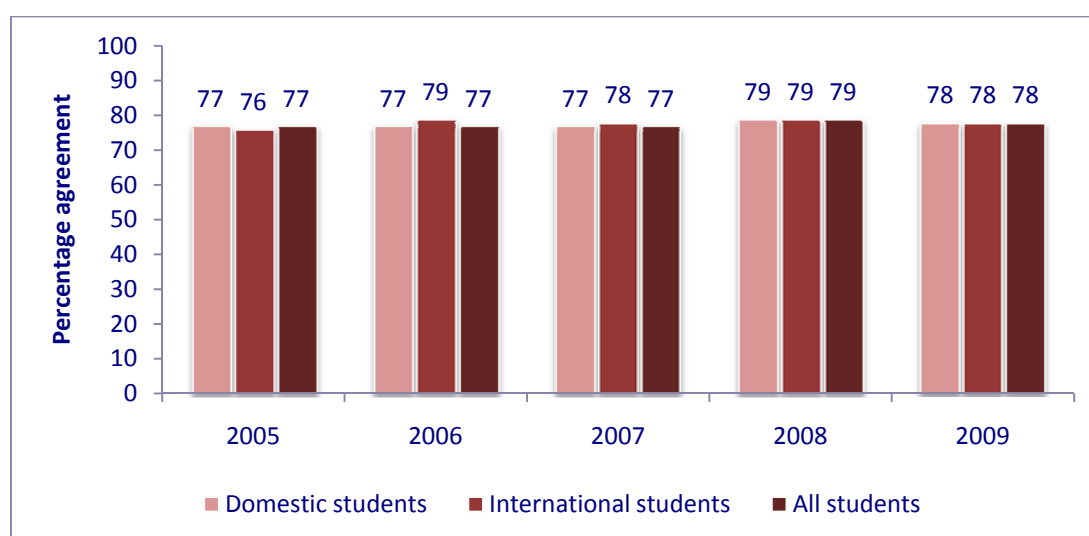
4.1 BACKGROUND INFORMATION

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

4.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

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

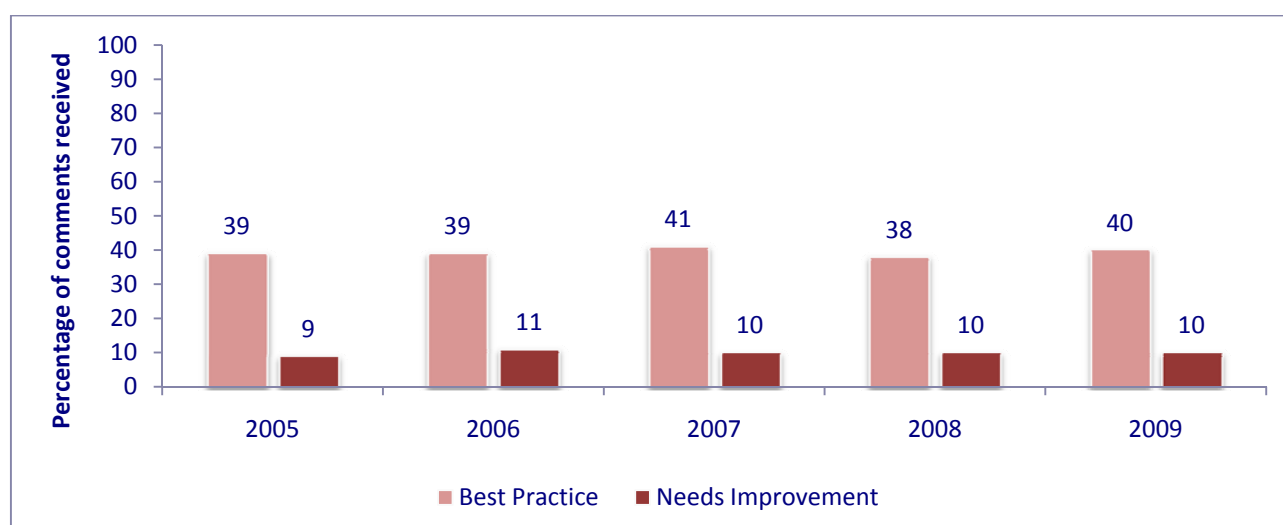
Figure 9: Generic Skills: Percentage agreement results: SREQ 2005 - 2009



4.3 FOCUS OF WRITTEN OBSERVATIONS: 2005–2009

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 2005 – 2009 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 10: Graduate Attributes: Focus of written observations: SREQ 2005 - 2009



4.4 KEY ISSUES : SREQ 2009

This section provides information on students' perceptions of the development or enhancement of tasks and abilities within each of the University Graduate Attribute clusters that were considered significant enough to merit mention by over 5% of the students who provided written observations in their responses to the 2009 SREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all students.

Historical evidence suggests that respondents to student satisfactions surveys at the University of Sydney tend to provide more comments suggesting the development of Graduate Attributes as an area of best practice than as an area requiring improvement. This trend is followed by respondents to the SREQ. However, whilst coursework students tend to focus on the development of tasks and abilities within the Ethical, Social and Professional Understanding cluster, comments from research higher degree students focus mainly around Research and Inquiry, and Personal and Intellectual Autonomy. In addition to these areas, in 2009, 6% of comments received from international students mentioned the development of Communication skills, as both an areas of best practice and one that requires improvement.

4.4.1 Areas of best practice

	<i>Domestic</i>	<i>International</i>	<i>All</i>
Research and inquiry	20%	24%	21%
<p>The majority of comments related to the development of analytical, problem solving and research skills, critical thinking, and the expansion of the knowledge relating to research topics. Students appreciated research methodology courses or seminar.</p> <p>Ten faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed satisfaction with the development of tasks and abilities within the Research and Inquiry cluster of graduate attributes was 48%; the lowest was 7%.</p>			
Personal and intellectual autonomy	8%	11%	8%
<p>Students appreciated the fact that they were developing the ability to tackle unfamiliar problems, together with learning how to work independently with confidence.</p> <p>Seven faculties recorded results equal to or higher than the University average. The highest percentage of comments received which expressed satisfaction with the development of this Graduate Attribute was 15%, the lowest was 3%.</p>			

4.4.2 Areas needing improvement

10% of comments received from all respondents to the SREQ who provided written observation mentioned dissatisfaction with the enhancement of Graduate Attributes during their research training experience. The majority of these (4%) related to tasks and abilities within the Research and Inquiry cluster, and referred to both research and statistical skills. The improvement of written and oral communication skills, particularly in relation to proficiency in the English language, was raised as an area of concern with 6% of international respondents.

Seven faculties recorded results equal to or higher than the University average. The highest percentage of comments received which related to the development or enhancement of one or more of the University Graduate Attribute clusters was 28%, the lowest was 2%.

5 OVERALL SATISFACTION

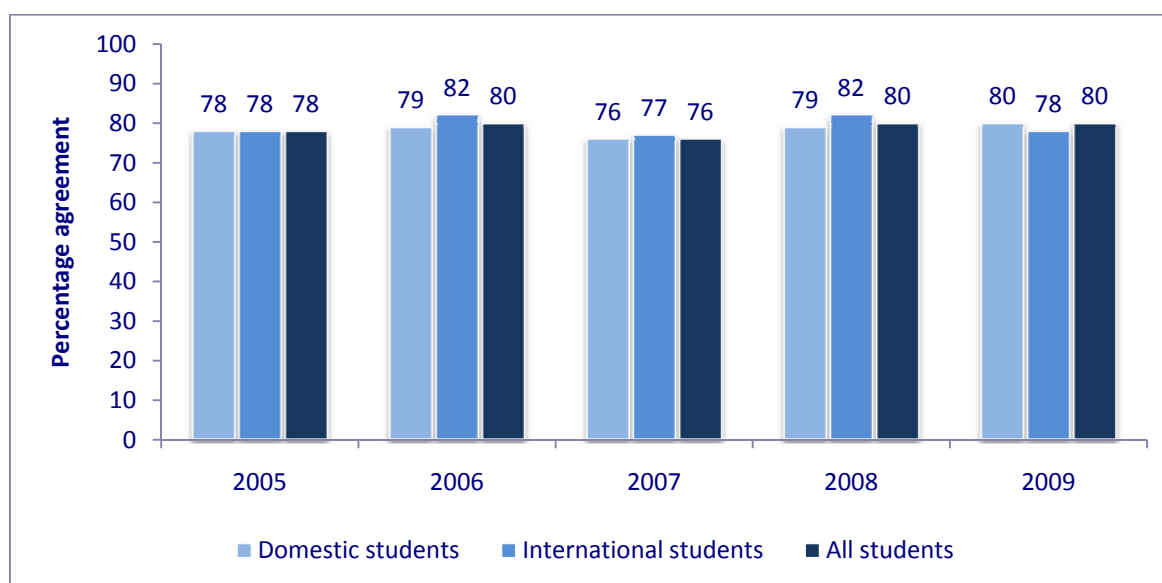
5.1 BACKGROUND INFORMATION

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

5.3 COMPARATIVE RESULTS: QUANTITATIVE DATA 2005–2009

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

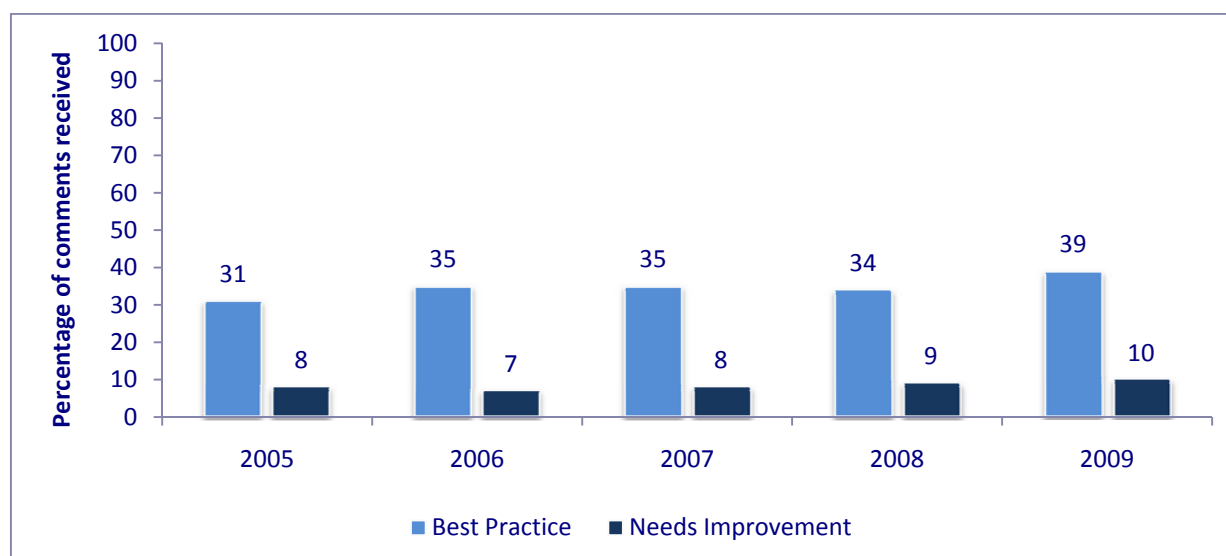
Figure 11: Overall Satisfaction Item: Percentage agreement results: SREQ 2005 - 2009



5.3 FOCUS OF WRITTEN OBSERVATIONS: 2005–2009

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 2005 – 2009 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 12: Overall Satisfaction: Focus of written observations: SREQ 2005 - 2009



5.4 KEY ISSUES: SREQ 2009

This section provides information on the aspects of Overall Satisfaction that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the students who provided written observations in their responses to the 2009 SREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all students.

The majority of comments which fall within the remit of Overall Satisfaction relate to Satisfaction with research and Flexibility of the research higher degree program. Very few comments are received that mention any aspect of Overall Satisfaction as an area in need of improvement.

5.4.1 Areas of best practice

	<i>Domestic</i>	<i>International</i>	<i>All</i>
<p>Satisfaction with research</p> <p>Comments which fell within this category generally referred to the individual research topics and their contribution to the relevant field.</p> <p>Seven faculties recorded results equal to or higher than the University average. The highest percentage of students who expressed satisfaction with their research was 38%, the lowest was 8%. Very few respondents expressed dissatisfaction with this area of their experience.</p>	20%	13%	19%
<p>Flexibility of program</p> <p>The freedom to work on their own research, to be more independent than in previous studies, and to have flexible working hours was valued highly by research higher degree students.</p> <p>Six faculties recorded results equal to or higher than the University average. The highest percentage of students who appreciated the freedom associated with a research higher degree, was 21%, the lowest was 7%. Very few respondents expressed dissatisfaction with this area of their experience.</p>	14%	11%	13%

5.4.2 Areas needing improvement

10% of comments received from all respondents to the SREQ who provided written observation mentioned dissatisfaction aspects of Overall Satisfaction. The majority of these (4%) related the quality of the degree, including coursework, the length of the degree and related pressure to complete within 3.5/4 years.

Seven faculties recorded results equal to or higher than the University average. The highest percentage of comments received which related to aspects of Overall Satisfaction was 28%, the lowest was 4%.

ATTACHMENT ONE: STATISTICAL DATA

1 QUANTITATIVE DATA ANALYSIS

Number of research higher degree students surveyed/ enrolled⁴ 2005 – 2009					
	2005	2006	2007	2008	2009
	n=	n=	n=	n=	n=
Total	3375	3422	3685	3794	4020

Number of respondents to the SREQ 2005 – 2009					
	2005	2006	2007	2008	2009
	n=	n=	n=	n=	n=
Domestic students	1776	1696	1814	2155	1991
International students	283	346	349	465	453
Total	2061	2042	2163	2620	2444
<i>% who responded</i>	61%	60%	59%	69%	61%

2 QUALITATIVE DATA ANALYSIS

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

Number of respondents who answered the open questions SREQ 2005 – 2009						
	<i>Date of survey</i>	2005	2006	2007	2008	2009
		n=	n=	n=	n=	n=
<i>Areas of best practice</i>	Domestic students	1481	1339	1539	1671	1535
	International students	86	276	298	357	341
	Total	1583	1627	1844	2025	1876
	<i>% who provided comments</i>	77%	80%	85%	77%	77%

<i>Areas of improvement</i>	Domestic students	1268	1235	1454	1510	1338
	International students	78	262	278	315	315
	Total	1346	1497	1730	1825	1653
	<i>% who provided comments</i>	65%	73%	80%	70%	68%

⁴ All research higher degree students at the University are sent the SREQ. Separate figures not available for domestic and international students.

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:

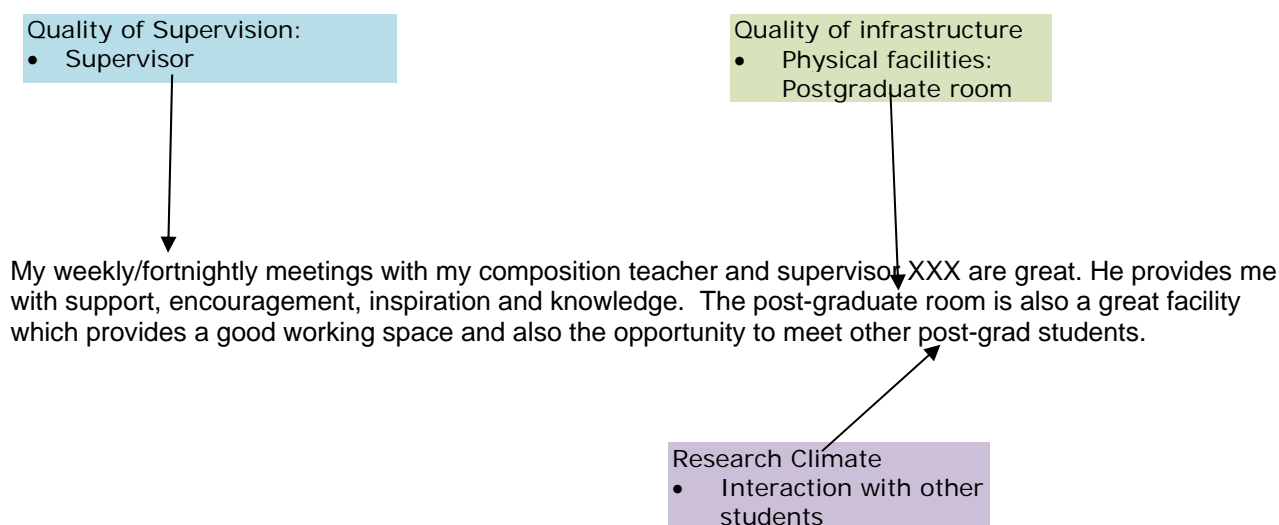
- Characteristics that define the area of the student experience
- SREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

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); Quality of Infrastructure (Physical facilities); and Research Climate (Interaction with other students), the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 3 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 attachment lists the relevant survey items and sub-categories and components used in the analysis of qualitative and quantitative data from the SREQ.

1 SUPERVISION SCALE/ QUALITY OF SUPERVISION

1.1 SREQ Survey items

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

1.2 Qualitative data analysis

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

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

2 INFRASTRUCTURE SCALE/ QUALITY OF INFRASTRUCTURE

2.1 SREQ Survey items

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

2.2 Qualitative data analysis

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

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

3 CLIMATE SCALE/ RESEARCH CLIMATE

3.1 SREQ Survey items

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

3.2 Qualitative data analysis

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

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

4 GENERIC SKILLS SCALE/ GRADUATE ATTRIBUTES

4.1 SREQ Survey items

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

4.2 Qualitative data analysis

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

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

5 OVERALL SATISFACTION

5.1 SREQ Survey item

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

5.2 Qualitative data analysis

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

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