

Faculty of Veterinary Science

Student Research Experience Questionnaire Report

Trends and key issues: 2006 - 2010

June 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.

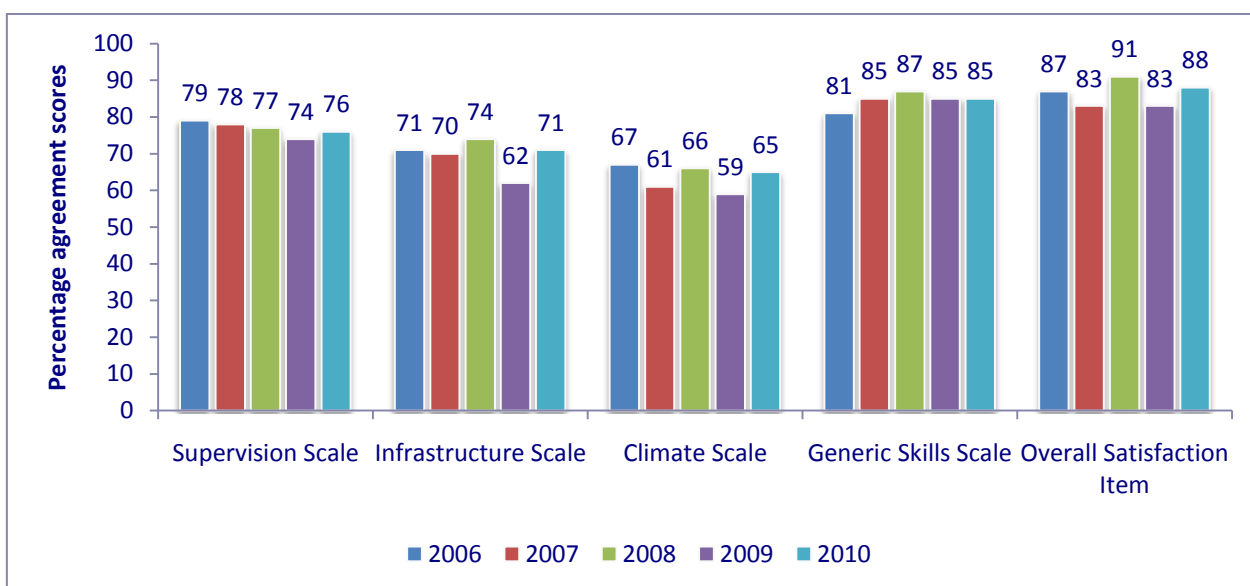
The analysis of qualitative data received between 2006 and 2010, and reported in this document, is based on written observations received from **all** respondents who answered the open questions in the SREQ.

COMPARATIVE DATA: 2006 – 2010¹

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 Veterinary Science since 2006.

Figure 1: Faculty of Veterinary Science: 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. An average of 80% of respondents provided written observations, indicating a high level of engagement with their research higher degree student experience..

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 Veterinary Science: Areas of best practice: SREQ 2006 - 2010

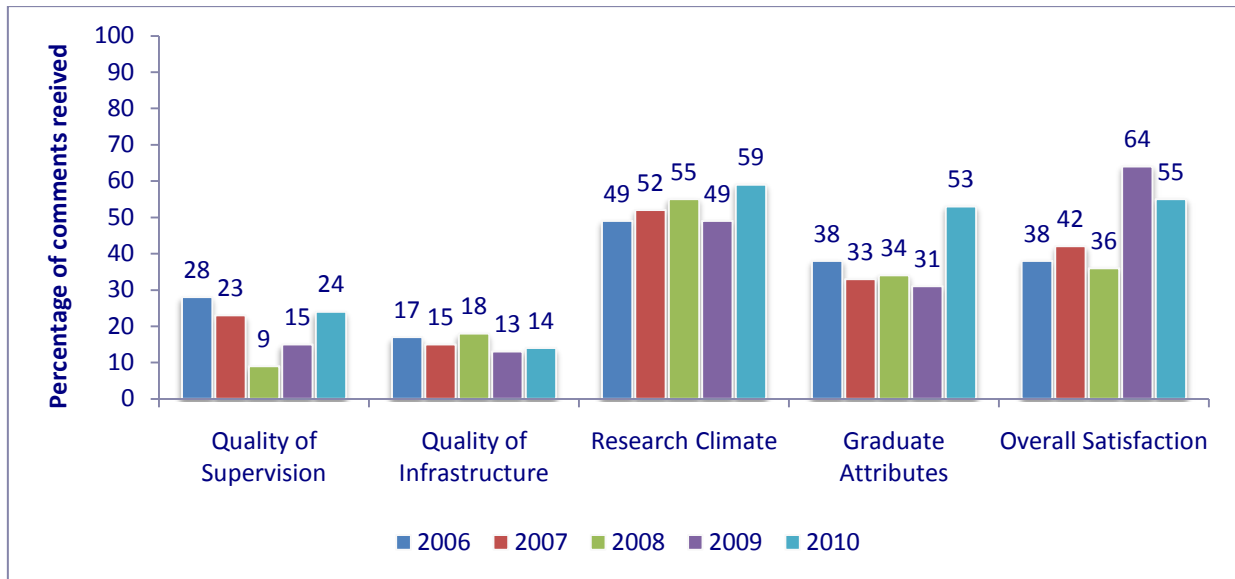
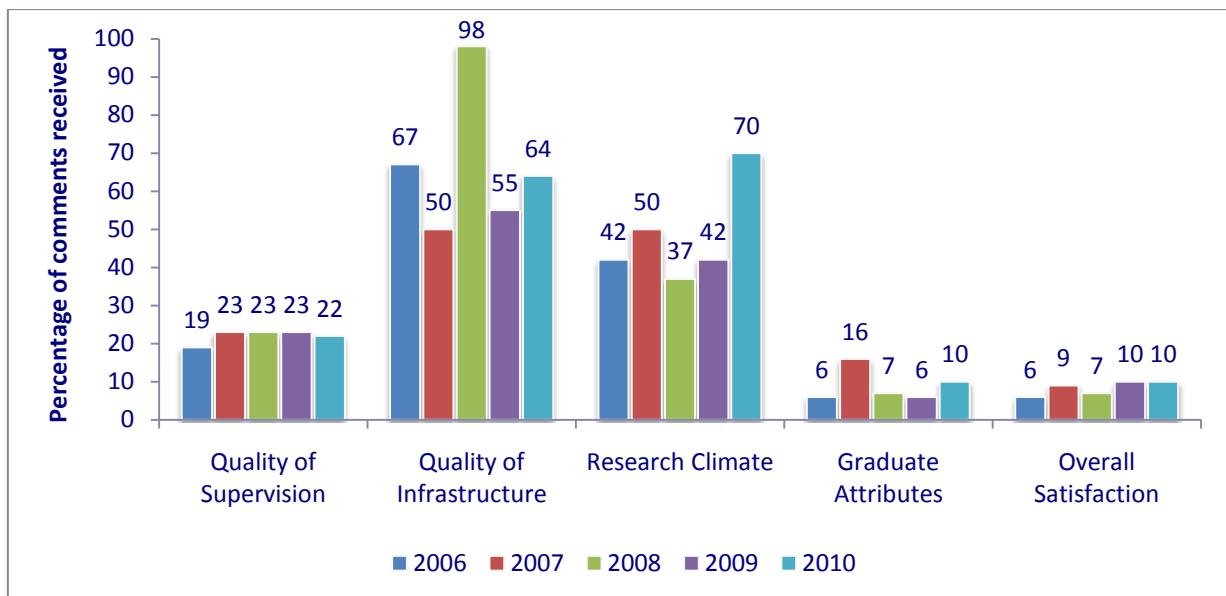


Figure 3: Faculty of Veterinary Science: Areas needing improvement: SREQ 2006 - 2010

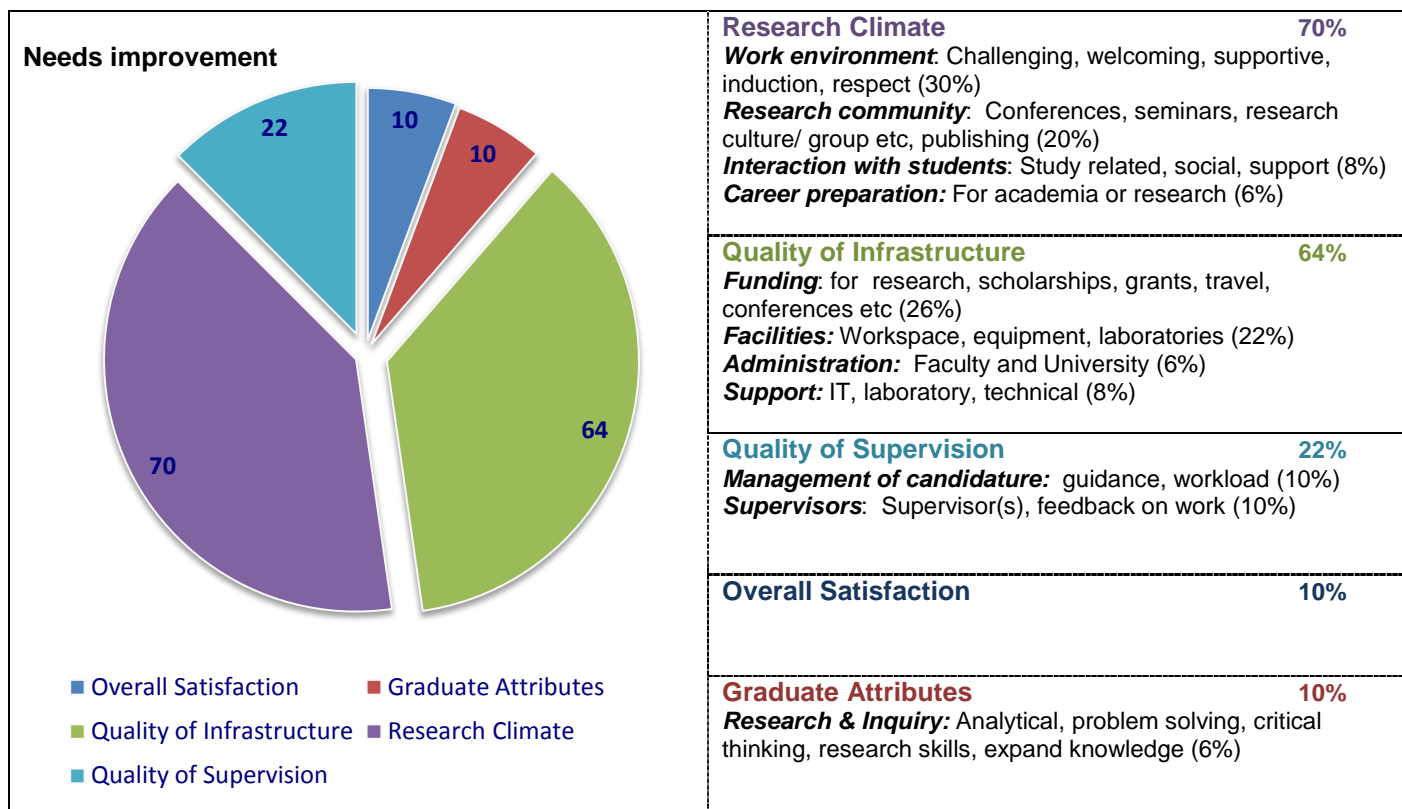
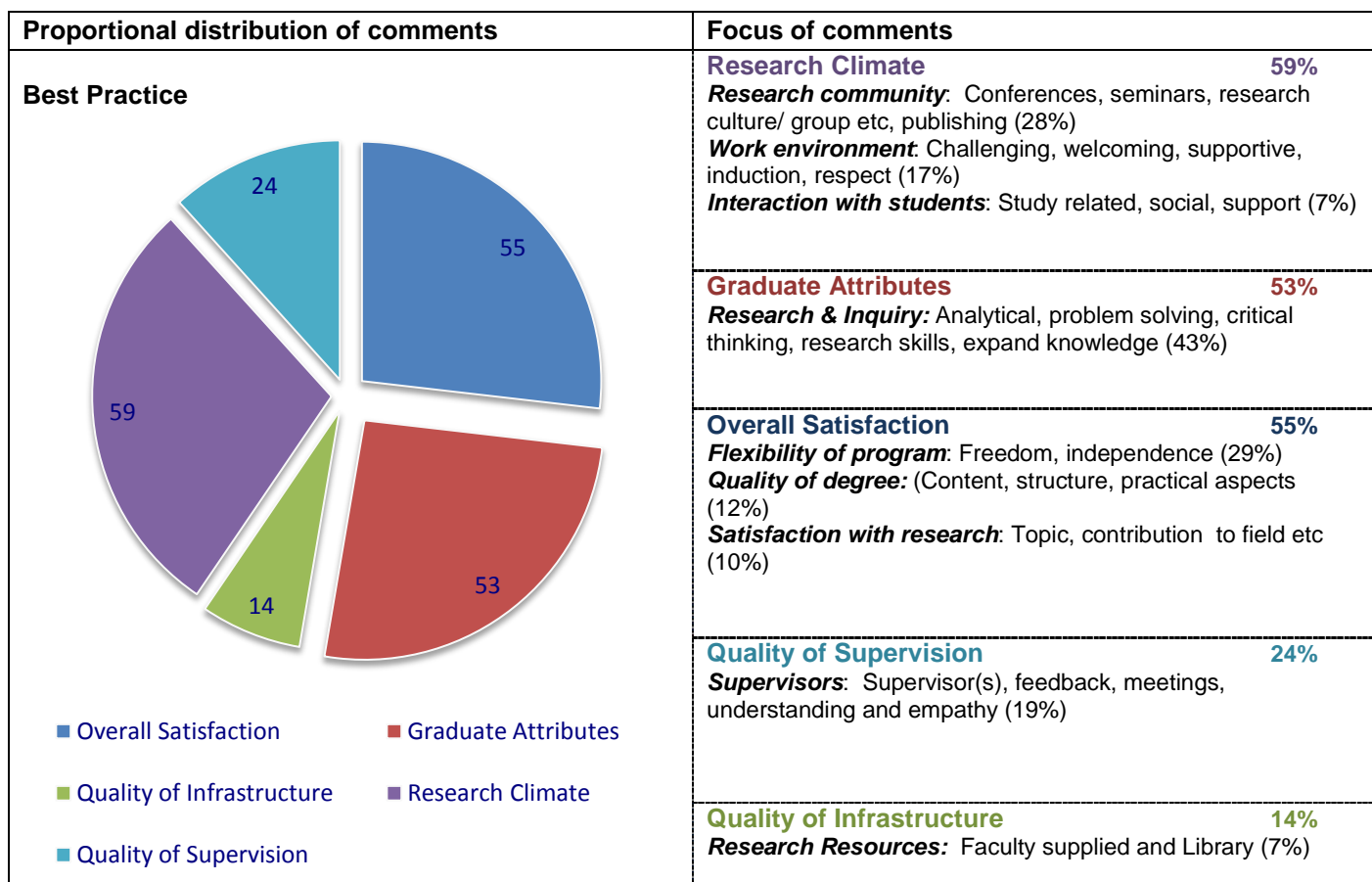


Key issues: 2010

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)



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
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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 Veterinary Science 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.

POSTGRADUATE RESEARCH EXPERIENCE QUESTIONNAIRE (PREQ) 2006-2008

Faculty scores from the 2009 and 2010 Postgraduate Research Experience Questionnaire (PREQ); together with a list of comments received in answer to the open response questions in the 2010 survey, are provided as an attachment to this report. The broad area(s) by which each comment has been analysed are indicated alongside each comment.

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; all respondents per degree) are considered significant enough to be included as key issues in the report.

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
- 4 PREQ 2010 comments

1 QUALITY OF SUPERVISION

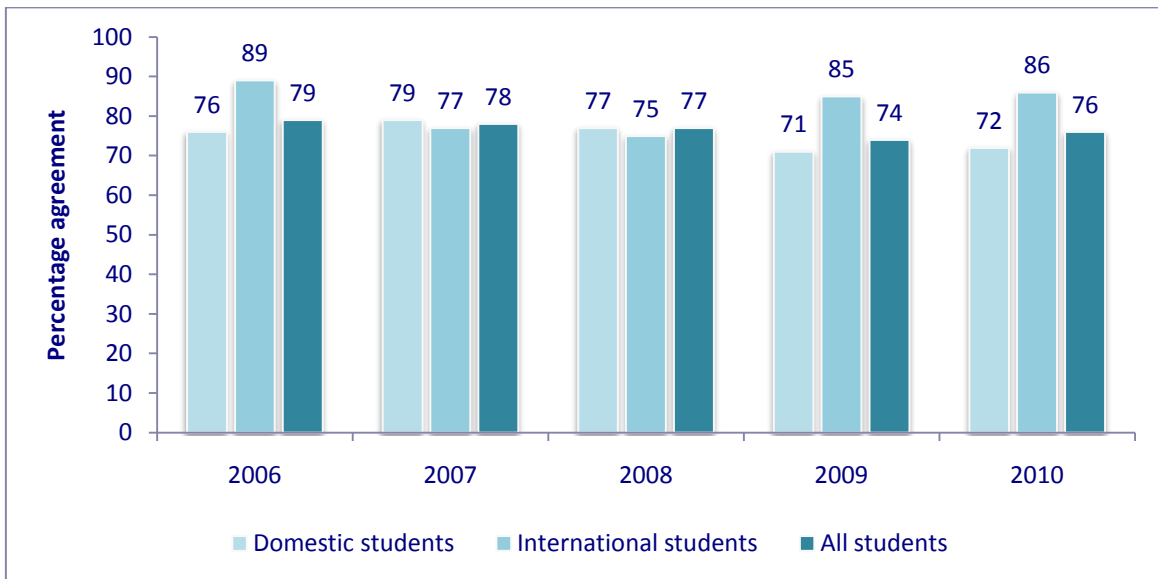
1.1 BACKGROUND INFORMATION

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=42)	International (n=16)	All (n=58)
Quality of Supervision	14%	50%	24%
- Supervisor(s)	14%	31%	19%

Sample comments

- Good support from supervisors
- encouragement and support from supervisors
- Supervision and guidance are excellent
- Outstanding supportive supervisors and PG research colleagues
- Supportive supervisors and getting to work at EMAI

1.4.2 Areas needing improvement

	Domestic (n=36)	International (n=14)	All (n=50)
Quality of Supervision	28%	7%	22%
- Management of candidature	11%	7%	10%
- Supervisor(s)	14%	0%	10%

Sample comments

- Increased communication and better understanding from supervisors. It is difficult for me to organise face to face meetings with my supervisor. She is often very busy
- Involvement of my supervisor to look at my work. I know supervisors are busy but they have a requirement to assist their students
- Outline of thesis via publication requirement to assist students with completion of thesis papers
- I am located off-campus and so the ability to see my supervisor regularly, i.e. daily as some other students do, is limited. This is what I would change if I could but the situation does not allow it

2 QUALITY OF INFRASTRUCTURE

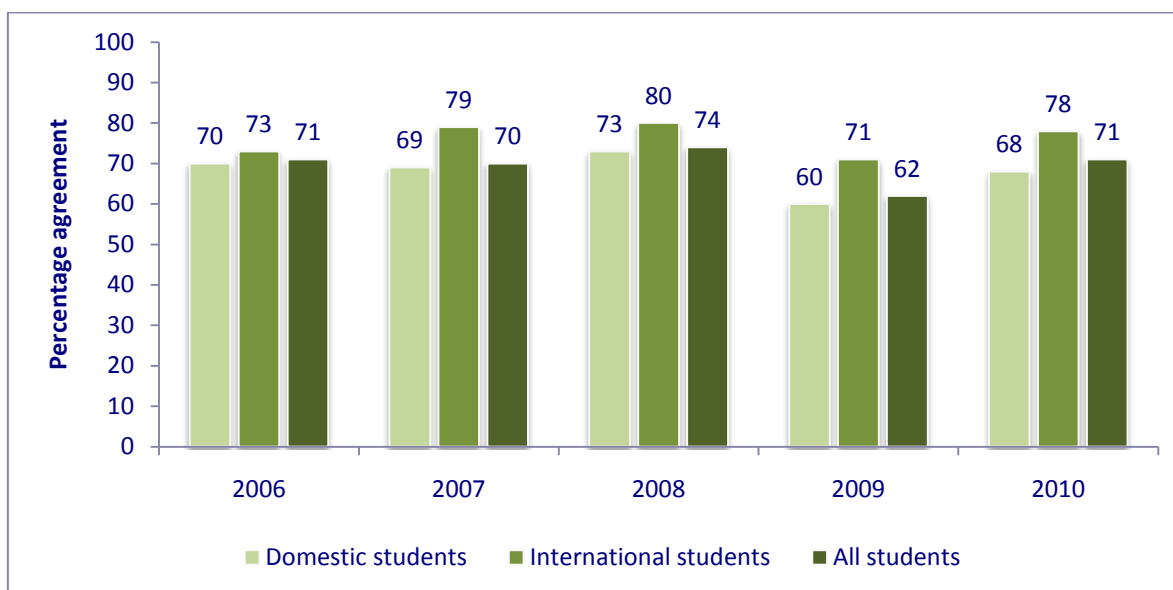
2.1 BACKGROUND INFORMATION

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=42)	International (n=16)	All (n=58)
Quality of Infrastructure	12%	19%	14%
- Research resources	10%	0%	7%

Sample comments

- The delightful terriers that work at the library - no book too obscure! no request dropped, no matter how lengthy! and always with a smile
- The access to resources
- Access to computer, office, office supplies and printer/photocopier/fax
- the freedom to use any available resources and facilities

2.4.2 Areas needing improvement

	Domestic (n=36)	International (n=14)	All (n=50)
Quality of Infrastructure	61%	71%	74%
- Finance and funding	25%	29%	26%
- Facilities	17%	36%	22%
- Support	8%	7%	8%
- Administration	8%	0%	6%

Sample comments

- Administration at University level (except Library) is awkward. Administration at Faculty and sub-faculty level is often rude and mostly unhelpful. Perhaps they are under-resourced, but they do not support my research. Therefore I try to do most administrative tasks for myself, which is an inefficient usage of my time
- The lab infrastructure is lacking - much of the equipment is ok, but the labs could be better maintained. As students, we do what we can to keep everything orderly, but there is very little storage space due to archived samples from past projects
- Computational support is poor for students wanting to do more than word processing - restrictions on access and control of computation resources results in big delays, especially if overstretched support people need to be asked to do simple tasks such install updated software
- Animal Research facilities at the University. They are of the poorest quality and do not allow for PC2 research experiments. Was required to work off campus and was restricted in ability to conduct research in a timely manner. University need to be at the forefront of research...and have the facilities to conduct AQIS and PC 2 or higher laboratory and animal experiments

3 RESEARCH CLIMATE

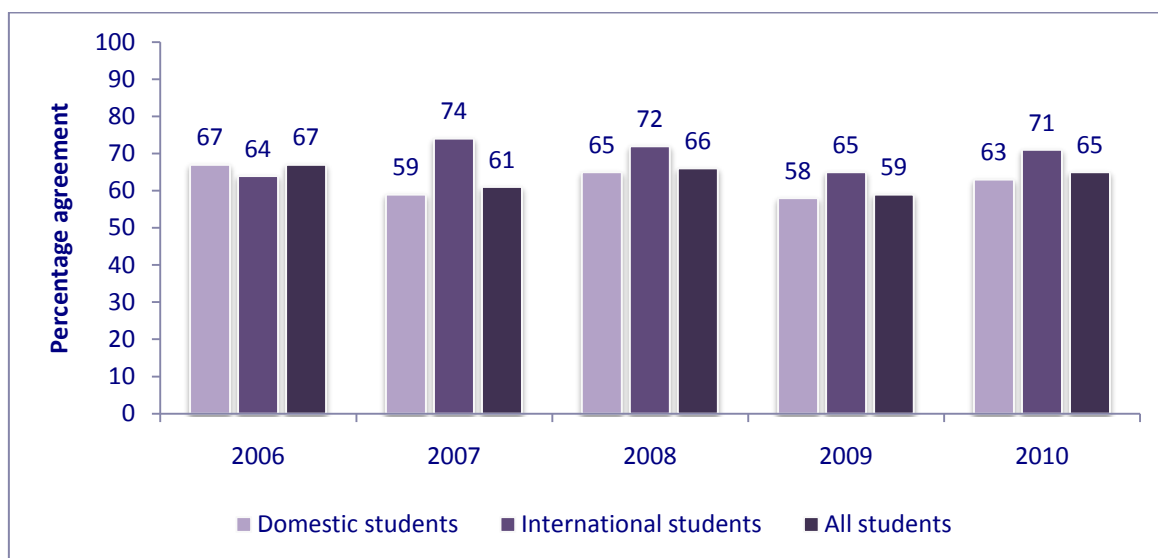
3.1 BACKGROUND INFORMATION

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: 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=42)	International (n=16)	All (n=58)
Research Climate	55%	69%	59%
- Research community/ culture	24%	38%	28%
- Work environment	19%	13%	17%
- Interaction with other research higher degree students	5%	13%	7%

Sample comments

- Doing research in a world-class research facility (Australian Animal Health Laboratory) exposes me to numerous scientists from different fields and allow interaction and even possible collaborations.
- International research experience that my supervisor arranged. Other national career building skills that my supervisors have instigated on my behalf
- The research environment in the faculty is very supportive and academics are very helpful. They are always willing to help answer questions or help to solve any problems I may encounter
- My supervisors and the group that I am in... Farm Animal and veterinary Public Health. It's a very positive, supportive group despite being full of brains!

3.4.2 Areas needing improvement

	Domestic (n=36)	International (n=14)	All (n=50)
Research Climate	54%	35%	49%
- Work environment	36%	14%	30%
- Research community/ culture	19%	21%	20%
- Interaction with other research higher degree students	6%	14%	8%
- Career preparation	6%	7%	6%

Sample comments

- The lack of interaction with fellow students and researchers (apart from my supervisor) throughout the degree. I felt it was too bilateral (student-supervisor). There were no formal opportunities to discuss ideas with other people. I am in Camden
- Postgrads need to be more integrated into the Faculty- the feeling of isolation is not uncommon at times. More integration socially within postgrads should also be improved. Different sectors WITHIN each faculty need to get together and share ideas, learn about one another's research. Also different Faculties should share research they are doing- to get an idea of where the university in general is heading in terms of research
- As a distance part-time student it is very difficult to feel involved with university activities. I would like to attend events but they are held at lunchtimes and the distance is too great for a 1hr seminar. Not sure how you improve it but needs consideration.
- I enrolled 2nd semester last year and almost no information was provided. I did not realise I needed to complete an academic honesty module and so on. I was not given info on scholarships and so on and by the time I found my "way around", it was too late as I had entered the "start" of my second year. I have a great learning environment and my individual people and department - but did feel very isolated from the post graduate requirements and services of my faculty. There is not even a thesis guideline on "size"

4 GRADUATE ATTRIBUTES

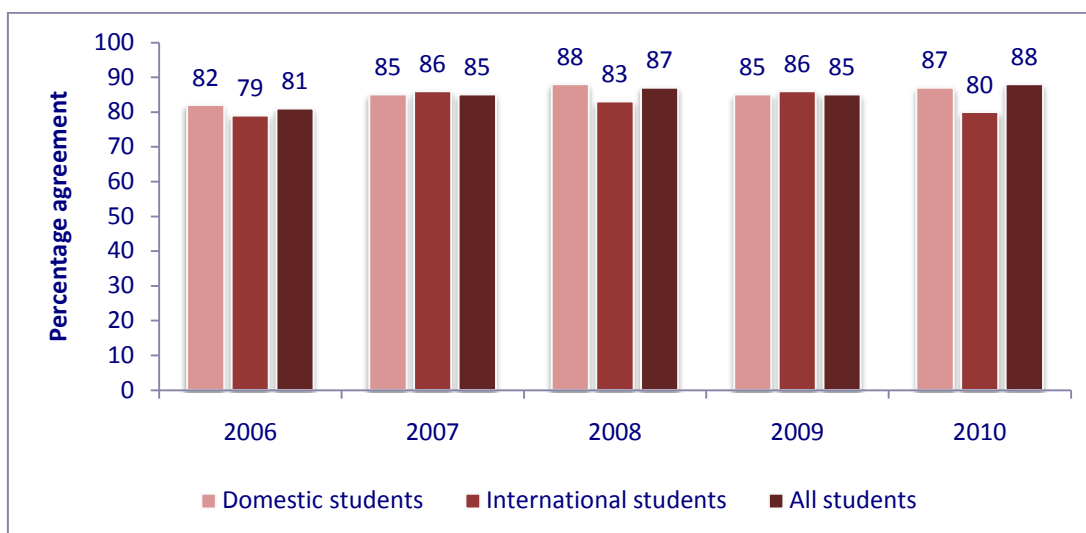
4.2 BACKGROUND INFORMATION

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.

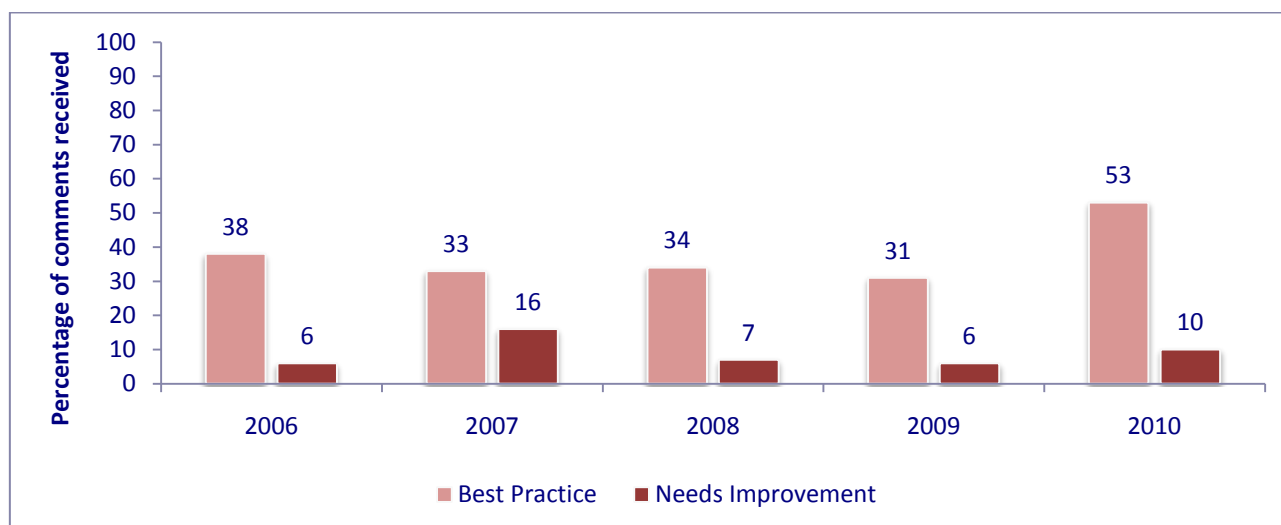
Figure 10: Generic Skills: Percentage agreement results: SREQ 2006 - 2010



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=42)	International (n=16)	All (n=58)
Graduate Attributes	55%	50%	53%
- Research and Inquiry	48%	31%	43%

Sample comments

- Analytical skill: as my work involves analytical chemistry, I am learning the skills related to this area, and is a good opportunity for me strengthen my future career. Critical thinking (problem solving) is the best experience I am having now, as I need to challenge many of questions
- Learning new laboratory techniques. This is good for future job prospects. Developing communication skills. This is good for personal development
- The skills I have gained for the analysis and both written and oral presentation of any issue. Those skills will be very valuable for my development as a professional in any position
- I learnt new techniques in connection to my research experiment. These techniques are going to be very useful for me in future. I learnt to understand the research problem and finding solutions

4.4.2 Areas needing improvement

	Domestic (n=36)	International (n=14)	All (n=50)
Graduate Attributes	8%	14%	10%
- Research and Inquiry	3%	14%	6%

Sample comments

- Leadership, teamwork and management training for Postgraduate students. Having these skills already available when Postgraduate students move into academia or private enterprise will raise the profile of the University and improve the options for succession planning into the future
- Pooling of resources (technical skills, supplies of equipment and consumables) would be nice. I.e. a university or faculty wide forum on laboratory skills, and/or tips on ordering consumables, or a chance to ask around for advice or equipment)
- How to carry out research step by step. Sometimes we get stuck in the middle and do not know how to tackle the issues
- Guidance in general aspects of research Statistics course

5 OVERALL SATISFACTION

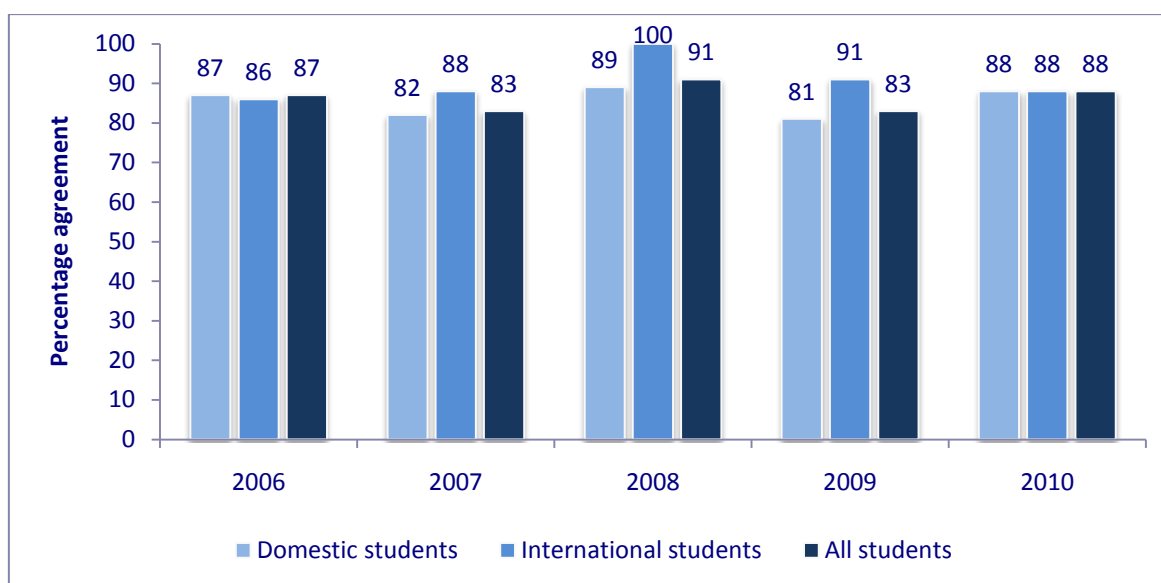
5.1 BACKGROUND INFORMATION

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=42)	International (n=16)	All (n=58)
Overall Satisfaction	57%	50%	55%
- Flexibility of program	29%	31%	29%
- Quality of degree, incl. practical aspects	14%	6%	12%
- Satisfaction with research	12%	6%	10%

Sample comments

- Flexibility in learning. I have the opportunity to think about my project from all aspects and decide on the path I would like to follow. I am only restricted by a broad topic
- Having the freedom to thoroughly explore ideas, talk about them to other researchers, and being encouraged to do both. It is the most mentally stimulating and enriching thing I have ever done
- The field work - the opportunity to gain experience in remote Indigenous communities is priceless
- The quality of the research is far ahead in comparison to what I would expect in my home country

5.4.2 Areas needing improvement

	Domestic (n=36)	International (n=14)	All (n=50)
Overall Satisfaction	6%	21%	10%

Sample comments

- Structured units of study or greater organisation for relevant areas such as biometry and various lab techniques
- TERRITORIALISM by faculty members in other departments. Puts strain on postgrads when they try to share expertise...."Oh...you are taking time of my staff and I pay their salary!"

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	87	98	94	90	89

Number of respondents to the SREQ 2006 – 2010					
	2006	2007	2008	2009	2010
	n=	n=	n=	n=	n=
Domestic students	46	48	56	43	52
International students	14	8	12	12	16
Total	60	56	68	55	68
<i>% who responded</i>	69%	57%	72%	61%	76%

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 Veterinary Science.

Number of respondents who answered the open questions SREQ 2006 – 2010						
	<i>Date of survey</i>	2006	2007	2008	2009	2010
		n=	n=	n=	n=	n=
<i>Areas of best practice</i>	Domestic students	41	41	38	31	42
	International students	12	7	6	8	16
	Total	53	48	44	39	58
	<i>% who provided comments</i>	88%	86%	65%	71%	85%

<i>Areas of improvement</i>	Domestic students	37	38	39	24	36
	International students	11	6	4	7	14
	Total	48	44	43	31	50
	<i>% who provided comments</i>	80%	79%	63%	56%	74%

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:

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

Where the number of respondents is less than 5, results are excluded from the report as they are likely to be unreliable.

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:

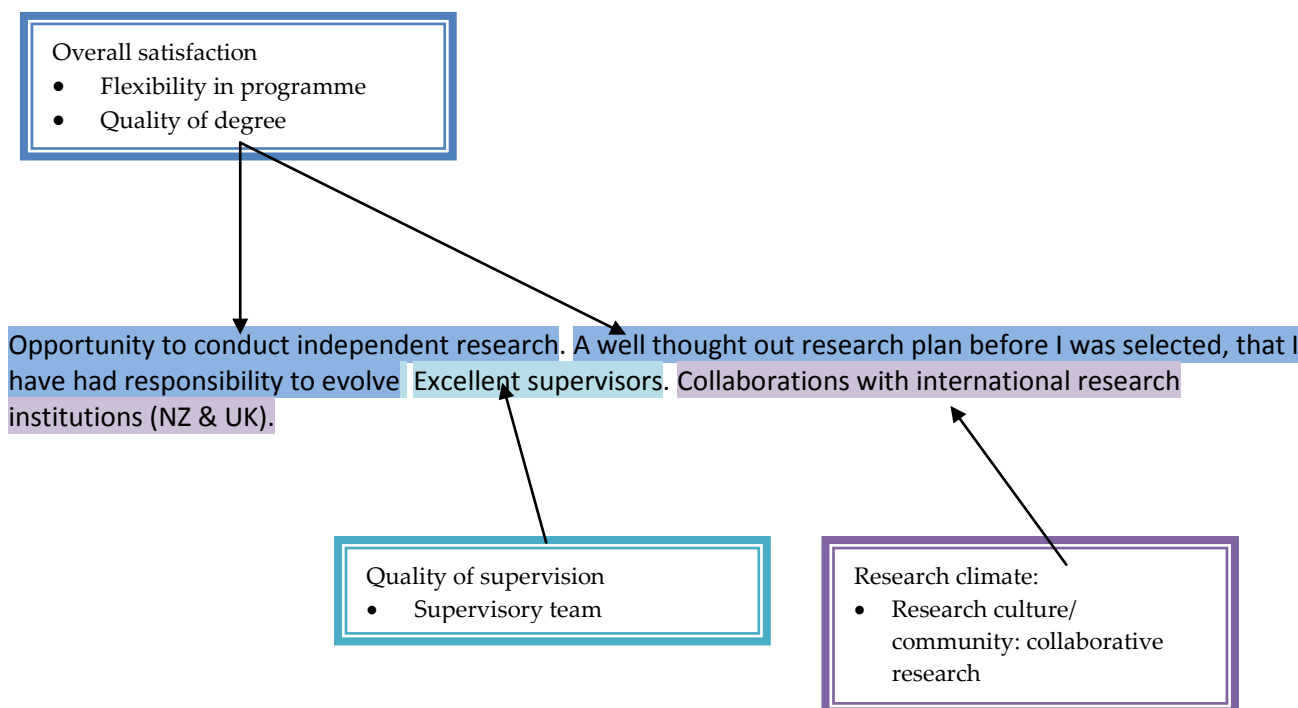
- Characteristics that define the area of the student experience
- SREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

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 Overall Satisfaction (Flexibility of programme; Quality of degree); Quality of supervision: Supervisory team); and Research climate (Research culture/ community: collaborative research) the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 4 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 (*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

ATTACHMENT FOUR: POSTGRADUATE RESEARCH EXPERIENCE QUESTIONNAIRE (PREQ 2010)

INTRODUCTION

The PREQ is a national survey administered by the independent body, the Graduate Careers Council of Australia (GCA). It is a survey of research higher degree *graduates* of all Australian universities. PREQ results are reported at least a year after the research higher degree graduates actually finish their courses i.e. students who completed their research higher degree in 2009 would have completed the PREQ in 2010, with results reported in 2011. The purpose of the PREQ is to provide the University community with a basis for strategic, faculty level academic development and curriculum review to further enhance the quality of research higher degrees. The PREQ also provides data for benchmarking between similar programmes in different universities.

Written observations, from respondents to the survey, about their experiences provide evidence to support the University PREQ 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 PREQ, with the addition of items that occur frequently in student comments.

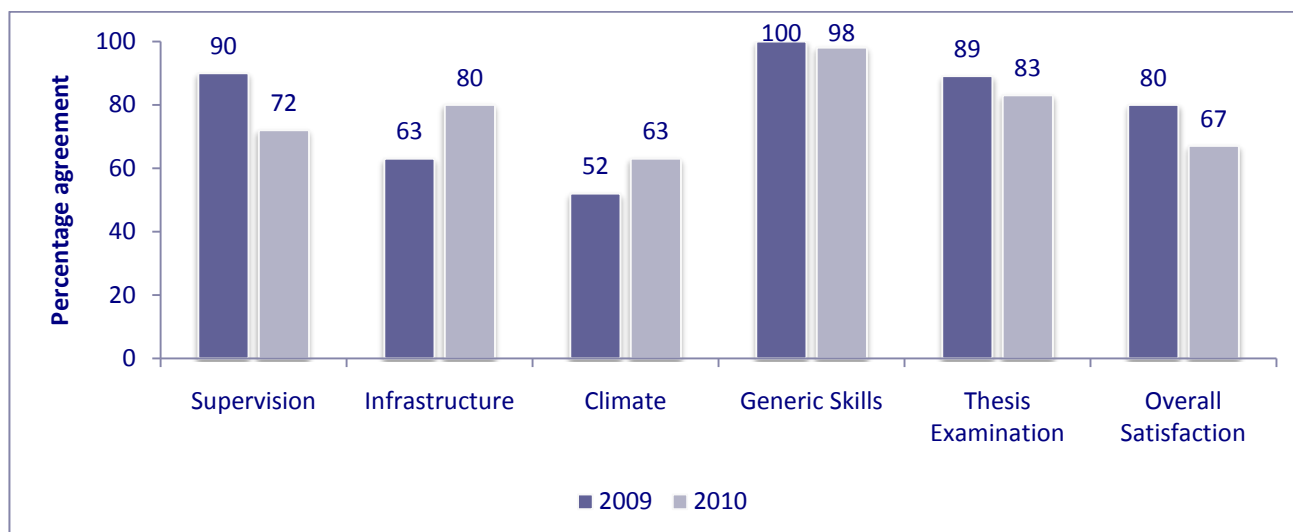
KEY RESULTS FOR 2010

The following results are an indication of those areas of the student experience that were of significance to research higher degree students in the Faculty of Veterinary Science who completed their degree during 2009. The quantitative data (percentage agreement results) reflect the experiences of respondents in relation to specific items in the survey; the qualitative data reproduces verbatim the 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.

QUANTITATIVE DATA

The following chart shows the 2009 and 2010 PREQ percentage agreement results (i.e. respondents who either agreed or strongly agreed with the survey items relating to each scale) for the Faculty.

Figure 14: Faculty of Veterinary Science: Percentage agreement results: PREQ 2009-2010



FOCUS OF WRITTEN OBSERVATIONS: 2010

In addition to PREQ survey items, graduates are asked to provide written observations on areas of best practice and areas in need of improvement during their studies at the University.

The following written observations were received from research higher degree graduates in response to the open questions in the 2010 PREQ. The broad area(s) by which each comment has been analysed is indicated in the second column

Areas of best practice

Domestic students

COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
International and interstate travel was encouraged, this allowed me to make contacts (that resulted in my current employment). experience other laboratories, and communicate with producers, who are the people my research will have an impact on.	RESEARCH CLIMATE
I finally finished it.	OVERALL SATISFACTION
Opportunity to develop self and skills. Meeting/networking with other scientists in same field.	GRADUATE ATTRIBUTES RESEARCH CLIMATE
That it's done.	OVERALL SATISFACTION
Having the opportunity to go to national and international conferences. Learning in a peer-supportive environment. Working with field experts.	RESEARCH CLIMATE
Very supportive.	RESEARCH CLIMATE
Developing my analytical skills. I found that towards the end of the PhD, I could read and understand scientific papers that I found incomprehensible at the beginning. I also enjoyed attending numerous conferences and meetings, and socialising with other scientists. There was plenty of bench space in the Gunn Building (Faculty of Veterinary Science) for performing laboratory work. The University of Sydney Camperdown Campus is beautiful and has an excellent atmosphere. My supervisors really did put in a lot of effort, with the skills learned from and soon after my PhD, I can now see how I could have avoided a lot of the problems I had.	GRADUATE ATTRIBUTES RESEARCH CLIMATE INFRASTRUCTURE SUPERVISION

Suggested improvements

COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
More structured learning may be helpful, as occurs in north America and Europe. students there are expected to take courses and be examined on their area of study. Whilst our undergraduate courses in Australia are perhaps more thorough, it may be beneficial for PhD students (who may have been out of uni for a few years) to undertake some courses related to their area of research.	QUALITY OF DEGREE
More supervision earlier on in the degree. more opportunities for interaction with other researchers outside and within the university. more technical support.	SUPERVISION RESEARCH CLIMATE INFRASTRUCTURE
Regular meetings/communication with supervisors throughout. Looking outside the square more to develop novel methods.	SUPERVISION OVERALL SATISFACTION
Supervision was terrible and supervisor was nasty, unavailable and made the whole experience a misery.	SUPERVISION
As I was based off-campus, I often felt that I was missing out on much of the Veterinary Faculty-run social presentations offered on-campus.	RESEARCH CLIMATE

COMMENT	AREAS OF RESEARCH TRAINING EXPERIENCE
<p>I felt very lost through much of my study. My research was severely underfunded, and I simply did not know what to do about it. I ended up wasting a lot of time and energy using old, cantankerous equipment which in the end turned out to be faulty and produced no usable data. I also did not get a lot of help with developing research questions and hypotheses, or with analysing my data. The Faculty of Veterinary Science, in which I completed my PhD, would really benefit from having more postdoctoral researchers and technicians to give support and advice, and to help with developing research ideas and in writing papers. The academic staff supervising me were either too busy or too long removed from lab work and data analysis to really help me with the problems I was having.</p>	<p><i>INFRASTRUCTURE SUPERVISION</i></p>