This is the Pre-Published Version.

This is an Accepted Manuscript of an article published by Taylor & Francis in Assessment and Evaluation in Higher Education on 21 Jun 2020 (published online), available at: http://www.tandfonline.com/10.1080/02602938.2020.1780562.

The following publication Neupane Bastola, M., & Hu, G. (2021). Supervisory feedback across disciplines: does it meet students' expectations?. Assessment & Evaluation in Higher Education, 46(3), 407-423 is available at https://doi.org/10.1080/02602938.2020.1780562.

Supervisory feedback across disciplines: Does it meet students' expectations?

Abstract

Supervisory feedback on thesis drafts and presentations is arguably the most important source of information for graduate students, particularly those writing their theses in English-as-a-foreign-language contexts, to conduct, complete, report, and improve graduate research and benefit from the process. Despite its critical role in scaffolding students' research and thesis writing, supervisory feedback on master's theses has been underresearched, compared with the attention given to doctoral supervision. This is particularly the case in non-Western, developing countries such as Nepal. The present study examined supervisory comments on thesis drafts (n = 97) in four disciplinary areas (Education, English Studies, Physics, and Engineering) in the context of Nepalese higher education. Furthermore, supervisors' beliefs underlying their practices and students' expectations were explored through interviews with 16 supervisors and 16 students. Quantitative and qualitative analyses revealed that supervisory feedback varied across the disciplinary areas and, in many cases, did not cater to students' needs or expectations. Pedagogical implications of these findings are derived with a view to improving the effectiveness of supervisory feedback.

Keywords: graduate supervision; master's thesis; disciplinary differences; academic writing; Napalese higher education

1. Introduction

Guided research is the climax of a master's degree (Paran, Hyland, & Bentall, 2017). Extant research has indicated that writing a master's thesis is often a demanding task for students (Bitchener, Basturkmen, & East, 2010; Vehviläinen, 2009) due to a number of factors, for example, the daunting size of such a thesis (Dong, 1998), students' lack of previous research experience (Paran et al., 2017), and their limited understanding of the thesis genre and disciplinary requirements (Bitchener et al., 2010). Therefore, students tend to "feel that the amount of energy they spend on writing this work equals or outweighs the energy they spend during their whole studies" (Sadeghi & Shirzad Khajepasha, 2015, p.357).

Previous research has also revealed that thesis supervisors play a crucial role in socializing students into academic writing through supervisory feedback (Bitchener et al., 2010; East, Bitchener, & Basturkmen, 2012; Kumar & Stracke, 2007). Supervisory feedback enables supervisors to act as both gatekeepers to ensure the research standard and mentors to support their students in conducting proper research and reporting it in logical, coherent, and fluent language (Anderson, Day, & McLaughlin, 2006). Thus, such feedback serves both assessment and feedforward functions, evaluating "an end product that is the result of prior performance" (Kumar & Stracke, 2018, p.221) and providing directions for future development (Price, Handley, Millar, & O'Donovan, 2010). Students generally value feedback from their supervisors (Hyland, 2013) because it can inform them of their strengths and weaknesses, help them improve their future work, encourage them to set goals for further development, and influence their academic achievement (Basturkmen, East, & Bitchener, 2014; Wang & Li, 2011). In addition, supervisory feedback can help them become independent in their work, understand the requirements of academic disciplines, grow intellectually, and gain membership to their disciplinary community (Basturkmen et al., 2014; Bitchener et al., 2010; Dysthe. Samara, & Westrheim, 2006; East et al., 2012; Li, Hyland, & Hu, 2017; Paltridge, 2002). However, to what extent supervisory feedback can achieve these goals depends on whether it can address students' needs and challenges adequately (Bitchener et al., 2010).

Despite its critical role in scaffolding students' research and thesis writing, supervisory feedback on master's theses has been underresearched, compared with research on doctoral supervision. Insufficient research attention has been paid to the actual feedback provided on master's thesis drafts to gain insights into the nature and adequacy of supervisors' comments and to shed light on feedback practices in different educational contexts. To bridge this lacuna, this study set out to examine aspects of English-medium master's theses that supervisors focused on in their feedback at a major public university in Nepal, an educational context that is little represented in the extant literature. The study aimed to ascertain to what extent supervisory feedback would meet students' learning needs and expectations with a view to providing useful input for the formulation of supervision policies and the development of effective supervisory practices.

2. Previous research

Research on master's thesis supervision has been thin on the ground (Anderson et al., 2006). One strand of this research has examined supervisor-student relationships. For example, a quantitative study conducted at a large Dutch university by de Kleijn, Meijer, Pilot, and Brekelmans (2014) found a positive association of supportive supervisor-student relationships with students' perceptions of supervisory feedback, satisfaction, perceived supervisor contribution to learning, and final grade. A second strand of research (e.g., Anderson et al., 2006) has examined the goals of supervision and revealed that master's thesis supervisors aimed to support student learning and ensure the standard of student work, though they found it challenging to maintain a balance between the "supporting" and "gatekeeping" goals. The third line of research has focused on good supervisory practices and advocated "multivoiced supervision" that involves students in colloquia as well as group and individual supervision (Dysthe et al., 2006). Such research has advised supervisors to make critical feedback less face-threatening, be aware of the fluid and continually evolving nature of a master's thesis, leverage students' previous learning experiences, and adapt supervisory feedback to their needs (Pilcher, 2011; Vehviläinen, 2009). This body of research has also suggested that skillful, supportive, and encouraging supervision, flexible supervision strategies, and individually tailored supervisory feedback could increase students' chances of success (Katikireddi & Reilly, 2017).

Knowing what constitutes good supervisory feedback practices may not ensure the enactment of such practices. To ascertain whether supervisors are able to engage in such practices, it is also necessary to examine the content and focus of supervisory feedback (Pilcher, 2011). In a study of feedback dialogue, Wisker, Robinson, Trafford, Warnes, and Creighton (2003) found that PhD supervisors at a UK university focused on different aspects of students' work at different stages of the research process, for example, development of research questions and methodologies in the initial stage but clarification of conceptual underpinnings and reflection on critical incidents/significant changes toward the end. In another study of doctoral supervisors' feedback at New Zealand universities, Bitchener et al. (2010) reported that supervisors provided feedback on what they thought were challenging areas to students, such as substantive content, functions of different thesis sections, rhetorical structure/organization, argument development, and language use. Although comments on linguistic accuracy and appropriateness predominated in textual samples, supervisors did not consider such comments as feedback but merely editorial markings to make the theses more readable. Similarly, East et al. (2012) found that master's and doctoral students at New Zealand universities reported receiving feedback on content, structure/organization, and language. They found the feedback useful because it provided them with information about their performance and suggested ways for further improvement. Notably, the aforementioned studies drew on mainly retrospective interview and/or questionnaire data to determine the foci of supervisory feedback, and their findings need to be corroborated by a close examination of actual supervisory feedback provided.

Two studies (i.e., Basturkmen et al., 2014; Kumar & Stracke, 2007) examined feedback comments on texts. In their study of written feedback on the first draft of a PhD thesis in Applied Linguistics at an Australian university, Kumar and Stracke (2007) identified three fundamental functions of feedback comments: referential, directive, and expressive. The supervisee found expressive feedback (i.e., praise, criticism, and opinion) most beneficial because the praise enhanced his confidence, the constructive criticisms motivated him to make substantive revisions, and the supervisor's opinion offered different perspectives and stimulated further explorations. These findings underscored the engaging potential of quality feedback. In a study of supervisors' on-script feedback on drafts of master's and doctoral theses across three disciplinary areas (i.e., Management/Marketing, Arts/Humanities, and Maths/Computer) at six New Zealand universities, Basturkmen et al. (2014) found that comments on linguistic accuracy and appropriateness far outnumbered those on content, requirements, and cohesion/coherence. These patterns were consistent across all three disciplinary areas, "suggesting some similarity in practices, norms, and values in these disciplines as part of the wider academic discourse community" (p.441). The predominance of comments on linguistic accuracy and appropriateness was attributed to the supervisors' emphasis on "the need for precise expression and appropriate phrasing in terms of academic English expectations" (p.441). The lower frequency of comments on content, on the other hand, was explained in terms of the supervisors' perceptions of content as being "a more emotively charged aspect of writing" and their wariness of making less carefully phrased responses.

As revealed by the two studies reviewed above, multiple factors and considerations could mediate supervisory feedback. The literature suggests that supervisors' own academic literacy skills and abilities, time constraints on feedback provision, students' work quality, their diverse needs, their level of engagement, and their sense of responsibility may all have an impact on the type and focus of comments that supervisors provide (Carter & Kumar, 2017; Filippou et al., 2017; Vehviläinen & Löfström, 2016; Wakefield, Adie, Pitt, & Owens, 2014). Furthermore, the nature, culture, and values of different disciplines might influence supervisory feedback (Becher, 1994; Bernstein, 1999; Hu & Choo, 2016), though both Basturkmen et al. (2014) and Bitchener et al. (2010) did not find disciplinary differences. In hard-pure disciplines (e.g., Physics), which have rigorous and standard procedures for knowledge verification, disciplinary knowledge is cumulative, atomistic, value-free, and concerned with universals. In contrast, in soft-pure disciplines (e.g., English Studies), where there are few universally agreed-upon standards for knowledge verification, disciplinary knowledge is value-laden, reiterative, holistic, and dependent on knowledge makers' personal voice, expertise, and authority. Unlike pure disciplines, hard-applied (e.g., Engineering) and soft-applied (e.g., Education) disciplines are more concerned with the application of knowledge to solving real-world problems (Becher, 1994). In terms of the underlying knowledge structure (Bernstein, 1999), hard disciplines tend to organize knowledge hierarchically and aim to integrate knowledge across "an expanding range

of apparently different phenomena" (p.162), whereas soft disciplines prefer to organize knowledge horizontally and place a premium on the deployment of "specialized languages" (p.159) and the development of a "gaze", that is, "a particular mode of recognising and realising what counts as an 'authentic' sociological reality" (p.165). Given such deep-seated disciplinary differences, students from different disciplines "may have varying needs and preferences for feedback" (Yang & Carless, 2013, p.291) and may understand the feedback received in different ways (Hyland, 2013). Furthermore, there may be disciplinary variations in terms of who (supervisors or students) should decide on research topics (Vehviläinen, 2009) and "what a thesis or dissertation should look like" (Paltridge, 2002, p.126). Consequently, it is necessary to examine supervisory feedback from a disciplinary perspective.

3. The gaps in literature

The literature review in the preceding section reveals several gaps in extant research on supervisory feedback on master's theses. First, although previous work has examined various aspects of master's thesis supervision, including supervisor-student relationships (e.g., de Kleijn et al., 2014), goals of master's thesis supervision (e.g., Anderson et al., 2006), characteristics of good supervisory practices (e.g., Dysthe et al., 2006; Katikireddi & Reilly, 2017; Vehviläinen, 2009), there has been only limited research on supervisory feedback, a critical source of information for thesis writing. Second, of the small number of studies that examined actual supervisory feedback, only two (i.e., Basturkmen et al., 2014; East et al., 2012) included master's students and their supervisors as participants. Findings from studies of supervisory feedback on doctoral theses may not be generalizable to master's theses because doctoral and master's students differ in their disciplinary socialization, previous research experience, and mastery of academic discourse, and therefore may have different feedback needs and expectations. Third, the bulk of previous research on supervisory feedback did not explicitly address students' needs for and expectations of supervisory feedback. As East et al. (2012, p.1) point out, "what the student wants to receive by way of feedback may sometimes differ from what the supervisor gives"; consequently, there may be a lack of shared understanding between supervisors and their students (Katikireddi & Reilly, 2017). Therefore, it is imperative to investigate supervisory feedback in relation to students' needs and expectations. Fourth, with the exception of Basturkmen et al. (2014), little research attention has been given to potential disciplinary variation in supervisory feedback practices. As argued above, however, there is good reason to examine supervisory feedback from a disciplinary perspective. Finally, extant research on master's thesis writing has mostly been conducted in Western contexts, and not much is known about master's supervision in other educational contexts. Like other academic activities, supervisory feedback practices are "contested and situated practices which take place within particular institutional cultures and academic power/knowledge relations" (Sutton, 2012, p.33) and "[maintain]

conventions and traditions that reflect underpinning values and assumptions about learning" (Vehviläinen & Löfström, 2016, p.511). The context- and culture-specific nature of feedback means that findings obtained in one learning or cultural context may not be extrapolative to graduate students writing their master's theses in other contexts.

In response to the gaps identified above, this study was designed to examine supervisory feedback comments on thesis drafts submitted by master's students from four disciplinary areas at a major public university in Nepal. Specifically, the study was guided by the following research questions:

1. What aspects of student work do supervisors focus on in their feedback?
2. Do supervisors differ in the provision of various types of feedback across disciplines?
3. Does supervisory feedback meet students' needs and expectations?

4. Methodology

4.1. Context

To address the research questions presented above, participants were recruited from four disciplinary areas at a large Nepalese university: English Studies, English Education, Physics, and Mechanical Engineering. These disciplinary areas were chosen to represent soft-pure, soft-applied, hard-pure, and hard-applied disciplines, respectively (Becher & Trowler, 2001). The participating university offers two-year master's degree programs, where thesis writing is compulsory in Education and Engineering but optional in English Studies and Physics. Master's degree is a 69-credit program in English Education and 60-credit program in other disciplines. A thesis carries six credits in Education and Physics (9-10%), three credits in English Studies (5%), and 16 credits (26.66%) in Engineering. In these disciplines, all the courses are delivered and assessed in English. While English Studies and English Education can enroll a large number of students (300 each), Physics and Mechanical Engineering have limited quotas, 120 and 80, respectively, with intense competition among applicants in getting admission. During data collection, there were 255 students in English Studies, 280 in English Education, 120 in Physics, and 80 in Mechanical Engineering. A student must secure at least an overall B grade in the first semester to be eligible for thesis writing in Physics and pass all the core courses before registering for thesis writing in Engineering. However, there are no such requirements in Education and English Studies. In Education and Physics, students prepare their proposals under their supervisors' guidance, whereas in English Studies and Engineering, students are assigned to supervisors after they defend their proposals. While students of Education, Physics, and English Studies give two presentations (proposal and thesis defenses), Engineering students are required to make four presentations (proposal, mid-term, pre-final, and final defenses) and disseminate their research in a journal article or a conference presentation. Academic writing instruction is offered only in Education (one credit) and English Studies (nine credits).

4.2. Participants and data collection

The research received ethical approval (HSEARS20180326003) from the Department Research Committee, The Department of English, The Hong Kong Polytechnic University, and closely followed the university's guidelines for sound research. The first author contacted the participants in their respective departments, duly informed them of the purpose of the research, made them aware of voluntary nature of participation, and obtained their written consent. The participants' personal information has been kept confidential, and their identity has been anonymized in reporting the findings. The interviews conducted in Nepali and transcribed in English further added to the anonymity of the participants represented in the quotations.

The principle of maximum variation motivated the selection of the sample (Patton, 2015). Data collection for this study consisted of the following two stages. At the first stage, thesis drafts with supervisory feedback were collected from four disciplines in view of supervisors' supervisory experience and research output to ensure the representativeness of the sample as far as possible. Altogether, 97 thesis drafts with supervisory feedback from 52 (male = 49; female =3) supervisors were collected from 97 students from the four disciplines (See Table 1). Unlike the other three disciplines, where supervisory feedback was provided predominantly in writing, most feedback in Engineering was provided orally during student-supervisor meetings, and students were asked to audio-record the oral feedback.

Table 1. Disciplinary distribution of the thesis drafts collected and analyzed and the number of supervisors and students involved

Discipline	Supervisor	Student	Draft
English Studies	15	20	20
English Education	12	25	25
Physics	10	24	24
Engineering	15	28	28

At the second stage, four supervisor-student pairs from each discipline who had contributed thesis drafts at the first stage were interviewed. The supervisors were sampled according to two criteria: supervisory experience and research output. Beginning supervisors (*n* =8) had less than three years of supervisory experience and had rarely published in indexed journals, whereas experienced supervisors had at least five years of supervisory work and had multiple publications in indexed journals. Each selected supervisor and one student supervised by him/her were interviewed individually. The interviews each lasted between 45 minutes and one hour. An interview protocol was used to guide the interviews. Formulated for a larger project subsuming the present study, the interview questions concerned what goals supervisory feedback waw intended to serve, what types of feedback were provided and received, what feedback practices the interviewees considered useful, what challenges they faced, and to what extent the students engaged with the feedback or perceived to do so. The interviews were audio-recorded. There were two interviews with each participant. The first interview

was intended to establish rapport, collect some background information about a participant, and set time for the second interview. The second interview was conducted with the interview protocol described above. A copy of the transcription was emailed to each participant to ensure that their views were represented accurately.

4.3. Data coding and analysis

All supervisory feedback on the collected thesis drafts were first segmented into individual comments. Following F. Hyland (1998), "all feedback given was considered as feedback points, including symbols and marks in the margins, underlining of problems, and complete corrections, as well as more detailed comments and suggestions" (p.261). When a stretch of written or verbal feedback addressed multiple aspects of the student's presentation, each chunk of text that dealt with a distinct aspect was counted as an individual feedback point, as illustrated by the following example comprising four feedback points:

Any data from the observation?? Too little information.∥ Your thesis lacks analysis∥ and smooth flow of language.∥Also, you need to triangulate the data (interview and observation).

All the segmented feedback points were then coded for their focus. This coding process was a deductive content analysis that involved moving from categories established on the basis of previous work to new ones emerging in the data (Cohen, Manion, & Morrison, 2018). Specifically, categories of feedback focus established by Basturkmen et al. (2014) and Bitchener et al. (2010) were used as a preliminary coding scheme and revised iteratively in response to new and different categories identified in the data as a result of repeated reading and constant comparison. This interaction between deductive and inductive coding resulted in an analytic framework of six categories comprising subcategories: (1) content, (2) coherence/organization, (3) expected components of a thesis, (4) linguistic forms, (5) mechanics, and (6) miscellaneous. Table 2 presents these categories and subcategories illustrated with examples from our data. Extracts from students' writing are underlined, the information crossed out by the supervisors is marked with a ~~strikethrough~~, and supervisors' comments are in italics.

Table 2. Categories and subcategories of feedback comments

Focus	Example
Content (accuracy, coverage, clarity, originality, and relevance of content)	• *There is some mistake in the graph.* (**Accuracy**) • *What do you mean by small, medium, or large granule size? Don't you have to measure the size?* (**Clarity**) • *Which poems are you going to deal with? Note them down here….* (**Coverage**) • *All copied and compiled here.* (**Originality**) • ~~Technique is a real strategy, trick or stratagem of teaching language.~~ *No need to define technique.* (**Relevance**)

Coherence/organization (logical connection of content at sentence, paragraph and text levels)	• *There is a lack of coherence. Three sentences in a paragraph are talking about three different and unrelated things.* (**Coherence**) • *Reorganize based on objectives.* (**Organization**)
Expected components (various components conventionally expected of a thesis)	• *What is the value addition of your work?* (**Significance**) • *Your research is a narrative inquiry. How did you develop narratives from these teachers? Describe in methodology.* (**Methodology**) • *Discuss your results by comparing it with the work done by previous researchers.* (**Analysis and discussion**) • *Use feminism in talking about the agency.* (**Theoretical framework**) • What is the main research gap for this study? (**Identification of research gaps**)
Linguistic forms (accuracy and appropriateness of language use)	• We can't draw water ~~tied~~ *tight* distinction between them. (**Accuracy**) • *Do not use evaluative words such as good, better, etc. Describe in line with the indicators*. (**Appropriateness**)
Mechanics (style and referencing conventions)	• *The name of the book should be in italics.* (**Format**) • <u>Views on good instruction have shifted</u>. *Who said?* (**Reference**)
Miscellaneous (focus not ascertained)	• <u>The purpose of the study varies according to the types of the nature of the study</u>. *?*

The finalized scheme was used to code the foci of the feedback comments. About 12% of the drafts (i.e., 12 drafts) were coded independently by the first author of this paper and a PhD student of Applied Linguistics to establish inter-coder reliability. The obtained Cohen's kappa value of .96 indicated excellent inter-coder reliability. All inter-coder disagreements were resolved through discussion. The first author then coded all the remaining data.

The absolute and relative frequencies of comments falling into different categories were computed to answer the first research question. To answer the second research question, a one-way between-subjects ANOVA was run on the absolute frequency of each category of comments to determine if there was a statistically significant main effect for disciplinary background, followed by a Bonferroni post hoc test to locate specific differences. Finally, to answer the thir research question, a thematic analysis was conducted on the interviews with the students, following the 6-phase approach developed by Braun and Clarke (2006). The research questions and the interview questions provided some broad sensitizing notions to start with, and the iterative passes through the data abstracted the salient themes inductively. This process of data analysis led to four dominant themes concerning (1) corrective linguistic feedback, (2) directive feedback on content and expected components of a thesis, (3) positive feedback on efforts, and (4) guidance in finding references.

5. Results

Table 3 presents the absolute and relative frequencies of feedback comments on different aspects of student work aggregated over the four disciplines, together with other relevant descriptive statistics. Table 4 presents a breakdown of the descriptive statistics by discipline. The results are organized and reported below, according to the three research questions.

Table 3 Descriptive statistics for feedback comments by category and aggregated over disciplines

Category	AF	RF	*M*	*SD*
Content	1264	19.30	13.03	15.79
Coherence/organization	457	6.98	4.71	6.36
Expected components	212	3.24	2.19	2.81
Linguistic forms	1664	25.42	17.15	29.79
Mechanics	2118	32.35	21.84	43.87
Miscellaneous	832	12.71	8.58	22.45
Total	6547	100.00	67.49	82.86

Note. AF = absolute frequency; RF = relative frequency; *M* = mean for absolute frequency; *SD* = standard deviation for absolute frequency

Table 4. Descriptive statistics for feedback comments by category and discipline

	English Studies (*n* =20)				English Education (*n* =25)				Physics (*n* = 24)				Engineering (*n* = 28)			
Category	AF	RF	*M*	*SD*	AF	RF	*M*	*SD*	AF	RF	*M*	*SD*	AF	RF	*M*	*SD*
Content	103	11.47	5.15	4.76	442	22.84	17.68	10.70	591	17.61	24.63	24.31	128	35.75	4.57	2.41
Coherence/organization	77	8.57	3.85	3.83	194	10.03	7.76	9.11	141	4.20	5.88	6.66	45	12.57	1.61	1.32
Expected components	15	1.67	0.75	1.41	101	5.22	4.04	3.20	14	0.42	0.58	1.10	82	22.91	2.93	3.01
Linguistic forms	235	26.17	11.75	12.02	641	33.13	25.64	21.85	749	22.32	31.21	49.41	39	10.89	1.39	5.27
Mechanics	224	24.94	11.20	13.02	455	23.51	18.20	19.22	1381	41.15	57.54	74.71	58	16.20	2.07	2.18
Miscellaneous	244	27.17	12.20	29.47	102	5.27	4.08	6.50	480	14.30	20.00	32.97	6	1.68	0.21	0.42
Subtotal	898	100.00	44.90	38.29	1935	100.00	77.40	53.34	3356	100.00	139.83	121.50	358	100.00	12.79	7.05

Note. *n* = number of theses; AF = absolute frequency; RF = relative frequency; *M* = mean for absolute frequency; *SD* = standard deviation for absolute frequency

5.1. Aspects of student work receiving supervisory feedback

As can be seen in Table 3, across the disciplines, supervisors made a total of 6547 comments on the 97 drafts, averaging 67.49 per draft. The large standard deviation of 82.86 indicated much variation across the drafts. Of these comments, mechanics took the largest share (32.35%), with a mean absolute frequency of 21.84. The majority (about 80%) of such comments targeted formatting, with only a small minority (around 17%) addressing citations and references and the rest (3%) concerning consistency, abbreviations, and contracted forms. Comments on linguistic forms constituted the second most common type of comment (25.42%), focusing mostly (95%) on linguistic accuracy and occasionally (5%) on the appropriateness of language use. Somewhat unexpectedly, comments on content took only the third place in terms of relative frequency (19.30%), with an average frequency of 5.79 per draft. The content feedback targeted different aspects (i.e., accuracy, coverage/clarity, originality/standard, and relevance of content) but mainly (around 50%) focused on the coverage and clarity of content, asking students to add new content, provide further details to the given content, offer justifications, and clarify sections that failed to communicate well. Supervisors supplied the required information sometimes. A tiny proportion of content-related comments (i.e., less than 3%) dealt with originality and standard of content.

The fourth most common type of feedback was the miscellaneous category (12.71%). Such comments taking the form of tick marks indicated approval, while those in the form of underlines and question marks conveyed disapproval. The specific focus of miscellaneous comments was difficult to ascertain. Comments on coherence/organization (6.98%) and on expected components of a thesis (3.24%) were the least frequent categories. The former type required students to make their writing flow well at the sentence, paragraph, and text levels by employing appropriate discourse markers, supporting details, advance organizers, succinct and informative headings, and explicit connections between sections. The latter type of feedback directed students' attention to the purposes and requirements of different components of a thesis: information to be included in the abstract, relevant background to the study, operationalization of key terms, discussion on the motivation for and significance of a thesis project, identification of research gaps, adoption of an appropriate theoretical framework, justification of research design and methodology, discussion of results in relation to the relevant literature, and drawing of conclusions. Supervisors rarely asked students to evaluate the literature critically or to consult published writing handbooks to learn about the disciplinarily expected components of a thesis.

5.2. Disciplinary variation in the incidence of different types of feedback comment

Table 4 shows substantive discrepancies in the absolute and relative frequencies of most types of supervisory comments across the disciplines. The relatively large standard deviations indicated considerable intra-disciplinary variation as well. To determine if the cross-disciplinary differences

were statistically significant, one-way ANOVAs were run on the absolute frequency data.

A significant main effect of discipline was found for content-related feedback, $F(3, 93) = 12.84$, $p = .003$, $\eta^2_p = .29$, with the Physics supervisors providing markedly more content-related comments than their counterparts in English Education, Engineering, and English Studies in that order. Disciplinary background accounted for 29% of the variance and constituted a large effect. The post hoc Bonferroni test located significant differences between Physics and English Studies ($p = .001$, $d = 1.11$), Physics and Engineering ($p = .001$, $d = 1.13$), English Education and English Studies ($p = .01$, $d = 1.44$), and English Education and Engineering ($p = .004$, $d = 1.51$). Cohen's d values showed large effect sizes.

The ANOVA on coherence/organization-related comments also found a significant main effect of discipline, $F(3, 93) = 5.11$, $p = .003$, $\eta^2_p = .14$, with English Education supervisors providing the highest number of such comments. With a medium effect size, disciplinary background explained 14% of the variance. The post hoc test found a statistically significant difference with a large effect ($p = .002$, $d = 0.94$) only between English Education and Engineering supervisors.

There was a significant main effect of discipline on comments targeting the expected components of a thesis, $F(3, 93) = 11.24$, $p = .001$, $\eta^2_p = 0.27$. This time, English Education supervisors provided more such feedback than their colleagues in Engineering, English Studies, and Physics in that order. As indicated by the accompanying effect size, disciplinary background accounted for 27% of the variance. The post hoc test revealed significant differences with large effect sizes between English English Education and English Studies ($p = .001$, $d = 1.33$), English Education and Physics ($p = .001$, $d = 1.45$), Engineering and English Studies ($p = .001$, $d = .93$), and Engineering and Physics ($p = .001$, $d = 1.04$).

Significant cross-disciplinary differences were also observed in the frequency of comments on linguistic forms, $F(3, 93) = 6.14$, $p = .001$, $\eta^2_p = .17$, with such comments being most frequent in Physics, followed by English Education, English Studies, and Engineering. The effect size was large, and the post hoc test revealed significant differences between Physics and Engineering ($p = .001$, $d = 0.85$), and English Education and Engineering ($p = .001$, $d = 1.53$).

The ANOVA run on mechanics comments also located a significant cross-disciplinary variation, $F(3, 93) = 9.73$, $p = .001$, $\eta^2_p = .24$, with such comments being very frequent in Physics. Disciplinary background accounted for a sizeable 24% of the variance, and the post hoc test found that Physics supervisors differed significantly from their counterparts in English Education ($p = .004$, $d = 0.72$), English Studies ($p = .001$, $d = .86$), and Engineering ($p = .001$, $d = 1.5$).

Finally, a significant main effect of discipline was found for miscellaneous comments, $F(3, 93) = 2.27$, $p = 0.007$, $\eta^2_p = .12$, with such comments being most frequent in Physics. Disciplinary background accounted for 12% of the variance. As determined by the post hoc test, the number of miscellaneous comments in Physics differed significantly from that in Engineering ($p = 0.008$, $d =$

0.85).

5.3. Students' perceived needs for and expectations of supervisory feedback

Our reiterative thematic analysis of the interviews with 16 students revealed four themes dominant in their reported needs for and expectations of supervisory feedback. These themes are presented below, together with illustrative examples and excerpts.

Corrective linguistic feedback is both necessary and beneficial. All the English Studies and English Education students interviewed expected corrective feedback on language because "most of the time, we cannot correct our mistakes" and "we tend to think that our work is good." Despite their appreciation of form-related supervisory feedback, most of the interviewed students from the Engineering, English Education, and English Studies Departments indicated that they did not receive enough of such feedback and, as a result, felt that they were deprived of much-deserved language learning opportunities. One English Studies student captured the general sentiment well when he said:

> The supervisors rarely help us with language…. Most teachers do not fix our language errors. They may underline if there are problems and tell us orally what the issues are. We tend to forget what they tell us verbally…. If they replace one word instead of other, we get the opportunity to learn the word.

Another student struggled to articulate his ideas in English:

> I felt that I had difficulty in expressing my ideas fluently. We cannot express what we think. I felt like I could not communicate well in writing. Paraphrasing was very challenging for me…. When I want to express the ideas that I have read in my own way, I feel like I have distorted the ideas.

These excerpts and other similar responses indicated that the Engineering, Educaiton, and English students were in great need of linguistic feedback. In contrast, the Physics interviewees said that their supervisors provided them with corrective feedback on language use when they requested such information.

We need directive and informative feedback on content and thesis components. All the English English Education, English Studies, and Engineering students interviewed found the supervisory feedback they received on the content and expected components of their theses less directive and informative than they expected. They complained that their supervisors did not read their thesis carefully. An English Studies student's view was representative: "If they [the supervisors] underline a section and do not tell us what we should do, we do not know what we have to do." In a similar vein, an English Education student talked hypothetically about how effective supervisory feedback would be "if our supervisors read our work thoroughly, indicated problem areas, and suggested ways to improve them." Two other English Education students expressed a strong desire for their supervisors to tell them what they should include under different thesis sections. Three Engineering students were

desperate for their supervisors' guidance to keep them on track, to select a researchable topic, and to "create a boundary" for their work. Commenting on insufficient guidance, an Engineering student confided:

> They leave us free. When we do something on our own, they say what is wrong with our work. They do not provide any way out. Even in presentations, we get [evaluative] comments but not guidelines to improve our work… If our work is not good, they need to tell us what we should do to improve it.

On a more positive note, a lucky Engineering student related an account of how some hard-wrung feedback from his supervisor brightened up his day:

> I asked him, "What should I do now?" Then he said, "Do what you can, and that will be fine." Then I again asked, "What is the way out?" At last, he said, "You can compare thermal conductivity in two types of blocks." Then I felt like I was having a flash of light.

Similarly, a student from the Physics Department, where supervisors seemed more ready to provide content-related feedback, shared the following incident gratefully:

> That was my first presentation, my figures were not clear, and I was anxious and blushed. I just presented the figures, and my supervisor explained the figures. When he explained the graphs, I got insights for the interpretation of the results. That helped me a lot to describe my results.

Can we have some positive feedback to cheer us up? While they recognized the value of critical feedback on their thesis, most of the students we interviewed longed for positive and constructive feedback and disliked comments that only pointed out what was wrong with their work. Their sentiments appeared to be that all criticism and no encouragement would make thesis writing an emotively frustrating undertaking. As one Engineering student said,

> They somehow tend to frighten us. They easily criticize our work and say, "Can't you even do this!" Some might take it easy, while others might get hurt. It hurts our self-esteem.

An English Education student confided that his supervisor would easily become angry with him and splutter self-esteem-busting comments such as "You do not understand even minor things!" The students' complaints about the damaging effects of too much criticism without being balanced by positive feedback on what had been done well were supported by our analysis of the supervisory comments in our data set. A large number of these comments were highly critical and expressed in a direct and face-threatening way that could easily crush students' fragile selves and offer them few learning affordances. Given the prevalence of such negative feedback, it was little wonder that the interviewed students yearned for their supervisors to recognize the efforts they made and the difficulties they faced, instead of merely picking on them. They believed that such affirmative and positive feedback would be extremely important in enhancing their motivation and engagement with supervisory feedback.

Tell me where I can find the relevant references, please! Most of the English Education, English

Studies and Engineering students expected their supervisors to guide them in finding useful references because they believed that their supervisors were more knowledgeable and had better access to resources. Some supervisors helped students to do so. All Physics students said that "getting resources is not a challenge," their supervisors directed them to free resources, provided them with relevant resource packs, and asked their international collaborators for help when necessary. A Physics student reported gratefully that "In general, we do not feel lack of resources." However, students in other disciplines struggled to obtain reading resources. An English Studies student described the challenge encountered: "It is challenging to find the resources published by foreign writers…. Sometimes, we do not find anything in the area of our interest." Although Engineering students had some access to Science Direct within the campus premises, they, too, found it difficult to obtain relevant resources:

> We do not have access to resources and do not have ideas about recent research. We select one area based on the resources available, considering what we are doing to be appropriate. One might say that the topic is researchable, while for another, it might be vague…. Our relation to resource matters a lot. We cannot purchase papers to read and do not get free access to relevant resources.

Because of such resource constraints, students longed for their supervisors' guidance in this regard and were very grateful when their supervisors "provided [them] with some resources," "recommended some reference materials," and "pointed to useful links." One English Education student proudly shared that one faculty member (not his supervisor) gave him 19 articles, which immensely supported his research.

6. Discussion

6.1. What aspects of student work do supervisors focus on in their feedback?

As reported in the previous section, there was a profusion of supervisory feedback on mechanics (i.e., style and referencing conventions) and linguistic forms but a relative scarcity of comments on coherence/organization and expected components of a thesis. These patterns are consistent with what previous research (e.g., Basturkmen et al., 2014; Bitchener et al., 2010; East et al. 2012) has found in other educational contexts. The abundance of editorial feedback has been attributed to the less demanding nature of such feedback and supervisors' primary concern with making the text readable (East et al., 2012). In contrast, the scantiness of coherence and content-related comments could be explained by "the difficulty of diagnosing and commenting on problems in the coherence of writing" (Basturkmen et al., 2014, p.442) and the careful reading of a text, deep consideration and cautious phrasing required by commenting on content (East et al. 2012). Some additional factors appeared to be at work in this study. First, some supervisors took it as their responsibility to edit students' work to make it free of language and formatting errors. Second, as admitted by a few professors we interviewed, some supervisors did not have the time to read their students' drafts closely and made off-the-cuff editorial markings merely to give an impression of reading. Such superficial markings,

however, could communicate to the students a “lack of interest on the supervisor’s part or, even worse, that the writing and research are too bad to warrant any comments” (Wei, Carter, & Laurs, 2019, p. 165). Third, a few supervisors did not seem to be well prepared to provide carefully crafted, in-depth feedback. As one student intimated, "I don’t want to blame my supervisor, but I found as if he himself was not clear about many aspects and couldn’t give [me a] clear idea.” This is resonant with Starfield’s (2019) observation that “supervisors … may lack the explicit knowledge necessary to provide feedback on students’ writing that goes beyond grammar correction” (p.208). Finally, it transpired at the interviews that some supervisors appeared to have difficulty articulating their specialized knowledge and making it accessible to their students (Paré, 2011).

6.2. Do supervisors differ in the provision of various types of feedback across disciplines?

Unlike Basturkmen et al.’s (2014) study which did not observe disciplinary differences in the foci of supervisory feedback, our analysis revealed marked variations in the relative frequencies of different types of feedback comment across the four disciplines. Furthermore, significant cross-disciplinary differences were found in the absolute frequencies of each type of feedback comment. First, although all the interviewed supervisors from the four disciplines mentioned content as one of their foci and stressed the importance of coherent and well-organized texts, we found that the frequencies of content and coherence/organization comments differed greatly across the disciplines. These observed differences seemed to reflect a combination of disciplinary characteristics and contextual factors. The thesis drafts in Engineering received fewer content comments than those in Physics and English Education largely because the predominant mode of feedback for the Engineering supervisors was oral and, consequently, constrained the amount of feedback that could be provided in a limited time frame. The English Studies supervisors confided that they were unable to provide time-consuming content comments because they had a very heavy supervision load. In an extreme case, one supervisor had to supervise as many as 35 Master’s theses in a year! The markedly greater number of content-related comments on the Physics theses appeared to result from a greater disciplinary emphasis on (accuracy of) content. Furthermore, students in Physics and English Education worked within less clearly demarcated content areas and hence needed more content support. The significant differences in the frequencies of coherence/organization comments between English Education and Engineering could be attributed to English Education supervisors’ stronger language and discourse skills and the oral mode of feedback widely adopted by Engineering supervisors, respectively. Such a mode of feedback provision was not conducive to a focus on textual coherence and organization.

The cross-disciplinary differences in the frequencies of comments targeting thesis components that were observed between English Education and Engineering supervisors on the one side and their Physics and English Studies counterparts on the other side seemed to reflect both disciplinary

practices and local supervision practices. As applied disciplines, both English Education and Engineering stress the practical value and contributions of their research. This hallmark was embodied by the English Education supervisors' frequent comments on the need to expound the rationale/motivation/significance of their supervisees' research projects and the Engineering supervisors' common emphasis on unique research problems, sound and verifiable technical knowledge, practical applications of research output, and generalizable findings (Becher, 1994). A thesis in English Studies, on the other hand, typically reported a text-based analysis in an extended essay format and thus obviated the need for supervisory comments on such thesis components as research gaps, research design, data collection, methods of analysis, results, and discussion that are expected components of a thesis in other disciplines (Paré, 2011). Such disciplinary propensities were coupled with local supervision practices concerning topic selection and pre-writing feedback. In the English Education and Engineering Departments, students selected their own research topics before they were assigned to their supervisors, and there was a lack of pre-writing feedback on the topics and research proposal. These practices could have resulted in a greater need for supervisory feedback on the discipline-specific components of a thesis. In contrast, supervisor-chosen research topics and extensive pre-writing supervisory feedback might have contributed to fewer such comments from the Physics supervisors (Bitchener, 2017).

The striking cross-disciplinary differences in feedback on linguistic forms and mechanics could plausibly be attributed to supervisors' beliefs, students' proficiency in English, departmental academic writing support, and the mode of feedback provision adopted. Our interviews with the supervisors revealed that, like some of the Sciences and Mathematics supervisors in Bitchener et al. (2010), the Physics supervisors were willing to proofread and polish up their students' writing because they believed that the final theses should be free of language errors and mechanics-rlated problems. In contrast, all English Studies supervisors expected their students to be in charge of their language use and stylistic matters, either because of a firm belief that thorough editing of students' work was neither desirable nor feasible or due to a desire to let students exploit the "imaginative potential of language" (Bernstein, 1999, p.165) to develop their own voice or "specialized gaze". Such a hands-off approach was considered appropriate because students of English Studies were, by virtue of their disciplinary specialization, expected to be more proficient in English than students in the other departments and were provided with additional language and writing support in the form of two compulsory writing courses (i.e., Academic Writing I and Academic Writing II) and an optional one (i.e., Thesis Writing). The scarcity of language- and mechanics-related comments on the Engineering theses, on the other hand, seemed to be mainly a function of the oral mode widely adopted to provide supervisory feedback in the department. This mode of feedback provision made it infeasible to correct the multitude of language problems and mechanics-related issues in students' thesis. Unfortunately, as we have discussed earlier, this lack of supervisory attention to language use and appropriateness fell

short of the students' desire for corrective linguistic feedback and deprived them of valuable language learning opportunities (Starke-Meyerring, 2011).

6.3. Does supervisory feedback meet students' needs and expectations?

Although the supervisors held different views about the desirability and feasibility of corrective language feedback, almost all the students we interviewed, the English Education and English Studies students in particular, valued such feedback greatly simply because they believed that they might not be able to identify and correct various language problems themselves. This finding is in line with previous research (i.e., East et al., 2012; Xu, 2017) that found L2 students appreciating and expecting form-related comments. To most students' disappointment, their expectations were largely unmet, especially in the English Studies and Engineering Departments. The students also desired informative feedback on the content and discipline-specific components of their thesis. As confirmed by previous research (e.g., East et al. 2012; Hattie & Clarke, 2018), such feedforward information is crucial to further improvement of students' work. However, our analysis of the feedback comments on the thesis drafts revealed the scantiness of in-depth feedforward comments on content and genre elements in the Departments of English Studies and Engineering and, to some extent, English Education, indicating another gulf between students' perceived feedback needs and supervisors' actual feedback. A similar "gap between what supervisors perceive as useful feedback and what students really need" (Kumar & Stracke, 2018, p.7) was also observed in relation to students' deeply perceived emotive needs for positive supervisory feedback that would explicitly recognize their good efforts and motivate further endeavors to do well. Such psychological support, they felt, would provide them with the direly needed emotive recharge to undertake what was the most intellectually grueling task for them (Katikireddi & Reilly, 2017). Finally, in a resource-limited educational context like that of Nepalese higher education, master's students often have inconceivable difficulties in locating and gaining access to resources such as the latest literature. This is why students in our study longed for their supervisor to guide them to much needed resources. Our study revealed that only a small proportion of the students were fortunate enough to receive such support from their supervisors.

6. Implications

The findings of this study suggest that many master's students at a large Nepalese university are not receiving adequate supervisory guidance and support. Therefore, it is time for the university and other institutions in similar contexts to become cognizant of the situation and take effective measures to address the problem if master's education is to achieve its intended goals. First, universities might consider instituting quality control mechanisms for supervisory feedback and enforce accountability, given the centrality of supervisory feedback in developing students' research skills and disciplinary knowledge, ensuring successful and timely completion of their thesis, and socializing them into disciplinary communities. Second, departments should pay attention to reducing supervision load and

match students' research topics with supervisors' specializations as far as applicable so that the latter can provide in-depth and comprehensive feedback on the content and other discipline-specific aspects of the former's thesis. Third, the university should take initiatives to design and introduce faculty development programs to introduce good feedback practices (including those of successful colleagues) to supervisors (Katikireddi & Reilly, 2017), share effective time management strategies for providing timely and informative feedback, develop supervisors' understanding of and ability to provide different types of feedback (i.e., feedup, feedback, and feedforward; Hattie & Clarke, 2018), and enhance their knowledge of discourse and genre features so that they can provide well-informed guidance about text coherence/organization and expected thesis components (Basturkmen et al., 2014). Such development programs should also aim to raise supervisors' awareness of "disciplinary norms, core knowledge, valued dispositions, and discipline-specific meaning-making practice" (Hu & Choo, 2016, p.346). Fourth, supervisors are advised to actively find out their students' needs, wants, and perceptions regarding supervisory feedback (Anderson et al., 2006) and share their own views of the purposes and functions of feedback openly with students so as to negotiate a shared understanding and adapt feedback to individual needs and developmental stages (de Kleijn et al., 2013). In particular, supervisors ought to be aware of students' emotive needs and provide encouraging and motivating feedback that can not only inspire students' further efforts to excel but also foster a trustful, productive supervisor-student relationship (de Kleijn et al., 2014). Finally, supervisors might critically examine and reflect on their own feedback practices to generate self-feedback on what has been done well and what needs improvement. Such self-feedback is indispensable to the development of quality feedback practices.

References

Anderson, C., Day, K., & McLaughlin, P. (2006). Mastering the dissertation: Lecturers' representations of the purposes and processes of Master's level dissertation supervision. *Studies in Higher Education*, *31*, 149–168.

Basturkmen, H., East, M., & Bitchener, J. (2014). Supervisors' on-script feedback comments on drafts of dissertations: Socialising students into the academic discourse community. *Teaching in Higher Education*, *19*, 432–445.

Becher, T. (1994). The significance of disciplinary differences. *Studies in Higher Education*, *19*, 151–161.

Becher, T., & Trowler, P. (2001). *Academic tribes and territories* (2nd ed.). Buckingham, UK: SRHE and Open University Press.

Bernstein, B. (1999). Vertical and horizontal discourse: An essay. *British Journal of Sociology of Education*, *20*, 157-173.

Bitchener, J. (2017). *A guide to supervising non-native English writers of theses and dissertations: Focusing on the writing process*. London: Routledge.

Bitchener, J., Basturkmen, H., & East, M. (2010). The focus of supervisor written feedback to thesis/dissertation students. *International Journal of English Studies*, *10*, 79–97.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101

Carter, S., & Kumar, V. (2017). 'Ignoring me is part of learning': Supervisory feedback on doctoral writing. *Innovations in Education and Teaching International*, *54*, 68–75.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). New York, NY: Routledge.

de Kleijn, R. A. M., Mainhard, M. T., Meijer, P. C., Brekelmans, M., & Pilot, A. (2013). Master's thesis projects: Student perceptions of supervisor feedback. *Assessment & Evaluation in Higher Education*, *38*, 1012–1026.

de Kleijn, R. A. M., Meijer, P. C., Pilot, A., & Brekelmans, M. (2014). The relation between feedback perceptions and the supervisor-student relationship in master's thesis projects. *Teaching in Higher Education*, *19*, 336–349.

Dong, Y.R. (1998). Non-native graduate students' thesis/dissertation writing in: Self-reports by students and their advisors from two U.S. institutions. *English for Specific Purposes*, *17*, 369–390.

Dysthe, O., Samara, A., & Westrheim, K. (2006). Multivoiced supervision of Master's students: A case study of alternative supervision practices in higher education. *Studies in Higher Education*, *31*, 299–318.

East, M., Bitchener, J., & Basturkmen, H. (2012). What constitutes effective feedback to postgraduate research students? The students' perspective. *Journal of University Teaching & Learning Practice*, *9*, 1–16.

Filippou, K., Kallo, J., & Mikkilä-Erdmann, M. (2017). Students' views on thesis supervision in international master's degree programmes in Finnish universities. *Intercultural Education*, *28*, 334–352.

Hattie, J., & Clarke, S. (2018). *Visible learning: Feedback*. London: Routledge.

Hu, G., & Choo, L. (2016). The impact of disciplinary background and teaching experience on the use of evaluative language in teacher feedback. *Teachers and Teaching*, *22*, 329–349.

Hyland, F. (1998). The impact of teacher written feedback on individual writers. *Journal of Second Language Writing*, *7*, 255–286.

Hyland, K. (2013). Student perceptions of hidden messages in teacher written feedback. *Studies in Educational Evaluation*, *39*, 180–187.

Katikireddi, S. V., & Reilly, J. (2017). Characteristics of good supervision: A multi-perspective

qualitative exploration of the Masters in Public Health dissertation. *Journal of Public Health*, *39*, 625–632.

Kumar, V., & Stracke, E. (2007). An analysis of written feedback on a PhD thesis. *Teaching in Higher Education*, *12*(4), 461–470.

Kumar, V., & Stracke, E. (2018a). Reframing doctoral examination as teaching. *Innovations in Education and Teaching International*, *55*, 219–227.

Kumar, V., & Stracke, E. (2018b). Setting students into a community of practice. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp.17–22). New York, NY: Routledge.

Li, Y., Hyland, F., & Hu, G. (2017). Prompting MEd students to engage with academia and the professional world through feedback. *Journal of English for Academic Purposes*, *26*, 52–65.

Paltridge, B. (2002). Thesis and dissertation writing: An examination of published advice and actual practice. *English for Specific Purposes*, *21*, 125–153.

Paran, A., Hyland, F., & Bentall, C. (2017). Managing and mediating the research element on master's courses: The roles of course leaders and supervisors. In R. Breeze & C. Sancho Guinda (Eds.), *Essential competencies for English-medium university teaching* (pp.267–280). Cham, Germany: Springer.

Paré, A. (2011). Speaking of writing: Supervisory feedback and the dissertation. In L. McAlpine & C. Amundsen (Eds.), *Doctoral education: Research-based strategies for doctoral students, supervisors and administrators* (pp.59–74). London: Springer.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (Fourth edition). Thousand Oaks, California: SAGE Publications, Inc.

Pilcher, N. (2011). The UK postgraduate Masters dissertation: An 'elusive chameleon'? *Teaching in Higher Education*, *16*, 29–40.

Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback : All that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, *35*, 277–289.

Sadeghi, K., & Shirzad Khajepasha, A. (2015). Thesis writing challenges for non-native MA students. *Research in Post-Compulsory Education*, *20*, 357–373.

Starfield, S. (2019). Supervisory feedback: Building writing scaffolds with doctoral dtudents. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing* (2nd ed., pp. 206–225).

Starke-Meyerring, D. (2011). The paradox of writing in doctoral education: Student experiences. In L. McAlpine & C. Amundsen (Eds.), *Doctoral education: Research-based strategies for doctoral students, supervisors and administrators* (pp.75–96). London: Springer.

Sutton, P. (2012). Conceptualizing feedback literacy: Knowing, being, and acting. *Innovations in Education and Teaching International*, *49*, 31–40.

Vehviläinen, S. (2009). Problems in the research problem: Critical feedback and resistance in

academic supervision. *Scandinavian Journal of Educational Research*, *53*, 185–201.

Vehviläinen, S., & Löfström, E. (2016). 'I wish I had a crystal ball': Discourses and potentials for developing academic supervising. *Studies in Higher Education*, *41*, 508–524.

Wakefield, C., Adie, J., Pitt, E., & Owens, T. (2014). Feeding forward from summative assessment: The essay feedback checklist as a learning tool. *Assessment & Evaluation in Higher Education*, *39*, 253–262.

Wang, T., & Li, L.Y. (2011). "Tell me what to do" vs. "guide me through it": Feedback experiences of international doctoral students. *Active Learning in Higher Education*, *12*, 101–112.

Wei, J., Carter, S., & Laurs, D. (2019). Handling the loss of innocence: First-time exchange of writing and feedback in doctoral supervision. *Higher Education Research & Development*, *38*, 157-169.

Wisker, G., Robinson, G., Trafford, V., Warnes, M., & Creighton, E. (2003). From supervisory dialogues to successful PhDs: Strategies supporting and enabling the learning conversations of staff and students at postgraduate level. *Teaching in Higher Education*, *8*, 383–397.

Xu, L. (2017). Written feedback in intercultural doctoral supervision: A case study. *Teaching in Higher Education*, *22*(2), 239–255.

Yang, M., & Carless, D. (2013). The feedback triangle and the enhancement of dialogic feedback processes. *Teaching in Higher Education*, *18*, 285–297.