

Sydney Medical School

Postgraduate Research Experience Questionnaire Report: 2010

Research higher degree graduates

April 2011

Contents

INTRODUCTION.....	2
KEY RESULTS FOR 2010.....	2
QUANTITATIVE DATA	2
FOCUS OF WRITTEN OBSERVATIONS: 2010	3
ATTACHMENT ONE: COMPARATIVE TABLES: FOCUS OF WRITTEN OBSERVATIONS: 2007 – 2010.....	6
ATTACHMENT TWO: COMPARISON SREQ 2009 AND PREQ 2010	7
ATTACHMENT THREE: STATISTICAL DATA.....	9
ATTACHMENT FOUR: NOTES ON ANALYSIS AND COUNTING OF COMMENTS.....	10
ATTACHMENT FIVE: PREQ SCALES: COVERAGE OF QUANTITATIVE AND QUALITATIVE DATA	11

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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

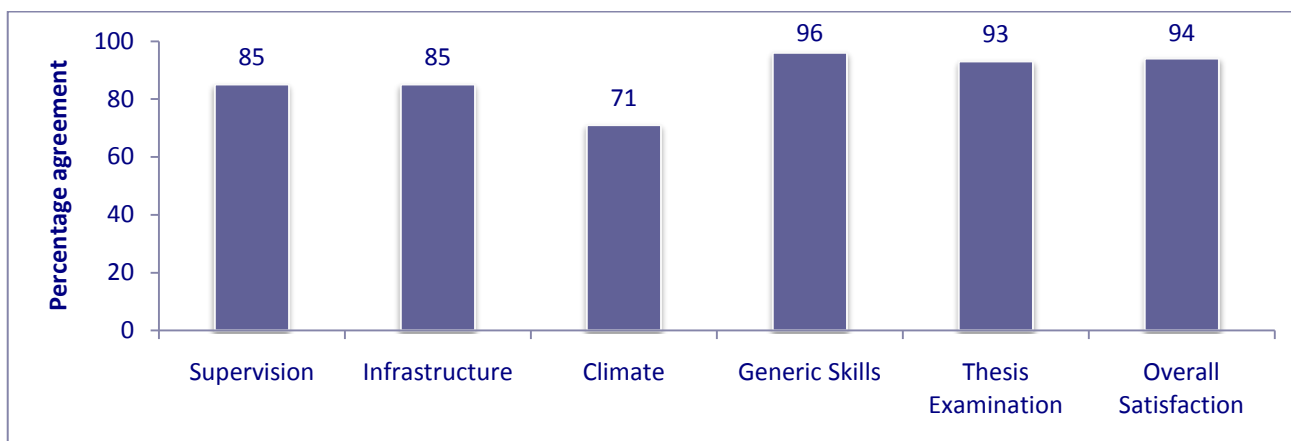
The following results are an indication of those areas of the student experience that were of significance to research higher degree students in the Sydney Medical School who completed their degree during 2009. The quantitative data (percentage agreement results) reflect the experiences of respondents in relation to specific items in the survey; the qualitative data 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: *In the PREQ, domestic reports use the field of study mapping, which gets more hits than the degree mapping, which is used for the overall and international reports. Therefore it is difficult to compare results between domestic and international respondents or domestic and overall totals¹. Consequently all data in this report is provided for all respondents (domestic and international combined)*

QUANTITATIVE DATA

The following chart shows the 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. 77 graduates responded to the PREQ in 2010.

Figure 1: Sydney Medical School: Percentage agreement results: PREQ 2010



Changes since 2009

- Comparisons with the 2009 results show the following changes:
 - *Supervision* an increase of 9% (2009: 76%)
 - *Infrastructure* an increase of 4% (2009: 81%)
 - *Overall Satisfaction* an increase of 4% (2009: 90%)
 - *Generic Skills* an increase of 7% (2009: 89%)
 - *Thesis Examination* an increase of 2% (2009: 91%)
 - *Climate* a decrease of 1% (2009: 72%)

¹ Based on information provided by the Institute for Teaching and Learning, April 2011.

FOCUS OF WRITTEN OBSERVATIONS: 2010

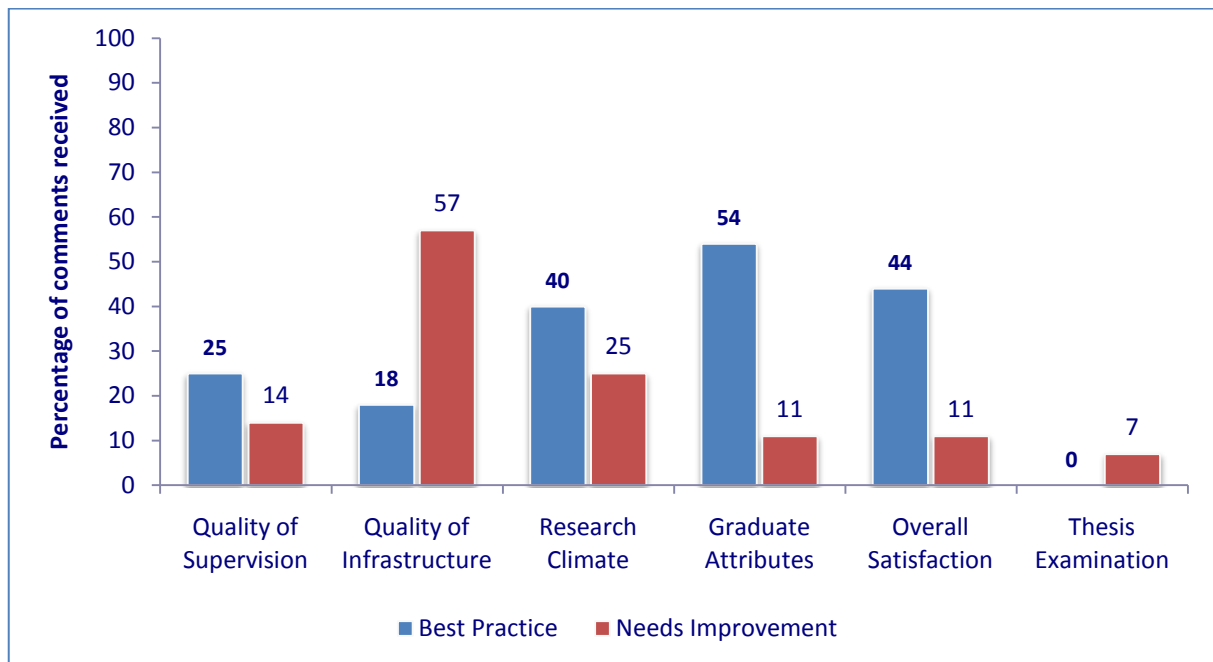
In addition to PREQ survey items, graduates are asked to provide written observations on areas of best practice and areas in need of improvement during their studies at the University. Of the 77 graduates who responded to the PREQ in 2010, 57 or 74% answered the question on areas of best practice, whilst 44 or 57% suggested improvements.

Each comment is analysed according to the *Taxonomy for analysing qualitative data from the SREQ and PREQ*, which is based on the Factors used in the SREQ and PREQ². 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. Therefore, if you add up the total percentage of comments received for each PREQ category, the total will always be more than 100³.

Distribution of comments received

The following chart provides an indication of trends in the research higher degree student experience as indicated in their responses to the open questions in the 2010 PREQ. 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 2: Sydney Medical School: Distribution of comments received: PREQ 2010



Tables showing the distribution of comments from 2007 – 2010 are at Attachment One: *Comparative tables: focus of written observations: 2007 – 2010*

Key issues

Quality of Supervision

Best practice

- 25% of respondents were satisfied with the quality of supervision. Of these 19% were satisfied with their supervisor(s)
- This represents a steady decrease in the level of satisfaction with Supervision since 2008 (2008:39%; 2009: 32%), and is almost identical to the 2007 result (24%).
- Sample comment: *Very fortunate to have one of the best supervisory teams*

² See Attachment Five: *PREQ Scales: coverage of quantitative and qualitative data*

³ See Attachment Four: *Notes on analysis and counting of comments*

Needs improvement

- 14% of respondents considered that improvements were required in this area of their experience. 9% of these comments focused on the process of supervision, rather than the actual supervisors.
- This is the lowest percentage of comments received suggesting improvements since records began in 2007, and represents a considerable decrease on the results from 2008 (38%) and 2009 (31%)
- *Sample comment: Closer monitoring of the number of students/work that supervisors take on as my primary supervisor was too busy a lot of the time to help me and I was lucky to have two great associate supervisors to help me as needed.*

Quality of Infrastructure

Best practice

- 18% of respondents were satisfied with the quality of infrastructure. Of these 7% were satisfied with library services and resources, and 7% with facilities.
- This is the highest recorded result for this aspect of the research higher degree graduate experience, and represents a noticeable increase on all previous results (2007: 13%; 2008:13%; 2009: 7%)
- *Sample comment: Library support from Lidcombe Campus, especially requests for papers/books not held at USyd*

Needs improvement

- 57% of respondents were dissatisfied with the quality of infrastructure. Of these 30% expressed concern about funding and scholarships; and 11% about facilities.
- Similar to areas of best practice, this is the highest recorded result for this aspect of the research higher degree graduate experience, and represents a considerable increase on all previous results (2007: 35%; 2008:31%; 2009: 38%)
- *Sample comment: More funding available for opportunities to attend conferences and/or carry out research overseas - or more easily accessed info about how to apply for funds*

Research Climate

Best practice

- 40% of respondents were satisfied with the prevailing research climate within the Faculty. Of these 12% considered that they worked in a supportive and welcoming environment; whilst 19% were happy with opportunities to attend conferences, seminars and be part of a research community
- Results for Research Climate have fluctuated over the past four years, with the current survey being the second highest recorded (2007: 21%; 2008: 64%; 2009: 34%).
- *Sample comment: Also good feeling to present my research work at scientific conferences and getting positive feedback on it from fellow researchers*

Needs improvement

- 25% of respondents suggested improvements in this area of their experience. Of these, 20% would welcome improvements in the work environment; whilst 7% were dissatisfied with aspects of the community.
- Similarly to areas of best practice, results have fluctuated over the past four years, with the current survey being the second lowest recorded (2007: 32%; 2008: 24%; 2009: 41%).
- *Sample comment: The department has a fragmented presence. More needs to be done to integrate students located outside Blackburn Building*

Graduate Attributes

Best practice

- 54% of respondents were satisfied the development of graduate attributes. Of these 37% were satisfied with the development of tasks and abilities within the Research and Inquiry cluster; 11% with Communication skills; and 7% with Personal and intellectual autonomy.
- This results represents an increase of 11% on 2009, and is identical to the 2008 result.
- *Sample comment: Learning many new techniques. developing writing and communication skills that will help me in future jobs*

Needs improvement

- 11% of respondents considered improvements were required in this area of their experience. All of the comments referred to tasks and abilities in the Research and Inquiry cluster, especially research, technical and statistical skills.

- This result represents a decrease of 2% on the 2009 results, and an increase of 2% on the 2008 result.
- *Sample comment: Formal/credited sessions on advanced research methodology and biostatistics for students*

Overall Satisfaction

Best practice

- Of the 44% of comments received that fell within the remit of Overall Satisfaction, 23% indicated that they were satisfied with their research and its contribution to the field of knowledge; whilst 18% appreciated the flexibility and independence of a research higher degree
- *Sample comment: The freedom to think. The independent approach*

Needs improvement

- 11% of respondents suggested improvements in this area of their experience. Comments ranged across all areas of the student experience that fall within the remit of Overall Satisfaction.
- *Sample comment (from Quality of degree: practical aspects): Communication with surgeons - collection of critical material e.g. biopsies, tissues, bloods etc*

Thesis Examination process

Best practice

- Whilst the quantitative data suggests a high degree of satisfaction with the thesis examination process, very few respondents choose to provide written observations on this aspect of their experience. No students commented on best practice in this area of their research higher degree experience between 2007 and 2010.

Needs improvement

- 7% of respondents expressed dissatisfaction with the examination process.
- This is similar to the previous three years, and represents a considerable decrease on the 2007 result (19%)
- *Sample comment: My examiners took 8 months to all complete their report on my thesis. would rather Sydney University incorporated an oral dissertation into the process to speed things up.*

COMPARISON WITH STUDENT RESEARCH EXPERIENCE QUESTIONNAIRE (SREQ) 2008

Since it is possible that final year respondents to the 2009 SREQ might also have responded to the 2010 PREQ after they graduated, comparative quantitative and qualitative data relating to the SREQ 2009 and the 2010 PREQ is appended to this report (Attachment Two).

FOR MORE INFORMATION

On the analysis and reporting of qualitative data

Ms Rachel Symons Executive Officer, Graduate Studies Office
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Reports on the current student experience (SREQ) are available at http://sydney.edu.au/learning/evaluating/research_higher_degree_reports.shtml

On the PREQ and how to interpret results

Staff of the ITL are available to provide support to faculties in the interpretation of the PREQ data and the development of strategic responses to address any issues identified
Phone: + 61 2 9351 3725
Email: itl@sydney.edu.au

PREQ results and reports are at <http://www.itl.usyd.edu.au/preq/reports.cfm>

ATTACHMENTS

The following attachments are provided:

- 1 Comparative tables: Focus of written observations: 2007 – 2009
- 2 Comparison SREQ 2009 and PREQ 2010
- 3 Statistical data: number of respondents to the PREQ
- 4 Notes on the analysis and counting of comments
- 3 PREQ Scales: Coverage of quantitative and qualitative data

ATTACHMENT ONE: COMPARATIVE TABLES: FOCUS OF WRITTEN OBSERVATIONS: 2007 – 2010

The following tables show the percentage of comments received relating to areas of best practice and areas needing improvement from respondents to the PREQ 2007 – 2010

QUALITY OF SUPERVISION	2007	2008	2009	2010
Areas of best practice	24%	39%	32%	25%
Areas needing improvement	19%	38%	31%	14%

QUALITY OF INFRASTRUCTURE	2007	2008	2009	2010
Areas of best practice	13%	13%	7%	18%
Areas needing improvement	35%	31%	38%	57%

RESEARCH CLIMATE	2007	2008	2009	2010
Areas of best practice	21%	64%	34%	40%
Areas needing improvement	32%	24%	41%	25%

GRADUATE ATTRIBUTES	2007	2008	2009	2010
Areas of best practice	47%	54%	43%	54%
Areas needing improvement	3%	16%	8%	11%

OVERALL SATISFACTION	2007	2008	2009	2010
Areas of best practice	37%	23%	52%	44%
Areas needing improvement	16%	9%	13%	11%

THESIS EXAMINATION	2007	2008	2009	2010
Areas of best practice	0%	0%	0%	0%
Areas needing improvement	19%	9%	8%	7%

ATTACHMENT TWO: COMPARISON SREQ 2009 and PREQ 2010

Since it is possible that final year respondents to the 2009 SREQ might also have responded to the 2010 PREQ after they graduated, the following comparative data is provided as an indication of the relationship between areas of the research higher degree student experience that were of importance whilst current students (SREQ 2009) and upon graduation (PREQ 2010).

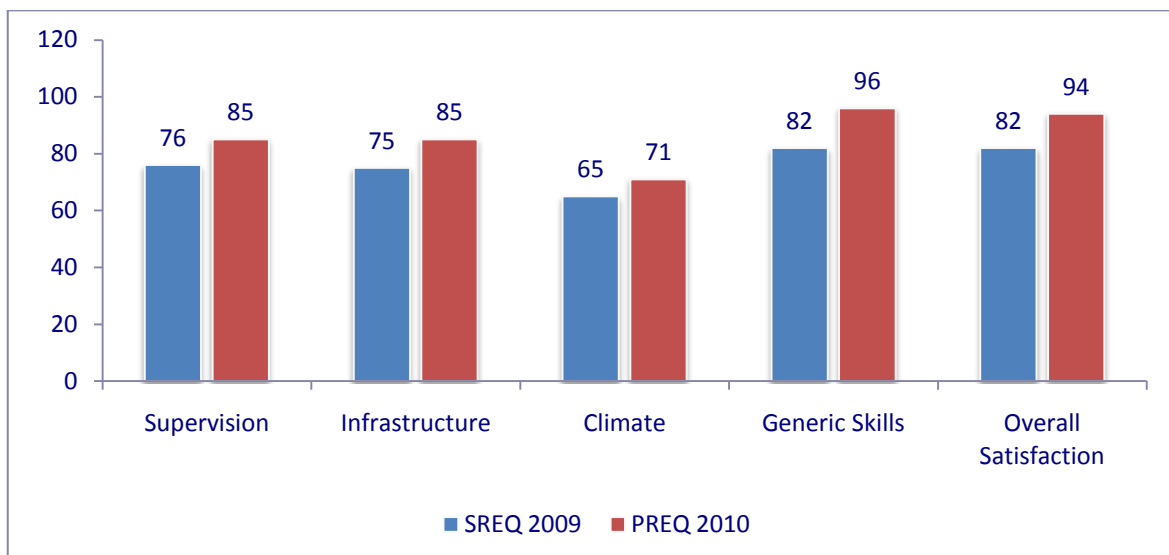
NB: Due to the differing lengths of time taken to complete a research higher degree, and the fact that results are reported by year of study, data relating to final year students responding to the 2009 SREQ is not available as a separate entity.

NB: Since the SREQ does not include the Thesis Examination Scale, data relating to this aspect of the research higher degree student experience is omitted from this comparison.

QUANTITATIVE DATA

The following chart compares the 2009 SREQ 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 Sydney Medical School.

**Figure 3: Sydney Medical School:
Comparison percentage agreement: SREQ 2009 and PREQ 2010**



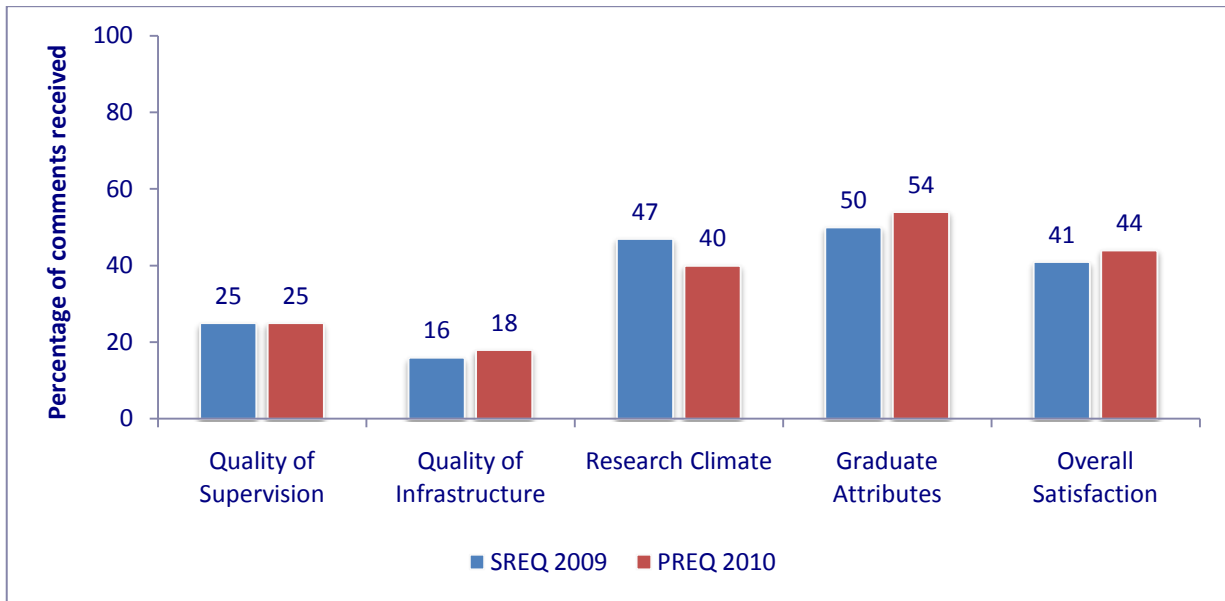
As indicated in the above chart, results from the analysis of survey items are higher for graduates than for current students in all areas of the research higher degree student experience.

FOCUS OF WRITTEN OBSERVATIONS

The charts on the following pages provide a comparison between the results of the analysis of qualitative data from the 2009 SREQ (current students) and that from the 2010 PREQ (graduates who were students in 2009). They provide an indication of the importance of areas of best practice (Figure 4) and areas in need of improvement (Figure 5) in the research higher degree student experience.

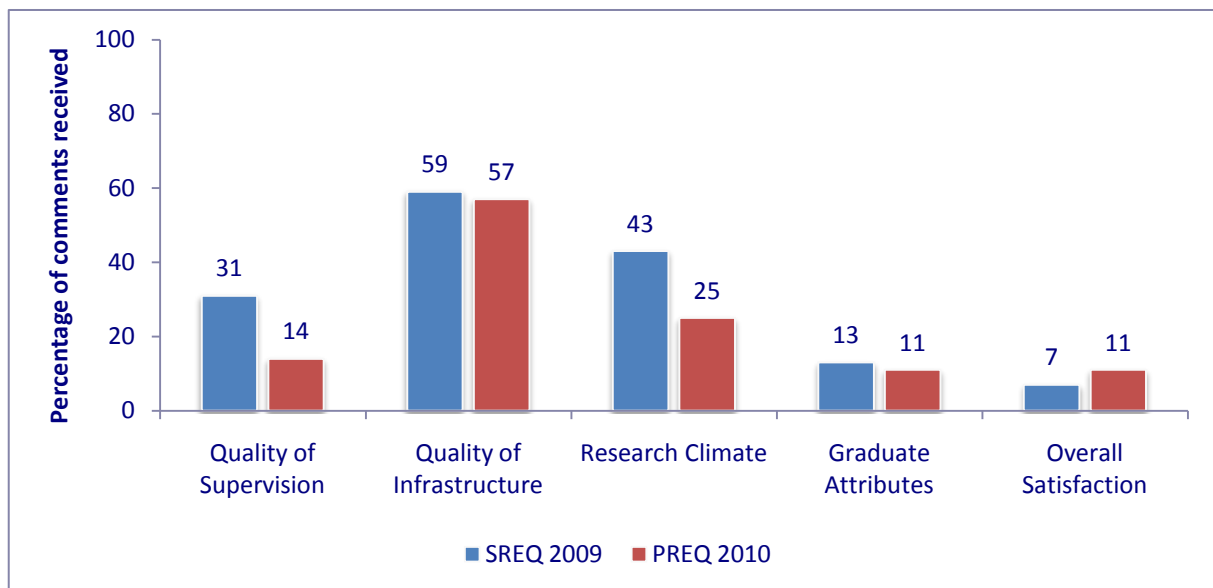
Areas of best practice

Figure 4: Areas of best practice: Comparison SREQ 2009 and PREQ 2010



Areas needing improvement

Figure 5: Areas needing improvement: Comparison SREQ 2009 and PREQ 2010



ATTACHMENT THREE: STATISTICAL DATA

1 QUANTITATIVE DATA ANALYSIS

Number of respondents to the PREQ 2007 – 2010				
	2007	2008	2009	2010
	n=	n=	n=	n=
Domestic respondents	70	45	50	58
International respondents	<5	10	6	12
Overall	79	75	80	77

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 Sydney Medical School

Number of respondents who answered the open questions PREQ 2006 – 2010					
	Date of survey	2007	2008	2009	2010
		n=	n=	n=	n=
<i>Areas of best practice</i>	Domestic students	34	56	48	49
	International students	4	5	8	8
	Total	38	61	56	57
	<i>% who provided comments</i>	55%	81%	70%	74%

<i>Areas of improvement</i>	Domestic students	28	52	32	38
	International students	3	3	7	6
	Total	31	55	39	44
	<i>% who provided comments</i>	39%	73%	49%	57%

3 INFORMATION RELATING TO NUMBERS OF RESPONDENTS (quantitative data)

As advised by the Institute for Teaching and Learning:

- Field of study mapping is used to retrieve statistical data for reports relating to domestic graduates
- Degree mapping is used to retrieve statistical data for overall reports and reports relating to international students
- Field of study mapping retrieves more 'hits' than degree mapping.

Therefore it is difficult to compare results between domestic and international respondents or domestic and overall results.

As a result of the above information, data in this report is provided at "overall" level only. The above data relating to the number of respondents who responded to the PREQ (note 1) is provided for information only.

ATTACHMENT FOUR: 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:

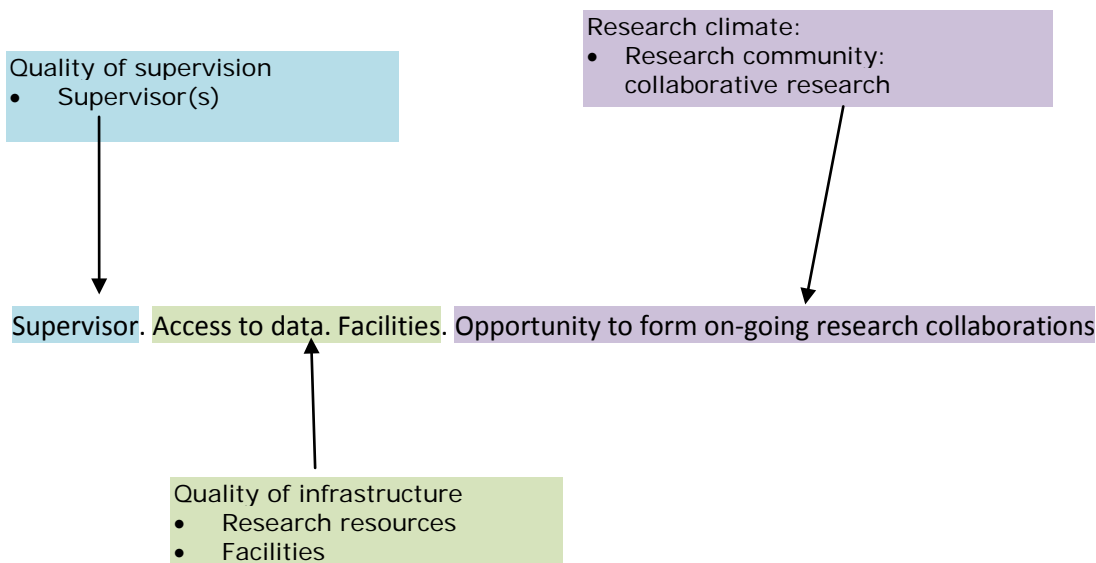
- Characteristics that define the area of the student experience
- PREQ survey items
- recurring themes in students' comments and have been developed over many years of analysing qualitative data from students' surveys.

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/PREQ*, which is based on the Factors used in the SREQ and PREQ. 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 (Research resources; Facilities); and Research Climate (Research 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 FIVE: PREQ SCALES: COVERAGE OF QUANTITATIVE AND QUALITATIVE DATA

The University of Sydney Postgraduate Research Experience Questionnaire (PREQ) survey items have been shown to cluster together to form factor scales: Supervision, Climate, Infrastructure, Generic Skills and Thesis Examination, and the Overall Satisfaction Item. These items, together with recurring themes in graduates' 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 PREQ.

1 SUPERVISION SCALE/ QUALITY OF SUPERVISION

1.1 PREQ Survey items

- Supervision was available when I needed it
- My supervisor(s) made a real effort to understand difficulties I faced
- My supervisor(s) provided me with additional information relevant to my topic
- I was given good guidance in topic selection and refinement
- My supervisor(s) provided helpful feedback on my progress
- I received good guidance in my literature search

1.2 Qualitative data analysis

There are 4 sub-categories within *Quality of Supervision*, against which graduates 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 PREQ survey items together with recurring themes in graduates' 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; help with writing the thesis*)
- IP and plagiarism

2 INFRASTRUCTURE SCALE/ QUALITY OF INFRASTRUCTURE

2.1 PREQ Survey items

- I had access to a suitable working space
- I had good access to the technical support I need
- I was able to organise good access to necessary equipment
- I had good access to computing facilities and services
- There was appropriate financial support for research activities

2.2 Qualitative data analysis

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

- Administration (*enrolment and admission; communication between faculty and graduates; general comments on administration (faculty and university); graduation; enrolment; postgraduate coordinator; ethics process*)
- 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 and conference funding*)
- Research resources (*provided by faculty; provided by internal and external libraries and archive centres*)
- Student support services (*Research Office; International Office etc*)
- Support (*IT; technical; laboratory*)

3 CLIMATE SCALE/ RESEARCH CLIMATE

3.1 PREQ Survey items

- The department provided opportunities for social contact with other postgraduate graduates
- I was integrated into the department's community
- The department provided opportunities for me to become involved in the broader research culture
- A good seminar program for postgraduate graduates was provided
- The research ambience in the department or faculty stimulated my work

3.2 Qualitative data analysis

There are 7 sub-categories within *Research Climate*, against which graduates 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 PREQ survey items together with recurring themes in graduates' comments.

- Social inclusion (*cultural diversity; equity, discrimination, and harassment*)
- Research culture/ 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, 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/research (e.g. availability of tutoring, lecturing); industry/ government; general comments*)

4 GENERIC SKILLS SCALE/ GRADUATE ATTRIBUTES

4.1 PREQ Survey items

- My research further developed my problem-solving skills
- I learned to develop my ideas and present them in my written work
- My research sharpened my analytical skills
- Doing my research developed my ability to plan my own work
- As a result of my research I feel confident about tackling unfamiliar problems

4.2 Qualitative data analysis

There are 5 sub-categories within Graduate Attributes, against which graduates 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; presentation*)
- 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 THESIS EXAMINATION SCALE/ PROCESS

5.1 PREQ Survey items

- The thesis examination process was fair
- I developed an understanding of the standard of work required
- I understood the required standard for the thesis
- I was satisfied with the examination process
- I understood the requirements of thesis examination
- The examination of my thesis was completed in a reasonable time.

5.2 Qualitative data analysis

There are 5 sub-categories within Thesis examination process. The components of these sub-categories are based on the PREQ survey items together with recurring themes in graduates' comments.

- Examiners
- Feedback from examiners
- Marking (*including time taken to examine thesis*)
- Process (*including comments on whole process; individual elements are analysed according to other sub-categories*)
- Standard of thesis (*understanding of*)

5 OVERALL SATISFACTION

5.1 PREQ Survey item

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, etc; practical components*)
- Pressure to complete (*i.e. within time frame set by APA conditions etc*)
- Satisfaction with research (*topic, contribution to field*)
- Writing and completing (*the process of completing the thesis and submitting for examination; finishing*)
- 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 fellow students (*calibre; education level etc*)