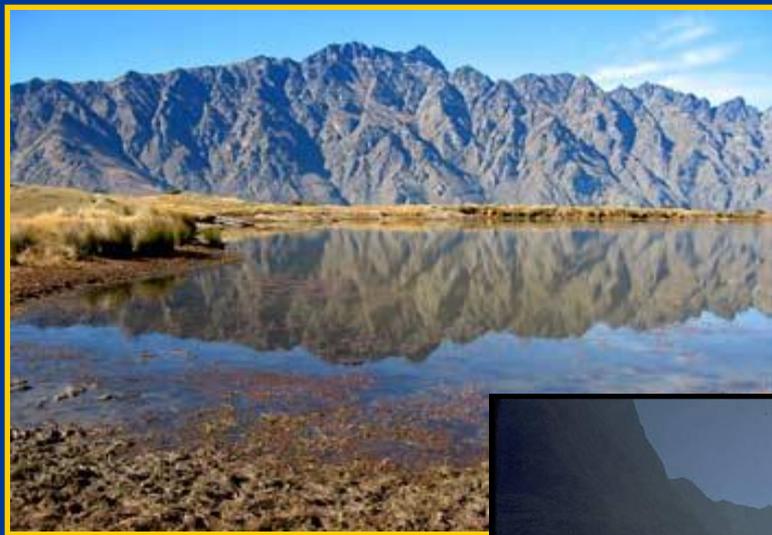
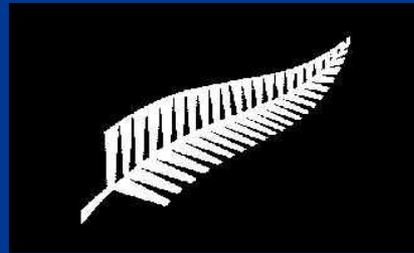
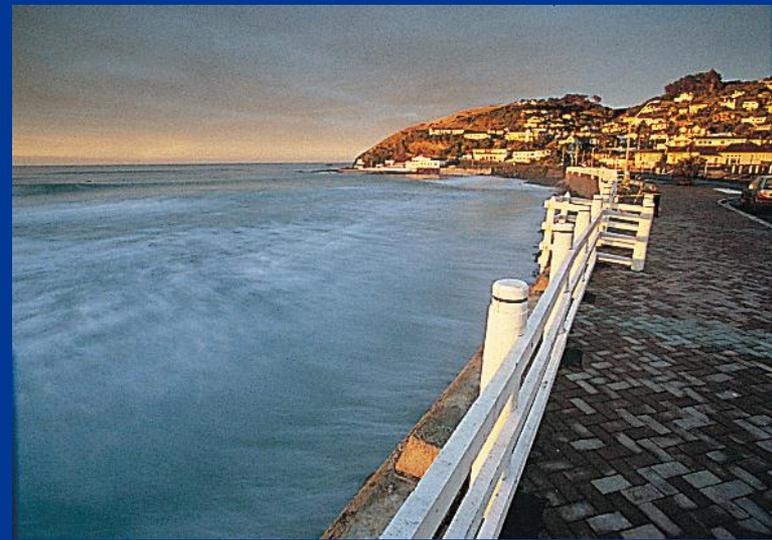
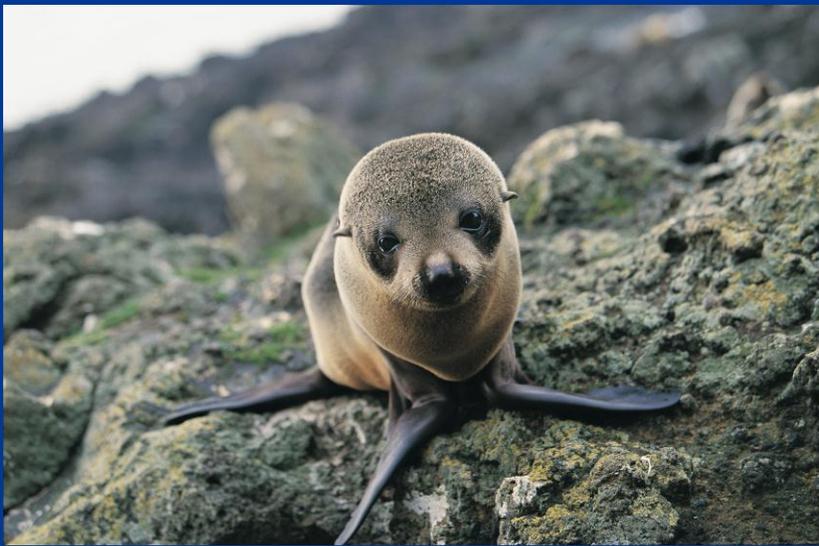


Using collaborative peer feedback and supervision to support doctoral research at a distance

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Introduction

- The attrition rates of doctoral programmes are very high (30% completing in New Zealand; 50% in Canada).
- Intellectual isolation a major factor. Many PhD students don't feel that they are part of a scholarly community.
- A key to successfully completing a doctorate is to encourage and support a sense of community among students.
- Peer support and feedback is effective in supporting graduate students' thesis research.

The Study

A collaborative peer-support and supervision model is used to support distance doctoral students in a New Zealand university.

Course work. Students undertake an intensive 12-months of part-time course work online.

Thesis. Students spend the following six to nine months to develop a thesis proposal. Complete thesis research in 5/6 years.

Research to Practice Portfolio. As a professional doctorate, students are also required to produce an evidence portfolio to demonstrate that their research is indeed related to practice.

The Study

- Distance students collaborate online with their peers and supervisors during course work.
- Students meet regularly in ten online conferences (each lasts for two weeks) as a group during the course work stage (first year of study).
- In the thesis proposal development stage (2nd year), students present drafts of their proposals online several times. These online presentations are discussed and critiqued by student and supervisor discussants.

Research Questions

1. What is the nature of the feedback provided by students and supervisors?
1. What types of feedback are conducive to assisting students in revising their thesis proposals?
1. Are there any differences between feedback provided by students and supervisors?
1. How do students see their role as peer reviewers?

Method

- A content analysis was conducted on all the online presentations in 2009.
- Three rounds of presentations and in total 26 presentations were included in the analysis.
- The online presentations were analysed using a feedback model adapted from Nelson and Schunn (2009).
- Seven types of feedback were included in the coding scheme (refer Table 1).
- An idea unit was used as the unit of analysis.
- Six students and six supervisors were interviewed.

Table 1: Coding scheme of feedback provided by students and supervisors

Category	Examples
Asking questions for clarifications but no specific suggestions/solutions are provided (Clarification - CL)	<p>“Have you thought about...”</p> <p>“What do you mean by...”</p>
Raising a specific problem/issue but no specific solutions/suggestions for revision are provided (Problem - PR)	<p>“I also found your ‘Research Methodology’ paragraph confusing...”</p> <p>“What I am concerned...if you are only using the interviews...to address questions 2 and 3, you may not be getting enough data”</p>
Raising a specific problem/issue and suggesting a specific solution or providing a suggestion/idea to assist the presenter to move forward (Solution - SO)	<p>“You need to link your strong statement...”</p> <p>“Another idea would be to have children create stories about these issues and have them react to the stores”.</p>
Making a general comment (Comment - GC)	<p>“My main concern...was that methodological nuts and bolts did not precede or swamp what is important here...”</p> <p>“I realize that your work is likely to show that we have to be sensitive to cultural influences...that really seems to be at the heart of what you propose to investigate”</p>
Providing an explanation of a concept or a resource related to the topic of study (Resource - RE)	<p>“The following references...might be useful to you”</p> <p>“Some non-sampling errors and other possible design weakness in the Kochenderfe-Ladd and Pelletier (2008) questionnaire for you to consider...”</p>
Confirming/agreeing/empathizing with the points raised by the presenter or other participants (Confirmation - CO)	<p>“Have to agree with your last comment...”</p> <p>“Thanks for the clarification...I also agree with you...”</p>
Praising the work done by the presenter (Praise - PA)	<p>“Your proposal looks good to me...”</p> <p>“This is looking like a really exciting and useful project...”</p>

Table 2: Coding scheme of responses provide by the presenters

Category	Examples
<p>The presenter has considered the suggestions/solutions provided by the discussant and certain action has been or will be taken (Change - R-C)</p>	<p>“May be I need to think about this a bit more...” “You distinguishing between attainment/achievement and the wider process of education is very helpful...” “I probably need to explore the emerging...literature...to see what methods other researchers have used...”</p>
<p>The presenter explains/clarifies/answers the questions raised by the discussants (Explanation - R-E)</p>	<p>“This interests me for several reasons...” “No current NZ research has used the CLES survey to investigate...”</p>
<p>The presenter provides some general comments on the issues raised by the discussants, but these are not specific responses (Comment - R-G)</p>	<p>“Sorry about the references, I do have them...” “I don’t know the answer to this...”</p>
<p>The presenter responses with further questions or seeks help from the discussants (Question - R-Q)</p>	<p>“At the risk of embarrassing myself can you just clarify for me what you meant by...” “When you say I have ‘enough of a sample’ ...do you mean...”</p>

Participants

- 10 doctoral students contributed 206 idea units (in 68 postings)
- 10 supervisors contributed 367 ideas units (in 136 postings)
- There were 261 response units – 95 to students, 166 to supervisors

Findings

Table 3: Amount and length of feedback and responses per presentation

	Average number of postings	Average number of words	Average number of feedback/response unit
Contributed by students	2.6	239	7.9
Contributed by supervisors	5.2	210	14.1
Contributed by presenter	4.0	293	10.0

Table 4: Types of feedback units per presentation

	CL	PR	SO	GC	RE	CO	PA	Total
Contributed by students	3.2	1.3	1.6	0.6	0.4	0.4	0.5	7.9
Contributed by supervisors	2.2	2.2	6.2	0.9	0.4	1.0	1.2	14.1

Table 5: Types of responses units contributed by the presenter per presentation

	Change (R-C)	Explanation (R-E)	Comment R-G)	Question (R-Q)	Total
Responding to student feedback	0.9	2.3	0.3	0.1	3.7
Responding to supervisor feedback	2.4	2.9	0.3	0.8	6.4

Relationship between feedback and revision

Table 6: Relationship between feedback and responses units

	Problem (PR)	Solution (SO)	PR + SO	Response – Change (R-C)	R-C/PR + SO
Student feedback	33	41	74	24	32%
Supervisor feedback	57	162	219	61	28%
Total	90	203	293	85	29%

Table 7: Correlations between student feedback features and responses features

	Response - Change	Response - Explanation	Response - Comment	Response - Question
Clarification	0.19	0.45*	0.14	-0.02
Problem	0.03	0.07	-0.12	0.12
Solution	0.67**	0.30	0.15	0.55**
Comment	-0.23	0.03	0.21	-0.05
Resource	0.10	-0.14	0.14	-0.19
Confirmation	-0.01	-0.42*	0.22	0.04
Praise	-0.19	-0.14	-0.16	0.02

** correlation is significant at the 0.01 level

* correlation is significant at the 0.05 level

Table 8: Correlations between supervisor feedback features and student responses features

	Response - Change	Response - Explanation	Response - Comment	Response - Question
Clarification	-0.27	0.51**	-0.20	0.17
Problem	0.43*	-0.125	0.65**	-0.05
Solution	0.08	-0.30	0.37	0.22
Comment	0.39	0.05	0.28	0.35
Resource	0.07	0.04	-0.27	-0.25
Confirmation	0.52**	-0.05	0.31	0.19
Praise	-0.10	-0.23	0.21	0.12

** correlation is significant at the 0.01 level

* correlation is significant at the 0.05 level

The role of the peer reviewer

Participants were cautious in giving feedback:

“I am not going to be of much help to you...” (Student)

“I think students felt a bit constrained about giving feedback...because I think they thought the academics would know more about this subject matter...may be a lack of confidence about offering feedback...” (Student)

“I can't comment intelligently on the various instruments and technical aspects of methodology...but I can add the following procedural comments...I don't know much about a lot of the tools that you have mentioned...I will leave those comments to the experts among us.” (Supervisor)

Supervisors supporting each other

Supervisor discussant: You [referring to the presenter] should state here why you have chosen to approach 1000, and why 40% is your 'preferred' response rate.

Primary supervisor: Not sure I understand your calculation. The response rate refers to the sample... Without going into details of how to calculate the required sample size (Supervisor A, Supervisor B, or Supervisor C might want to have a go), I would say you need no more than 350 as your sample size...

Supervisor A: What you need is more on the order of 200, and you could probably live with 100 if necessary...

Value of the feedback

Student A: Ignore all of this if I am on the wrong track...

Student B: These thoughts from the top of my head – may be complete nonsense...

Presenter: No way!...I know how valuable this process is...if I can answer the questions – then I can have confidence in my questions, if I can't, what you are offering me is other opportunities to strengthen my study...and I do need to go check those self-directed learning scales and to potentially operationalise what is SDL [self-directed learning]

Value of the feedback

A supervisor agreed with the presenter's comment:

Supervisor: Good discussion here – and the value, as you say, is in the way this shapes/forces further thinking and clarification.

His comment was supported by another presenter:

Presenter: I'm beginning to realize that the value of this type of forum, while partly about assisting us to design a competent study, is also about us developing a design that works for us individually. Hearing how different people would approach the same research question is very valuable for me.

Value of the feedback

“...rather than just having a conversation with your supervisor, it's forced us all to be more involved in critiquing each other's developing work...it's helped because there's been more feedback from a wider range of people...that the comments that one person makes are visible to the whole group, and so...sparks ideas and thoughts from a wider pool of people.” (Student)

Conclusion

- Feedback was considered carefully and positively and the presenters used the discussions to clarify their understanding and improve their proposals.
- Clarification questions did help the presenters to clarify and sharpen their understanding of the concepts and design of their projects, but it was mostly the problems identified and solutions proposed that led to revisions.
- The success of this model depends very much on the willingness of the students and supervisors to participate actively in the discussion process.
- Most of the students highly valued this collaborative process.

Thank you for your time!!