Research and Development in Higher Education: Reshaping Higher Education
Volume 33

Format for citing papers:

Author surname, initial(s). (2010). Title of paper. In M. Devlin, J. Nagy and A. Lichtenberg (Eds.) *Research and Development in Higher Education: Reshaping Higher Education*, *33* (pp. xx–xx). Melbourne, 6–9 July, 2010.

*Note: page numbers will be available when *Research and Development in Higher Education: Reshaping Higher Education, 33* is published after the conference.

This research paper was reviewed using a double blind peer review process that meets DIISR requirements. Two reviewers were appointed on the basis of their independence and they reviewed the full paper devoid of the authors' names and institutions in order to ensure objectivity and anonymity. Papers were reviewed according to specified criteria, including relevance to the conference theme and sub-themes, originality, quality and presentation. Following review and acceptance, this full paper was presented at the international conference.

Reshaping HDR supervisor writing advice through unpacking Discourses

Lalitha Velautham
The University of Adelaide, Adelaide, Australia
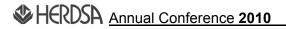lalitha.velautham@adelaide.edu.au

Michelle Picard
The University of Adelaide, Adelaide, Australia
michelle.picard@adelaide.edu.au

This paper aims to enhance supervisor writing advice and its uptake by research candidates through unpacking supervisors' written comments and candidates' perceptions of these comments. Effective commentary on research writing requires that supervisors and candidates have a mutual understanding of tasks, their responsibilities, standards and initiatives (Cargill & Cadman, 2005) and that the research candidates are able to "feed-forward" this understanding into future tasks as part of a self-management strategy (Rae & Cochrane, 2008). In this paper, we contend that a Critical Discourse Analysis (CDA) unpacking of supervisor comments can benefit all parties in the supervision relationship, particularly in the case of English as an Additional Language (EAL) candidates. Supervisors' awareness of their implicit pedagogies and their role in the supervisory relationship can transform praxis (Janks, 2005). Additionally, candidate understanding of what supervisors mean by 'good writing' and the categories by which they judge 'good writing', along with the institutional, disciplinary and individual relations that underlie these categories, can empower them as research writers and as participants in the supervisory relationship (Cadman & Cargill, 2007). This research involves an analysis of supervisor comments on eleven research proposals according to Fairclough's (2003) steps of CDA. The supervisor comments are categorised according to the types of feedback (discourse) they contain as well as the social and ideological relationships (Discourse) they reveal. Then the research candidates' experience of the comments are analysed. Finally, pedagogical implications aimed at enhancing the supervisory relationship are discussed.

Keywords: researcher education, writing advice, supervision pedagogy

Background and rationale

The Higher Degrees by Research (HDR) supervisor's role has evolved into a "productive pedagogy", where increasingly supervisors are attempting to scaffold the research process and to give research candidates explicit feedback (Hill, 2007, p. 1). The role of an explicit supervision pedagogy (Bruce, 2008) along with "positions mentoring" (Manathunga, 2007, p. 207) of the disciplinary and generic research culture(s) underlying this feedback is also pertinent, particularly if supervisors and candidates do not share the same cultural and linguistic background, since it is now generally acknowledged that research involves the development of identity as well as ideas and technical skills (Aitchison & Lee, 2006; Diezmann, 2005; Kamler & Thomson, 2004). Significant work has been done on identifying strategies that supervisors employ in their pedagogy (Bruce, 2008) and some research exists on how HDR candidates develop their identities as academics through the medium of receiving and processing feedback (Knowles, 2007). This study is, however, the first to

analyse supervisors' written comments on both discourse (linguistic) and Discourse (social and ideological) levels and complete the feedback loop with candidates' perceptions of the comments. It is also the first Critical Discourse Analysis of written comments related to draft research proposals.

In the Australian HDR context, scaffolding of research writing through effective feedback is particularly important, since postgraduate candidates in Australian universities are judged solely on the thesis, which represents all intellectual work during the course of their candidature. The research proposal is another significant document, since it plays both an "institutional" role (Cadman, 2002, p. 87) and an "academic role" (Cadman, 2002, p. 89), providing institutions with concrete 'proof' of research focus and serving as a discussion tool to clarify research goals along with developing research writing.

The danger of emphasising the research proposal document is that supervisors could potentially expect a well-crafted document even at a draft stage which could impact on candidate confidence and development. On the other hand, supervisors who "unreflectively and routinely correct errors and insert their preferred form of words into a candidate's text" in order to ensure "a nicely expressed written document" (Cadman & Cargill, 2007, p. 186) could breed dependent candidates lacking in self-editing skills. An explicit pedagogy of research writing, especially at the research proposal stage, is indicated.

This research was undertaken in the context of a structured program for English as an Additional Language (EAL) research candidates that involves supervisors in writing development. In this program, research writing skills are developed through feedback from candidates' Academic Language and Learning (ALL) lecturers and supervisors who co-mark successive drafts of the research proposal, each focusing on their area of expertise (content and disciplinary conventions; and research communication respectively) and providing written comments (Cadman, 2002; Cargill & Cadman, 2005). These comments provide the ALL team with unique insights into the supervisor's expectations, pedagogy, and the dynamics of the supervisory relationship which then informs the curriculum of the program.

Project aims

This research aims to categorise the types of feedback supervisors give on drafts of candidates' writing and analyse the research conventions and cultural implications behind this feedback. In addition, the candidates' reflections on the feedback are analysed. Through this process, this study aims to enhance interactions between supervisors and research candidates and to determine what type of feedback could potentially lead to candidate's using self-management strategies.

Method

The data consists of supervisor written comments on eleven draft research proposals from postgraduate EAL Engineering candidates and the candidates' reflections on the feedback received. The discipline of Engineering was selected since, although the pedagogies (Bruce, 2008) involved in this discipline and the discourses underlying these pedagogies (Henwood, 1998; Kittleson & Southerland, 2004) have been well described, the way these pedagogies are demonstrated in written comments and how candidates react to these pedagogies remains relatively unexplored. Permission was obtained from the eleven

supervisors and candidates to use the comments and responses for research purposes. Ethics clearance was also obtained.

Critical Discourse Analysis (CDA) was selected as the method for analysis because it is an excellent tool that captures both the social and ideological relationships that exist between participants who operate within a particular "network of social practices" (Fairclough, 2003, p. 23).

The comments were analysed and categorised using CDA to unveil the values that supervisors attach to their comments on candidate research writing. To gain an understanding of the candidate perspective, the researchers combined open-ended questions to which the candidates were asked to write written reflections, with interviews to obtain their responses to their supervisors' written comments on their draft research proposals.

The supervisors and HDR candidate respondents enact their identities through language and through their social actions. As such, it was important to make a distinction between the small discourses and big Discourses within the supervisory relationship. Gee (2005, p. 7) distinguishes the big Discourses from the small discourses in social interactions by describing the big Discourses as "... ways of being in the world ... ways of acting, interacting, feeling, believing, valuing ..." and the small discourses as "language in use." He further illustrates how an understanding of how and why language works the way it does when it is put into action can potentially contribute in terms of understanding and intervention to important issues (Gee, 2005, p. 7). The present study aims to "explain how and why language works the way it does" (Gee, 2005, p. 7) in supervisor comments on candidate draft research proposals and how these comments are received by candidates.

Both the small discourses and the big Discourses are reflected in Fairclough's (2003) framework for analysis. This framework identifies the levels for analysis with a series of focus questions in order to examine the social practices underlying the communication event as well as how these social practices are structured and reflected in language. Fairclough's (2003) framework serves as a systematic guide to categorise the types of discourses evident within a text. He identifies "social events, genre, difference, intertexuality, assumptions, semantic/grammatical relations between sentences and clauses, exchanges, speech functions and grammatical mood, Discourses, modality and evaluation" (p. 191) as levels of analysis. This study focuses on the Discourses and discourses detailed below (Table 1).

Table 1: Adapted from Fairclough's (2003) issues for text analysis

Level of analysis	Focus
Semantic/grammatical relations between sentences and clauses	What are the predominant semantic relations between sentences and clauses (causal-reason, consequence, purpose; conditional; temporal; additive; elaborative; contrastive/concessive)?
Exchanges, speech functions and grammatical mood	What are the predominant types of exchange (activity exchange or knowledge exchange) and speech functions (statement, question, demand, offer)? What is the predominant grammatical mood (declarative, interrogative, imperative)?
Discourses	What discourses are drawn upon in the text, and how are they textured together? Is there significant mixing of discourses?
Modality	To what extent are modalities categorical (assertion, denial etc), to what extent are they modalised (with explicit markers of modality)? What are the markers of modalisation? (modal verbs, modal adverbs, etc)?

Analysis of supervisor comments

Based on the data and literature on Engineering education and supervision, the following specific Discourses evident in the discipline of Engineering, Computer and Mathematical Sciences were identified: collaborative colleague discourse (Gatfield, 2005; Grant, 2003; Grant & Graham, 1999; Kittleson & Southerland, 2004), efficiency-driven, realist discourse (Henwood, 1998; Kittleson & Southerland, 2004), autonomous participant discourse (Kittleson & Southerland, 2004), gatekeeper or standards discourse (Henwood, 1998) and process driven discourse (Henwood, 1998).

The collaborative colleague Discourse was reflected in language features emphasising joint partnerships, development and networks of social practices as illustrated in these example comments (Table 2).

Table 2: Analysis of collaborative colleague Discourse

Supervisor comment	Analysis and discussion
"In **discussion with G**, **we** talked about [a] number of possible evaluations…" (Sup G)	Emphasis on pronoun "we". Possibilities rather than fixed ideas.
"Perhaps a little weakness, **for this stage** in the logical argument… Ok for **this stage**. Will require more detail later". (Sup E)	Emphasis on development, time, progress.
"**We have to assume** there may be some unforseen issues, such as availability of equipment and technique services, which may be impacts on the timeline". (Sup C)	Assumption of common challenges, the candidate is assumed to be a colleague with similar challenges to the supervisor.
"**Thank [the IBP] for efforts in helping H**, he has made substantial progress over the last six months" (Sup H)	Network of social practices of the supervisor, candidate and IBP lecturer.

The efficiency-driven, realist Discourse was reflected in unambiguous modality, short direct instructions characterised by the use of imperatives as evidenced below (Table 3).

Table 3: Analysis of efficiency-driven, realist Discourse

Supervisor comment	Analysis and discussion
"Background information **should be** given in a more logical way starting with general information then focussing on more specific issues" (Sup I) "One research aim that **needs to be** added is the potential improvements to…." (Sup F) "The document **should be** expanded to incorporate…" (Sup F) "Further work **is needed to** achieve the objectives of this project. Methodology needs to be rewritten" (Sup D)	Unambiguous guidelines – should, needs.
"**No title**: defective organisation" (Sup J) "**Need more** details of the methods used… **Provide more** information for…. **Describe how** the three project phases…" (Sup C)	Short, direct, fixed. Imperatives.

Supervisor comment	Analysis and discussion
"…further work to **understand** the topic and then **identify** the research focus and aims." (Sup D) "The ideas are **logically** and **coherently** presented and it reads well. **Needs** more work on expressing ideas **clearly** and **succinctly**" (Sup H) "Ability to express English still **needs to be improved**. I have made many suggested corrections to the document. I suggest that F **write out by hand** each original sentence and my corrected sentences from the report" (Sup F)	Focus on action (verbs) and how the action is completed (evaluative adverbs) and on expected, clearly defined product.

Some of the supervisors' comments appeared to show respect for the research candidates as autonomous participants. This was reflected in comments that signalled the careful distinction between supervisor and candidate work. Moreover, there was a distinct focus on empowerment as can be seen below (Table 4).

Table 4: Analysis of autonomous participant Discourse

Supervisor comment	Analysis and discussion
"G has worked on the citation and used it very often to support **his** argument" (Sup G) "This will form an excellent basis for **H's future research work**" (Sup H)	Personal pronoun "he" distinction between supervisor and candidate. Ownership of the research clearly allocated to the candidate.
"…as **he** progresses to the next phase of **his** program [where] **he** will start to **assume greater responsibility and initiative** of his research direction" (Sup G)	Concept of development and recognition of candidate's progress shown in abstract nouns naming personal qualities.
"In general G **has developed his** reading and writing skills and I can see that **he** has **come a long way** since he started" (Sup G) "But **she** still needs to work hard to express **own ideas** clearly and logically"(Sup D)	Handing over of responsibility, candidate empowerment reflected in present perfect tense (gradual progression from past and still ongoing) Recognition of candidate's responsibilities as an autonomous agent.

The process-driven Discourse is perhaps the most prominent of all the Discourses evidenced in the data. This Discourse is described as involving a focus on orderly completion and technical skills training (Henwood, 1998). Instead of expecting the HDR candidate to absorb information by themselves, the supervisor takes a scaffolding or "coach" role (Bruce, 2008). This Discourse is reflected in the data by a focus on actions and an emphasis on progression rather than perfection as reflected below (Table 5).

Table 5: Analysis of process-driven Discourse

Supervisor comments	Analysis and discussion
"It may be difficult for the student to prepare the budget details. However, …**could be able to anticipate** the estimated costs" (Sup C) "Ability to express English still needs to be improved. I have made many suggested **corrections** to the document. I **suggest** that F write out by hand each original sentence and my corrected sentences from the report" (Sup F)	Emphasis on action that the candidate can take in order to achieve success. Direct instructions with adherence to definite standards expected, but phrased as suggestions.

Supervisor comments	Analysis and discussion
"**More work** on the structure **is needed**, **nonetheless** considering the amount of time given to the student, he has made **good progress**" (Sup G)	The supervisor expects changes to be made, but concessions are made for development and recognition of candidate's previous work.
"Also the outcomes need to be highlighted a bit more. **We expect** these issues to be rectified in the near future" (Sup G)	Confidence in candidate's ability to receive and act upon supervisor feedback.
"**Though** she will need to acquire new knowledge and also….from my point of view, she is progressing well" (Sup G)	Concession.
"Good... Probably **a little more** detail is needed on possible….also need to discuss……….and how one might address this issue" (Sup K) "**No significant problem** there. **Minor comment**: in section 4 the word …should be used instead of…" (Supervisor B)	Language of hedging, use of modality and focus on downplaying severity of errors.

Despite indicating respect for candidate autonomy and the learning process, each set of supervisors' comments clearly reflected the Discourse of supervisor as gatekeeper. This Discourse is evidenced in a focus on institutional and disciplinary standards and a demand for adherence as represented below (Table 6).

Table 6: Analysis of 'supervisor as gatekeeper' Discourse

Supervisor comments	Analysis and discussion
"**More care is necessary** in the citations. Historical citations are required, but more emphasis should be put on the latest development" (Sup B) "Significance and contribution in applied Science and Pure Science are **only** outlined in 3.5 and **need to be** described with more details. "The title omits the word…**please be careful**. The **title is extremely important in a proposal** or paper". (Sup B)	Focus on task, constrained by institutional requirements and standards. Evaluative terms are used.
"G uses **appropriate headings, subheadings and linking devices**…" (Sup G) "The **introduction should** put more emphasis on the link between the two topics treated". (Sup B)	Adherence to named structural requirements in the research document.
"The used citations are **appropriate** for the **discipline** and follow the **common citation in EEE**" (Sup G) "The candidate did use citations to support his argument whenever needed to. Also the reference list does follow the **common convention in Electrical and Electronic Engineering discipline**" (Sup G)	The standard is named as a target for compliance.
"There are a few **constraints** placed on the research program which are either unnecessary or too restrictive. **Why** focus only on…? **Why** focus on…? **Why** focus on… as the near field…?" (Sup K) "**Why** do we want to extend the range of operation of … to ….?" (Sup B)	The supervisor becomes an inquisitor, demanding that the candidate refine or clarify the research focus in line with disciplinary or research group requirements.

Besides the five broad Discourses in Engineering reflected above, conflicting discourses were also identified in the supervisor comments. This suggests that supervisors might at times view their role as fluid, stretching along a continuum encompassing the role of gatekeeper and, at the same time, the role of a collaborative colleague within the supervisory team. There were instances in the supervisor comments where a single comment reflected conflicting discourses showing the ambivalent role of the supervisor. For example, a positive focus on improvement and praise was contrasted with harsher evaluations as apparent in Table 7.

Table 7: Analysis of conflicting Discourses

Supervisor comments	Analysis and discussion
"Certainly **improved**. **Although** linking now **stronger**, there are still **sometimes** gaps missing in the discourse. Rather than an issue with the language, I **suspect** that this may be due to **inadequate knowledge** of the subject field. " (Sup K)	Positive evaluative language and acknowledgement of progress. Positive language and/or hedging, contrasted with harsher authoritative evaluations.
"Material now at a state where the reader **is not too** distracted with errors. **Still need** to develop skills further to be **suitable for professional peer assessed documents**" (Sup K) "Some of the goals are **not so clearly** defined but **ok for now**" (Sup E) "There are certainly some grammar **flaws**, but in general, **quite readable**" (Sup E)	Concessions made for candidate development, but a strict adherence to institutional and scholarly conventions required. Supervisor shows conflicting views in assessment of task.
"Format and layout good. **Still** need headers in the doc. One question is there any reason **why** … have been chosen?" (Sup K) "The key components of the research are **clearly** addressed in the proposal. **However**, most of them are given with **limited details**." (Sup C)	Although complimentary, the supervisor is compelled to focus on quality control and expect the "beautifully expressed, edited and formatted document" (Cadman & Cargill, 2007, p186).

Candidate response to supervisor comments

Following the analysis of supervisor comments on the draft research proposals, a questionnaire was administered in which the research candidates were asked to provide written reflections. Follow up interviews were conducted with several of the respondents to clarify their responses.

The data reveals that the candidates' responses to their supervisors' comments also reflected the Discourses already identified. In many cases, the Discourses the candidates appeared to value correlated with those valued by their supervisors. An analysis of some of the candidate responses to the supervisor feedback and indication of correlation of discourses is presented below (Tables 8–13).

Table 8: Analysis of responses to collaborative colleague Discourse

Candidate response	Analysis and discussion	Correlation with supervisor
"However, after meeting with him, which **he justify his comment**, I **felt alright**" (Candidate C) "Afterwards, **I will ask why** they gave me these comments" (Candidate E)	Expectation that supervisor treats candidate with respect and explain the reasons for commentary given.	Mainly efficiency-driven and gatekeeper Discourses, sometimes more collaborative. Correlation.
"[I will] go **have a chat** with him and see if we could **compromise**" (Candidate C)	Candidate uses informal language illustrating a desire for a more informal collegial relationship. This is also shown in the emphasis on compromise from both sides, thus a more equal relationship.	End of feedback reflects a more collaborative relationship, but mostly efficiency-driven or gatekeeper Discourses.

Table 9: Analysis of responses to efficiency-driven, realist Discourse

Supervisor comment	Analysis and discussion	Correlation with supervisor
"I know a little bit more about what I **must write** and learn for my proposal." (Candidate D)	Unambiguous guidelines – *must*.	Correlates with short, guidelines given by supervisor.
"[I took the following actions]: **Corrected** all errors (grammar, words *et al*.) **Deleted** the unnecessary parts **Found** the new materials to fill in the research proposal. **Discussed** with supervisor about the unsure parts" (Candidate B) "I have **many meetings** with my supervisor and he always gives me **some feedbacks** on my short writing" (Candidate F)	Short, direct, fixed list of actions taken in response to supervisor feedback. Focus on action and how the action is completed (verbs) and on product.	Supervisor gives clear instructions. Supervisor gives explicit directions.

Table 10: Analysis of responses to process-driven Discourse

Candidate response	Analysis and discussion	Correlation with supervisor
"The comment about the research proposal structure **makes me get to know** how to explain a complex project in an easy understanding way. There are two parts to my project…..and …**in the first draft I did not properly** connect two parts. **According the comment** about the structure, I explained the comment about the significance…" (Candidate B)	Candidate positively acknowledges the supervisors' explicit directions and how he/she acted on them following guidelines.	This supervisor focuses on the process in most comments.
"I benefit much from the comments. It is a good way to **improve** my English….I read **carefully** and **modify** my paper **based on the comments**" (Candidate F)	Focus on actions to be followed in a sequential fashion.	This supervisor gives step-by-step instructions.
"He commented on my English in a **positive way which cancelled out** all the negative things he wrote. In a way his techniques **basically neutralise** any negative feeling I may have after reading his comment" (Candidate C)	Candidate values the supervisor's use of praise and appreciation of the candidate's early stage of development.	Comments include hedging and concession along with praise.

Table 11: Analysis of responses to gatekeeper Discourse

Supervisor comments	Analysis and discussion	Correlation with supervisor
"He read my research proposal carefully and **corrected grammar** errors. Furthermore, he also found **font style errors** in the reference section…the comments **should be considered thoroughly**" (Candidate B)	Focus on task, constrained by institutional requirements and standards. Candidate concurs with requirements.	Direct correlation.
"If I don't agree with the comment, **I will still modify** my works to match their suggestion. It is because supervisor has more experience than me… Moreover, **I will try to learn their way** and understand why they give me these comments so that I **can do better next time**" (Candidate E)	The supervisor is given elevated status. The candidate slavishly adheres to all the supervisor's suggestions.	Some correlation in discourse, reference to disciplinary requirements, but indirectly.

Although the research candidates usually appear to subscribe to a particular kind of Discourse more than others, there are cases where they seem to value apparently conflicting discourses as reflected below (Table 12).

Table 12: Analysis of conflicting Discourse in candidate responses

Supervisor comments	Analysis and discussion	Correlation with supervisor
"**Initial response is** "Yes, yes, yes. You are right! When my supervisor gives me comments, I feel they are absolutely correct. But sometimes, I think for a while and **start to doubt about** the comments. Afterwards, **I will ask why** they gave me these comments" (Candidate E)	Candidate's acquiescence is counteracted by his/her desire to assert independence as an autonomous participant.	Mainly a process driven, collaborative approach, but also a more gatekeeper discourse at times.
"**Rework** my research proposal to meet **his requirement** and **my own expectation**" (Candidate C)	Candidate tries to meet with external standards as set by the supervisor and his previous knowledge of standards.	Correlation at this point.

Although the supervisors and candidates generally seem to value the same Discourses, there are instances where they are clearly in conflict as indicated below (Table 13).

**Table 13: Candidate and supervisor conflicting Discourses
as evidenced in candidate responses**

Supervisor comments	Analysis and discussion	Correlation with supervisor
"I felt that the supervisor **doesn't understand** what I want to do and felt that he **demanded a lot from me**". However, after meeting with him, which he justify his comment, **I felt alright**." (Candidate C) "Sometimes they can be **very demanding**. It seems like my revised project cannot be done in a three year time span" (Candidate C)	Candidate appears to feel excessive pressures due to the supervisor's expectations. This is only partially alleviated when the supervisor "justifies" his comments treating the candidate more as a colleague.	Overall, a conflict in Discourses.
"I know **a little more** what I must write and learn for my proposal…**but I still need guides**…" (Candidate D)	The candidate seems to require a Gatekeeper discourse with definite instructions and complete oversight.	Supervisor favours a process-driven discourse.

Discussion

> The written comments gave me strongest impression as I have some time to think when I saw the comment. If the comments are given during meeting, I may properly forget after a while (Candidate E).

This comment by Candidate E was echoed by the other candidates in their reflections and interviews suggesting that written comments are particularly helpful for scaffolding research writing.

Although all five of the Discourses initially identified were used by the supervisors, content and document structure comments, which explicitly coached candidates in the processes they

could follow, was used most frequently by the supervisors and appeared to make the strongest impression on the candidates. This suggests that process-driven supervision practice is particularly valued in the Engineering discipline as indicated by the reflection below:

> I was impressed by the comments about which content was lacked in my research proposal draft. This kind of comment guided me in the future literature review (Candidate A).

The research candidates' initial responses to their supervisors' comments were generally positive and they stated that these would not negatively impact on their relationship. However, in two cases (Candidates E & H), the responses suggested that they felt compelled to follow the supervisor's advice, even when it was at odds with their own instincts and prior knowledge, suggesting that comments on written work can reflect underlying power issues in the supervisory relationship (Knowles, 2007).

The respondents appeared to understand their supervisors' comments and felt empowered to act upon them, but found quality control comments related to language issues the simplest to follow. Perhaps this is because as EAL candidates, they were accustomed to receiving explicit assistance related to language issues and acting on language feedback. Except in the case of language issues, the candidates appeared to struggle with their supervisors' "demands" (Candidate C) when the 'supervisor as gatekeeper' Discourse was prominent, perhaps due to a lack of understanding or perhaps due to not being able to meet these demands at this early stage of candidature.

Recommendations

The data suggests that written feedback can be particularly helpful in scaffolding research writing skills. However, written feedback should be complemented with discussions before and after the feedback in order to clarify product and process goals and match expectations. Feedback should also be as explicit as possible and divided into clear categories to facilitate mutual understanding. Responding to the explicit written comments systematically and then clarifying these in the face-to-face meetings can assist research candidates in self-managing their research writing. Since supervisor and candidates alike appear to favour a scaffolded process-driven discourse above all others, this appears to be a useful way of communicating and materials training Engineering supervisors should probably emphasise "coaching" pedagogies. It also appears to be helpful for supervisors to move between Discourses and their accompanying pedagogies in the course of their comments in order to ameliorate the negative effects of other Discourses. By sharing this analysis with supervisors and creating awareness of their implicit pedagogies, we aim to transform supervision praxis and help to refine materials in supervision training programs. This research could also feed into materials in researcher education programs for EAL candidates.

References

Aitchison, C., & Lee, A. (2006). Research writing: Problems and pedagogies. *Teaching in Higher Education*, *11*(3), 265–278.

Bruce, C. (2008). *Towards a pedagogy of supervision in the technology disciplines*. New South Wales: Queensland University of Technology.

Cadman, K. (2002). English for academic possibilities: The research proposal as a contested site in postgraduate genre pedagogy. *Journal of English for Academic Purposes*, *1*(2), 85–104.

Cadman, K., & Cargill, M. (2007). Providing quality advice on candidates writing. In C. Denholm & T. Evans. (Eds.), *Supervising doctorates downunder* (Vol. 1, pp. 182–191). Camberwell Acer.

Cargill, M., & Cadman, K. (2005, 6–8 July, 2005). *Revisiting quality for international research education: towards an engagement model.* Paper presented at the 2005 Australian Universities Quality Forum, Sydney, Australia

Diezmann, C. (2005). Supervision and scholarly writing: Writing to learn – learning to write. *Reflective Practice*, *6*(4), 443–457.

Fairclough, N. (2003). *Analyzing discourse and text: Textual analysis for social research* London: Routledge.

Gatfield, T. (2005). An investigation into PhD supervisory management styles: Development of a dynamic conceptual model and its managerial implications. *Journal of Higher Education Policy & Management*, *27*(3), 311–325.

Gee, J. P. (2005). *An introduction to discourse analysis*. New York: Routledge.

Grant, B. (2003). Mapping the pleasures and risks of supervision. *Discourse: Studies in the Cultural Politics of Education*, *24*(2), 175–190.

Grant, B., & Graham, A. (1999). Naming the game: Reconstructing graduate supervision. *Teaching in Higher Education, 4*(1), 77.

Henwood, F. (1998). Engineering difference: Discourses on gender, sexuality and work in a college of technology. *Gender and Education*, *10*(1), 35–49.

Hill, G. (2007). Making the assessment criteria explicit through writing feedback: A pedagogical approach to developing academic writing. *International Journal of Pedagogies and Learning*, *3*(1), 59–66.

Janks, H. (2005). Deconstruction and reconstruction: Diversity as a productive resource. *Discourse: Studies in the Cultural Politics of Education, 26*(1), 31–43.

Kamler, B., & Thomson, P. (2004). Driven to abstraction: Doctoral supervision and writing pedagogies. *Teaching in Higher Education*, *9*(2), 195–209.

Kittleson, J. M., & Southerland, S. A. (2004). The role of discourse in group knowledge construction: A case study of engineering students. *Journal of Research in Science Teaching in Higher Education*, *41*(3), 267–293.

Knowles, S. S. (2007*). Getting up close and textual: An interpretive study of feedback practice and social relations in doctoral supervision*. Unpublished PhD, Murdoch University, Perth.

Manathunga, C. (2007). Supervision as mentoring: The role of power and boundary crossing. *Studies in Continuing Education*, *29*(2), 207–221.

Rae, A. M., & Cochrane, D. K. (2008). Listening to students: How to make written assessment feedback useful. *Active Learning in Higher Education*, *9*(3), 217–230.

Weaver, M. (2006). Do students value feedback? Student perceptions of tutors' written responses. *Assessment & Evaluation in Higher Education*, *31*(3), 379–394.