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SUPERVISORY FEEDBACK: A MIXED-METHODS MULTI-PERSPECTIVAL STUDY

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PhD

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2021

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Supervisory Feedback: A Mixed-Methods Multi-Perspectival Study

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of
Philosophy

July 2020

CERTIFICATE OF ORIGINALITY

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Madhu Neupane Bastola _____ (Name of student)

DEDICATION

To all the supervisors who inspire their students

To my mother, Khim Kumari Neupane

ABSTRACT

Writing a thesis is a critical component of master's degree programs with a thesis component. For most students, a master's thesis is the first independent piece of work aiming to transform them from reactive students to pro-active researchers. In this regard, supervisory feedback plays a crucial role because it provides them with much-needed help when they are most likely to benefit from it. However, despite a growing number of students writing master's theses, supervisory feedback on master's theses, especially in a non-western context, has received little research attention. A limited body of existing research has rarely occupied itself with actual supervisory feedback and multiple factors that shape feedback practices. To address this knowledge gap, this multi-perspectival study of supervisory feedback was conducted at a comprehensive public university in Nepal. The study was informed by cultural-historical activity theory and employed an exploratory mixed-methods research design to examine supervisory feedback practices, supervisors' and students' perceptions and motives, and disciplinary variation in supervisory feedback. Data collected for the study included in-text feedback on thesis drafts ($n = 97$), oral feedback provided during defenses ($n = 89$), multiple case-studies involving supervisor-student pairs ($n = 16$), and questionnaire surveys with supervisors ($n = 102$) and students ($n = 442$). The study included participants from four disciplines (i.e., Education, English Studies, Physics, and Engineering) to examine the role of disciplinary culture in supervisory feedback.

The findings indicated that supervisory feedback mostly failed to address the students' needs and expectations. Supervisory feedback comments, at times, appeared to be too direct and too critical, with a high likelihood of damaging students' confidence and wavering self. The supervisors tended to judge the students directly, although, in principle, it is the thesis that should be the target of evaluation. The supervisors' and the students'

perceptions of supervisory feedback differed significantly. The supervisors tended to think that they provided more feedback than the students reported receiving, and the students believed that they engaged with supervisory feedback more than the supervisors thought they did. While some supervisors were guided by a desire to inspire and support their students for in-depth learning and developing research and literacy skills, others were more concerned with finding flaws in students' works without offering ways for improvement. The students also seemed to differ in their motives. Some students were sincerely interested to learn from thesis writing and supervisory feedback, but others did not see much value in writing a thesis beyond fulfilling the requirements for graduation. The supervisors' and the students' historical, social, and personal factors shaped their motives, which, in turn, influenced their practices. The study revealed that the intended outcomes of thesis writing did not seem to materialize in most cases because of the uncondusive research environment. Feedback practices and perceptions differed significantly across disciplines, owing to both disciplinary cultures and individual differences. In general, the Physics students were better supported than their counterparts in the other disciplines.

Informed by cultural-historical activity theory, a tentative model to conceptualize effective supervisory feedback has been proposed based on the findings of this study. These findings add to the body of knowledge about supervisory feedback on master's theses and have implications for supervisory feedback practices and policy formulation.

RESEARCH OUTPUT

Journal Articles

- Neupane Bastola, M. Formulation of feedback comments: Insights from supervisory feedback on master's theses. *Innovations in Education and Teaching International*. Accepted.
- Neupane Bastola, M. & Hu, G. (2020). Supervisory feedback across disciplines: Does it meet students' expectations? *Assessment and Evaluation in Higher Education*, 1-17.
- Neupane Bastola, M. (2020). Engagement with and challenges in supervisory feedback: Supervisors' and students' perceptions. *RELC Journal*, 1-15.
- Neupane Bastola, M. (2019). A systematic analysis of a two-word conogram in Nepalese policy documents: A corpus-driven approach. *Journal of NELTA*, 24, 33-51.

Conferences (Presented and Accepted for Presentation)

- Neupane Bastola, M. (2021, August). *Supervisory feedback: Constructing and negotiating voice, identity, and agency in doctoral writing*. Paper accepted for World Congress of Applied Linguistics, Groningen, the Netherlands.
- Neupane Bastola, M. (2021, January). *Commenting on your work is a waste of time!* Paper accepted for Continuing Professional Development International Conference 2020 for English teaching professionals worldwide, The University of Hong Kong, Hong Kong.
- Neupane Bastola, M. (2020, March). *Engagement with supervisory feedback: Do Nepalese Supervisors and students see eye to eye?* Paper accepted for American

Association for Applied Linguistics 2020 Conference, Denver, USA. (The conference was cancelled due to Covid-19 pandemic)

- Neupane Bastola, M. (2019, September). *Supervisory feedback across disciplines: Does it meet student expectations?* Paper presented at 12th International Symposium at Teaching English at Tertiary Level, Tsinghua University, Beijing.
- Neupane Bastola, M. (2019, June). *Give up your Master! Meanings expressed in supervisory feedback comments.* Paper presented at the 16th International Pragmatics Conference, The Hong Kong Polytechnic University, Hong Kong.
- Neupane Bastola, M. (2018, April). *Giving and receiving ends of supervisory feedback: Where is the missing link?* Presented at Joint Postgraduate Student Symposium on Language, Culture, and Cognition, The Hong Kong Polytechnic University, Hong Kong.

ACKNOWLEDGEMENTS

Completing this thesis has been an incredibly rewarding journey because of the generous assistance of many people. I am grateful to all of them. First and foremost, I would like to extend my gratitude my chief supervisor Professor Hu Guangwei for his constant support and encouragement. I have been extremely fortunate to have Professor Hu as my supervisor. Every email communication and meeting with him was enlightening, eye-opening, inspiring, and energizing experience for me. I immensely benefitted from his vast theoretical, analytical, and statistical knowledge and was so impressed by his meticulous feedback ranging from minute details to broader perspectives. His commitment to his students' success is unmatched. As a feedback researcher, I found him a model supervisor having all the qualities described in literature and more. His insightful and constructive feedback has scaffolded my academic writing process, brought me into the academic community, and changed my life in positive ways. Today my abilities as a researcher are what they are because I have had my supervisor as my role model. I am humbled by his guidance. Words are never enough to express my admiration for and gratefulness to him. I want to live by the example he has set for me.

Secondly, I am grateful to my co-supervisor, Professor Martin Warren, for his valuable guidance in the initial phase of my study. The course Corpus Linguistics and Discourse Analysis that I took from him helped me to extend my frontiers of knowledge. I was so impressed by the course that I even thought of changing my research topic. However, as per Professor Warren's suggestion, I continued with my original plan and enjoyed the research because it is so organic to my experience and profession.

I have sincere and respectful gratitude to late Professor Stephen Evans. His support during the preparation of my proposal was instrumental to my PhD journey at The Hong Kong Polytechnic University. In the email that I received from him on 24 February 2017, he

wrote, “Looking forward to seeing you at PolyU in Sept. In the meantime, keep up your reading so that you can hit the ground running when you arrive”. Unfortunately, the day to meet him never came. I felt shattered when I came to know about his untimely demise. However, his inspiration has always been my source of energy. Remembering him today towards the end of my PhD journey makes me feel emotional.

I am indebted to Associate Professor Aditi Bhatia, Associate Professor Dennis Tay, and Dr. Renia Lopez for their insightful comments as examiners of my guided study and confirmation report. I would also like to express my gratitude to Professor Hans Ladeggard, Professor Bernadette Watson, Professor Christian Matthiessen, Professor Kathleen Ahrens, Professor David Qian, Dr. Xu Xun-feng, Dr. William Feng, Dr. Victor Ho, Dr. Phoenix Lam, Dr. Phoebe Lin, Dr. Kristen Murray and the whole Department of English, The Hong Kong Polytechnic University, for their teaching and administrative support. Thanks are due to all my colleagues for their direct and indirect support. I am especially thankful to Brian Xu for helping me to establish intercoder reliability.

I owe a great deal to my graduate school mentors at the Department of English Education, Tribhuvan University, Nepal, and The University of Sydney, Australia, for their academic and professional support. I am also grateful to the University Grants Committee, Hong Kong, for generously funding my PhD studies through a research studentship. I am thankful to Tribhuvan University, Nepal, for granting me leave to undertake this academic journey.

I sincerely thank all the participating supervisors and students for donating their time and allowing me to observe, listen to, and record their experiences, without which this study would not have been possible. I would like to remember the supervisors, the students, and the administrative staff at the following departments of Tribhuvan University, Nepal: the Department of English Education at the University Campus, Mahendra Ratna Campus,

Butwal Multiple Campus, and Sanothimi Campus; the Department of English at the University Campus, Patan Multiple Campus, Padmakanya Multiple Campus, and Ratna Rajya Campus; the Department of Physics at the University Campus, Patan Multiple Campus, and Amrit Science Campus; and the Institute of Engineering at Pulchowk and Thapathali. I would also like to acknowledge the support I received from the supervisors and students at the Central Department of Chemistry and Botany, University Campus Kirtipur in the pilot of the questionnaires. I duly acknowledge the scholars whose ideas I have cited in this study.

My special thank goes to the entire hall family, Student Halls of Residence, Ho Man Tin. I was fortunate to have the luxury of being a full-time researcher to explore my research interest with great reverence by staying in the cozy environment of the University's Student Halls of Residence, Ho Man Tin. I will always cherish the experience of residential life and the support I received, especially during turbulent times, from the hall family.

Saving the nearest and dearest to last, I am eternally grateful for the endless and unwavering support of all my family members. I owe a great deal to my brother, Bishnu Prasad Neupane and sister-in-law, Indira Neupane for supporting me to pursue my dream. I heartily thank my nephews (Dipak Paudyal, Madhav Paudyal, Shreeram Subedi, Milan Neupane, and Sangam Neupane) and nieces (Narmada Subedi, Sushila Bhushal Paudyal, and Goma Subedi) for their pivotal support while I am away from home. I hope my work will inspire them to follow their dreams. My most substantial support and strength is my wonderful and loving husband, Mukesh Kumar Bastola. He always inspires me to go beyond my expectations, encourages me to be resilient in difficult times, and takes care of our son as the best daddy. I want to thank my son, Midas Bastola, for his decency and understanding. Being miles away from him in his tender age for such a long time was the hardest decision for me to make, but he never made me feel bad. He always brightens me up with his beautiful smile.

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CHAPTER 1

INTRODUCTION

1.1 Chapter overview

This thesis aims to explore supervisory feedback on English-medium master's thesis in an English-as-a-foreign language context in Nepal. It takes a multi-perspectival holistic approach to examine different aspects of supervisory feedback: foci and functions of feedback comments, supervisors' attitudes, supervisors' and students' perceptions, their motives that mediate feedback practices, and disciplinary variations. This chapter first presents the background of the study, including a brief overview of research on master's thesis supervision. It then provides a statement of the research problem, research questions, and motivation as well as the significance of the study. The final section of this chapter presents the organization of the thesis.

1.2 Background

Writing a thesis is a critical element or the climax of a master's degree with a thesis component (Biggam, 2017; Paran, Hyland, & Bentall, 2017). For many students, it is the first piece of independent research work that demands them to be proactive researchers and, to some extent, contribute to the body of knowledge by means of creative originality (Paltridge & Starfield, 2019; Lum, 2018). Previous literature has indicated that writing a master's thesis is often a demanding task for students irrespective of their language background (Bitchener, Basturkmen, & East, 2010; Vehviläinen, 2009; Paltridge & Starfield, 2019). Consequently, students often perceive that "the amount of energy they spend on writing this work equals or outweighs the energy they spend during their whole studies" (Sadeghi & Khajepasha, 2015, p. 357). Several factors, for example, the daunting size of a thesis (Dong, 1998), students'

lack of previous research experience (de Kleijn, 2015; Paran et al., 2017), the limited understanding of the thesis genre and disciplinary requirements (Bitchener et al., 2010; Paltridge, 2002), and the high standard required of a master's thesis (Basturkmen et al., 2014) contribute to challenges faced by all master's students. However, English as a second or foreign language (ESL/EFL) students often experience additional difficulties (Duff, 2010; Paltridge & Starfield, 2007, 2019; Zheng, Yu, Wang, & Zhang, 2019) and might require more supervisory support to develop discipline-specific writing competence and practices (Paré, 2011). However, despite the growing number of master's students worldwide (Ginn, 2014), supervisory feedback on master's theses is under-researched (Paran et al., 2017; Wagener, 2018). Not surprisingly, graduate supervision has been little researched in the Nepalese higher education setting.

Supervisory feedback is at the heart of postgraduate research supervision (Bitchener et al., 2010; East, Bitchener, & Basturkmen, 2012). It plays a crucial role in socializing students into disciplinary discourse (Kumar & Stracke, 2007) because it is “tailored to the specific needs of students at the point when they are most likely to benefit from it” (Bitchener, 2017, p. 90). Moreover, it enables supervisors to act as both gatekeepers to ensure the research standard and guides to support their students in the design and conduct of proper research reported in logical, coherent, and fluent language (Anderson, Day, & McLaughlin, 2006; Kumar & Stracke, 2018; Price, Handley, Millar, & O'Donovan, 2010). Students generally value feedback from their supervisors (Hyland, 2013) because it informs them of their strengths and weaknesses, helps them improve their future work, and influences their academic achievement (Basturkmen et al., 2014; Wang & Li, 2011). Besides, it can help them become independent in their work, understand the requirements of academic disciplines, grow academically, 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 its objectives depends on whether it can address students' needs and challenges (Bitchener et al., 2010). Pilcher (2011, p. 29) characterizes the master's thesis as an "elusive chameleon", suggesting its variable nature and multiple interpretations. The variability of a thesis can be seen in the difference in the credits offered, the selection of a research problem (i.e., by a supervisor or a student), and the assessment of the final product in which the supervisor may or may not be involved (Dysthe et al., 2006; Gin, 2014; Paran et al., 2017; Vehviläinen, 2009). There is also a great diversity among supervisors and students, which might cause a lack of shared understanding (Katikireddi & Reilly, 2017). For supervisors, providing feedback may mean commenting on or evaluating students' work against given standards. However, for students, it is mostly about supervisors telling them "where to go next" (Hattie & Clarke, 2018, p. 5). Extant research shows that "there is often a gap between what supervisors perceive as useful feedback and what students need" (Kumar & Stracke, 2017, p. 17). Such mismatches in expectations arise from students' "different levels of dependency and need" (Wisker, Robinson, Trafford, Warnes, & Creighton, 2003, p.384). Consequently, "[w]hat the student wants to receive by way of feedback may sometimes differ from what the supervisor gives" (East et al., 2012, p. 1).

Recent scholarship informed by a sociocultural perspective characterizes feedback as a student-centered, long-term, dynamic, and dialogic process (Ajjawi & Boud, 2018; Carless, 2006, 2019; Carless, Salter, Yang, & Lam, 2011; Lam, 2017, Winstone, Nash, Parker, & Rowntree, 2017). According to Wisker (2012), in the case of thesis supervision, feedback dialogue can take place "face-to-face or through electronic/postal/textual means" (p. 187). The conceptualization of feedback as a dialogic process places such a high premium on

student engagement that “without student action, we cannot meaningfully use the term feedback” (Henderson, Ajjawi, Boud, & Molloy, 2019, p. 4). In this regard, supervisors’ and students’ perceptions of feedback play a crucial role because “differing viewpoints are represented as barriers that distort the potential for learning” (Carless, 2006, p. 220). For example, if supervisors believe that their students will not engage with their feedback, they might be unwilling and unlikely to invest time and effort to provide constructive feedback (Ali et al., 2015). Students’ perceptions of supervisory feedback are also important because such attitudes have impact on supervisors’ feedback beliefs and practices (Neupane-Bastola, 2020; Schaaf, Baartman, Prins, Oosterbaan, & Schaap, 2013).

Furthermore, giving and receiving feedback involves an emotional aspect, and students need to feel a sense of trust in and care from supervisors to get optimum benefit from feedback. The way that feedback is formulated may make or break such trust and may help or hinder students’ subsequent efforts and learning (Kumar & Stracke, 2017). The feedback that fails to spark a desire and a thirst for learning in students might be of no use even if supervisors spent an inordinate amount of time providing it. Therefore, the examination of attitudes conveyed in feedback comments, as well as the pragmatic functions of feedback is of paramount importance.

Although supervisors and students are primary stakeholders in the feedback process, the process occurs in particular cultural, institutional, and interpersonal contexts (MacKay, Hughes, Marzetti, Lent, & Rhind, 2019). Therefore, we need “to go beyond the individual act of feedback itself to consider the factors that influence feedback choices and student responses to these [choices]” (Hyland & Hyland, 2019, p. 12). It is important to note that students receive feedback in the context of their disciplines, which have their own culture. According to Becher and Trowler (2001), disciplinary culture refers “to sets of taken-for-granted values, attitudes and ways of behaving” (p. 23). Disciplinary culture manifests itself

in distinct variations in knowledge domains in terms of “characteristics in the objects of enquiry; the nature of knowledge growth; the relationship between the researcher and knowledge; enquiry procedures; extent of truth claims and criteria for making them; the results of research” (pp. 35-36). As Paré (2011) notes, “each discipline and sub-discipline sets its research gaze on certain phenomena, uses community-approved methods to collect relevant data, draws on different kinds of evidence, and finally crafts particular types of argument” (pp. 59-60). Gunn (2014) divides such variations into four categories: formal practices (e.g., feedback), informal practices (e.g., implicit rules of the game), cultural norms (e.g., academic discourse genres), and content themes (e.g., vices and virtues of the disciplines). Supervisors, as experienced members of the disciplinary community, initiate students into the discourse that is valued by the discipline. For example, “in the natural sciences, the author provides evidence, while the author in the humanities needs to convince the readers why his or her perspective contributes to knowledge” (Brondin & Frick, 2017, p. 214). Such disciplinary variations have important implications in thesis writing “for understanding the values, ideologies and research perspectives that are prioritized in the students’ area/s of study” (Paltridge & Starfield, 2007, p. 4). Against this backdrop, this study adopts the four-way distinction of disciplines (i.e., hard-pure, hard-applied, soft-pure, and soft applied) to examine disciplinary variations in supervisory feedback (Becher, 1994; Becher & Trowler, 2001).

Disciplinary cultures and knowledge domains, however, are not fixed and clear cut but are mediated by social processes. Therefore, “[a]n appreciation of how an individual is inducted into the disciplinary culture is important to the understanding of that culture” (Becher & Trowler, 2001, p. 47). In this context, it is crucial to examine supervisory feedback as a systematic activity involving multiple agents functioning at the individual, group, and community levels (Vehviläinen & Löfström, 2016). Therefore, this study draws on cultural-

historical activity theory (Engeström, 1999, 2000, 2009, 2015) because it provides a comprehensive theoretical framework for examining the interaction between supervisors' and students' social, cultural, and historical contexts within which the activity of graduate research and education is embedded. The study adopts a mixed-methods design to collect data from supervisors and students in four disciplines (Education, English Studies, Physics, and Engineering) using observations, in-depth case studies, and questionnaire surveys.

1.3 Statement of the research problem

Research on supervisory feedback on master's theses has been thin on the ground (Anderson et al., 2006; Maher & Milligan, 2019), compared with research on the supervision of doctoral theses. It is surprising given the fact that master's level students outnumber PhDs by almost ten to one (OECD, 2016). One strand in the small body of existing research has examined supervisor-student relationships. For example, a quantitative study conducted at a large Dutch university by de Kleijn et al. (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. The second strand of research has examined the purpose of supervision and revealed that master's thesis supervisors aimed to support students in learning and ensure the standard of their work. However, they found it challenging to maintain a balance between the two goals of supporting and shaping students' work (e.g., Anderson et al., 2006). The third line of research has focused on good supervisory practices and advocated "multivoiced supervision" that involved 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, explore previous learning experiences, and adapt supervisory feedback to diverse student needs (Lam, 2017; Pilcher, 2011; Vehviläinen, 2009). This body of research has also suggested that skilful, supportive, and encouraging

supervision, flexible supervision strategies, and individually tailored supervisory feedback could increase students' chances of success (Katikireddi & Reilly, 2017). A recent study on international master's students in Finland revealed that master students appreciated “[f]requent communication, an interesting topic and emotional support from the supervisor” (Filippou, Kallio, & Mikkilä-Erdmann, 2017, p. 347) as the most important aspects of supervision.

Its contribution notwithstanding, this limited body of research on master's thesis writing is mostly concentrated in Europe (e.g., de Kleijn, Mainhard, Meijer, Pilot, & Brekelmans, 2012; de Kleijn, Meijer, Brekelmans, & Pilot, 2013; de Kleijn et al., 2014; Filippou et al., 2017), especially the UK (e.g., Anderson et al., 2006; Pilcher, 2011). Scholarship on supervisory feedback on the master's thesis in the Nepalese context is rare. The few studies available focused on reflections of supervisors (A. Bhattarai, 2009; Karn, 2009) and students (M. Bhattarai, 2018; M. Rai, 2018; T. Rai, 2018; Roka, 2018) or offered technical advice on formatting a thesis (Avasthi, 2014). Although these studies provide valuable insights into supervisory feedback, they are somewhat limited in their scope. At the same time, there are grave concerns regarding the quality of graduate research in the Nepalese context (N. Acharya, 2019; P. Acharya, 2016; Dhakal, 2019).

Like most graduate programs elsewhere, the master's degree in the university concerned requires master's students to complete a thesis in the last semester of a two-year program. Master's students are usually supervised by an individual supervisor and defend their thesis before the Research Committee composed of the Head of the Department, an external evaluator, and the thesis supervisor. Although both Nepali and English are the official media of instruction in higher education in Nepal (University Grants Commission, Nepal [UGC-N] 2017), English is preferred because of its perceived power “for social mobility, linguistic superiority, and economic benefits” (Giri, 2009, p. 39). Because of

limited access to resources and lack of academic writing instruction, thesis writing students virtually rely on supervisory feedback for disciplinary learning and quality of thesis research.

Therefore, there is a clear need to research supervisors' and students' practices and perceptions regarding multiple yet interrelated aspects of supervision and disciplinary variations in various contexts, including Nepal, the present researcher's home context. This study sets out to bridge this lacuna in knowledge and examines multiple aspects of English-medium master's theses at a major public university in Nepal, an educational context that is little known in the existing literature.

1.4 Motivation for the study

The motivation for this study came from the researcher's own experience of writing her theses in different contexts and supervising Nepalese students writing their theses. Learning opportunities that thesis writing engenders are unmatched to any number of courses. However, it is worth noting that students can reap such benefits only when they are involved in the rigorous research process, which requires serious and concerted efforts of all major stakeholders (i.e., university, supervisors, and students). However, it is disconcerting that the intended benefits of thesis writing do not materialize for many students. At the heart of the issue are increasing concerns raised regarding the quality of thesis research. The pertinent question that demands serious reflection is: Why are master's students required to write a thesis?

In the current scenario, all the stakeholders (i.e., university, supervisors, and students) seem to be at a loss. Students are missing the learning opportunity by deviating from the rigorous research process; supervisors tend to view supervision as a burden because they perceive that most of the students are careless, and the university's research credibility is in question. The challenges, if taken seriously, can be opportunities in disguise and can usher in

improvement and transformation. It requires concerted efforts from all significant stakeholders to establish a conducive research environment where required resources are available; students value research and feel cared for, and supervisors feel appreciated for their hard work. There is no option except starting from where we are. Therefore, this research is the result of an acutely felt need and desire to generate knowledge for making informed decision regarding master's thesis supervision policies and practices, add to the limited body of research on supervisory feedback on master's theses, and enhance the effectiveness of supervisory feedback practices.

1.5 Research questions

The present study seeks to answer the following research questions:

1. What areas do supervisors focus on in their feedback, and what functions do their feedback comments serve?
2. What attitudes do supervisors convey in supervisory feedback?
3. What are supervisors' and students' perceptions of supervisory feedback with respect to its purposes, practices, effectiveness, challenges, and student engagement?
4. What are supervisors' and students' motives related to thesis writing? What factors shape their motives? How do their motives influence feedback practices?
5. Are there disciplinary variations in supervisory feedback in terms of (a) foci and functions, (b) supervisors' attitudes, and (c) supervisors' and students' perceptions of feedback?

1.6 Significance of the study

This study aims to advance knowledge, enhance practices, and inform policy regarding master's thesis supervision. Its findings are expected to be useful to research scholars, graduate supervisors, thesis writing students, and policy makers.

Firstly, the study can add to “the small but growing body of the literature on master's as distinct to Ph.D. supervision” (Ginn, 2014, p. 107) in several significant ways. The growing body of literature on supervisory feedback pays scant attention to supervisory feedback on master's theses. Besides, whatever research exists on the topic has focused on one or two aspects rather than adopting a systemic view. This exploratory mixed-methods study can yield insights to develop a more comprehensive understanding of supervisory feedback on master's theses in the English-as-an-additional-language context in general and in the context of Nepal in particular. This study is the first of its kind conducted in the Nepalese context. It has the potential to advance the frontier of knowledge because it systematically examines supervisory feedback in its cultural and historical contexts and provides a multi-layered perspective on supervisory feedback by bringing together the views of supervisors, students, and the researcher.

Secondly, this study has the potential to inform supervisory feedback practices and professional development activities targeting graduate supervision. It is hoped that the findings will benefit supervisors and students by informing their practices. Supervisors and students across disciplinary areas (especially in Education, English Studies, Physics, and Engineering) are likely to benefit from the analysis of issues related to supervisory feedback. An intimate knowledge of the issues may provide them with the impetus for transforming their practices to better address students' needs and expectations. The findings of this study are also expected to provide useful input for providers of professional development for supervisors.

Finally, the findings of this study are expected to inform policy makers in their efforts to formulate effective policies on graduate research and supervision so as to create a conducive and supportive research environment.

1.7 Overview of the thesis

The overall structure of the thesis takes the form of nine chapters. This introductory chapter provides the background for the study. It also presents the research problem, motivations for the study, research questions that guided the study, and the significance of the study.

The review of literature in Chapter Two covers specific issues that are relevant to master's thesis supervision in general and supervisory feedback in particular. Some of the themes that are addressed in the literature review include foci and functions of feedback, supervisors' and students' perceptions, supervisors' attitudes conveyed in their feedback comments, and disciplinary variations in feedback practices.

Chapter Three delineates the theoretical framework that informs this study. This study has adopted cultural-historical activity theory as the theoretical lens for examining supervisory feedback. The chapter provides a brief introduction to the theory, describes its components and key constructs, and reviews relevant studies drawing on cultural-historical activity theory. It also conceptualizes thesis writing and supervisory feedback from a cultural-historical activity theory perspective and provides a rationale for adopting the theory in the present study.

Chapter Four outlines the methodology used to answer the research questions formulated for the study. It describes the research paradigm underpinning the present study, the specific mixed-methods research design adopted, the research setting, participants involved in the study, and the methods used for data collection. It also details the measures

taken to ensure the reliability and validity of the research, ethical considerations, and procedures followed in the preparation and analysis of data.

Chapters Five, Six, and Seven present the findings obtained from the various types of data collected in this study, including in-text feedback provided on thesis drafts, oral feedback offered during defences, questionnaire surveys, and multiple case studies. The division of the findings among the three chapters is based on the research questions. Chapter Five answers the first and the second research questions regarding foci and functions of, and attitudes conveyed in supervisory feedback comments. Chapter Six presents findings relevant to the third research question (i.e., the supervisors' and the students' perceptions regarding different aspects of supervisory feedback). Chapter Seven answers the fourth research question (i.e., supervisors' and the students' motives for thesis writing and their influences on supervisory feedback practices). A primary focus of this study is disciplinary variations in feedback practices and perceptions (i.e., the fifth research question). The findings concerning disciplinary variations are interspersed in all three "findings" chapters according to the aspects of supervisory feedback in question.

Chapter Eight presents the discussion of significant findings presented in Chapters Five, Six and Seven. The findings are organized around the research questions. Although the findings related to disciplinary variations are presented in the different chapters according to the research questions concerned, they are discussed together in the interest of clarity and precision.

Chapter Nine concludes the thesis by summarizing the most important findings, discussing the limitations of the study, and presenting implications drawn from the findings. Specifically, insights yielded by this study into supervisory feedback practices, perceptions, motives are presented and highlighted. The implications for advancing knowledge, improving practice, and informing policy regarding supervisory feedback practices are also provided in

the chapter. The chapter also provides directions for further research. References and appendices form the final parts of the thesis.

CHAPTER 2

LITERATURE REVIEW

2.1 Chapter overview

This chapter reviews the relevant research on key variables examined in this study. These include the foci and functions of supervisory feedback, supervisors' attitudes conveyed in feedback comments, supervisors' and students' perceptions of various aspects of supervisory feedback, and disciplinary variations in the practices and perceptions of supervisory feedback. The chapter also delineates the research gaps that the present study sought to fill.

2.2. Foci and functions of supervisory feedback

2.2.1 Foci of supervisory feedback

Academic writing is a demanding task for students irrespective of their language background (Bitchener et al., 2010; Casanave & Li, 2015; Kumar & Stracke, 2017). However, the challenges are more pronounced in the case of English-as-additional-language learners (Bitchener et al., 2010; Paltridge & Starfield, 2019; Paré, 2011; Yu, Zhang, Zheng, Yuan, & Zhang, 2018). In this case, supervisory feedback on thesis drafts can help students to close the gap between their level of writing and the expected standards. Then the question arises: what aspects of students' writing catch and do deserve supervisors' attention? The scholarship on the focus of feedback presents three distinct contending views. First, a body of research (e.g., Salter-Dvorak, 2017) shows that some supervisors focus on linguistic issues at the expense of more detailed, in-depth feedback. In contrast, other research warns against the dichotomy between language and content because it gives a false impression that "content can be created independently of the language that conveys it: that meaning and form are separate things" (K. Hyland, 2019, p. 271). Second, there is intense disagreement among

scholars regarding whether language- and writing-focused feedback is beneficial to learners. Some researchers (e.g., Truscott, 1996) claim that such feedback is not only unhelpful but harmful to students, and some supervisors tend to subscribe to this view. However, students, especially those having English as their additional language, do report finding such feedback beneficial (East et al., 2012; Kumar & Stracke, 2007; Xu, 2017). Third, there is a contention about whether it is supervisors' responsibility to develop students' academic literacy. Some scholars (e.g., Grant & Xu, 2017; Kumar & Stracke, 2017; Paré, 2011) argue that it is *in quo* non for supervision, while others tend to place the emphasis on content. Therefore, it is essential to examine the foci of supervisory feedback to determine whether such feedback is scaffolding students' research and academic writing skills (Pilcher, 2011).

However, research examining the nature of feedback on thesis drafts has been sparse. Two studies (i.e., Bitchener et al., 2010; East et al., 2012) drew on self-report data to ascertain the foci of feedback. In Bitchener et al.'s (2010) study, doctoral supervisors at New Zealand universities reported providing feedback on what they thought were challenging areas to students. These included content, functions of different thesis sections, rhetorical structure/organization, argument development, and language use. Although comments on linguistic accuracy and appropriateness prevailed in textual samples, supervisors did not consider such comments as feedback but merely editorial marking to make the theses more readable. Similarly, in East et al.'s (2012) study, 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, these studies drew on mainly retrospective interview and 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.

Three studies (i.e., Basturkmen et al., 2014; Kumar & Stracke, 2007; Xu, 2017) examined actual feedback comments on texts. In a study of supervisors' on-script feedback on drafts of master's and doctoral theses across three disciplinary areas 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). Although supervisors from all the disciplines focused on the same aspects (i.e., content, requirement, cohesion/coherence, and linguistic accuracy and pragmatic appropriateness), differences were observed in terms of the frequency of comments provided. In Science/Mathematics and Commerce, comments on linguistic accuracy and appropriateness were more frequent than comments on content, whereas, in Humanities, comments on requirements were highly frequent. The researchers assumed that the students' texts rather than the discipline as such might have contributed to such variations. The predominance of comments on linguistic accuracy and appropriateness was attributed to supervisors' emphasis on "the need for precise expression and appropriate phrasing in terms of English academic expectations" (p.441). The lower frequency of comments on content, on the other hand, was explained in terms of supervisors' perceptions of content as being "a more emotively charged aspect of writing" and their wariness of making less carefully phrased responses. A recent case study (Xu, 2017) examined feedback comments provided on a PhD proposal. The findings showed that supervisors' feedback focused on linguistic accuracy and acceptability, content (ideas, argument, and evidence), organization (structure, logic, coherence, and cohesion), and appropriateness. In line with the findings of previous studies, the primary focus of feedback was on linguistic forms (i.e., 50.9%) and content (31.9%) in comparison to appropriateness and organization. However, linguistic feedback

was provided only half-way through the proposal perhaps expecting the supervisee to follow a similar pattern of accuracy. The author explained, “If linguistic accuracy/acceptability is a basic expectation of supervisors for academic writing, content is a requirement for advanced levels” (p. 248). Notwithstanding their contribution to our understanding of aspects focused on in supervisory feedback, these studies involved modest samples of mostly international PhD students in native-English-speaking contexts.

Only a few studies have examined the foci of feedback on master’s theses. For example, Morton, Storch, and Thompson’s (2014) case study investigating feedback provided on three consecutive drafts of a student found that, in general, content was the main focus of feedback on all the drafts. However, for the second and the third drafts, the emphasis was on structure and language, respectively. Adamson, Coulson, and Fujimoto-Adamson’s (2019) exploration of supervisory feedback provided to two postgraduate and one bachelor students at three Japanese universities found that the prime focus of feedback was on language and content. The supervisors provided directive and explicit language feedback as they believed that it would help the Japanese students with English as an additional language to take agency and develop criticality in their writing. A similar case study at a Macau University (Zheng et al., 2019) investigating feedback provided to three students on their two consecutive drafts through multiple means (i.e., in text, emails, and consultation meetings) revealed that the feedback focused on content and language, with content feedback taking the lead.

The review shows that very little is currently known about the foci of supervisory feedback, especially on master’s theses. This limited body of research underscores the need for further research in this area to better inform supervisory feedback practices.

2.2.2 Functions of supervisory feedback

The formulation of feedback and the functions it serves has the potential for creating a supportive learning environment (F. Hyland & Hyland, 2001). In this regard, “careful selection of feedback formulations makes the feedback more accessible and stimulating” (Xu, 2017, p. 249). K. Hyland and Hyland (2001) argue that decisions regarding the construction of feedback reveal supervisors’ views on students’ efforts and negotiate “the fragile intimacy of the teacher-student relationship” (p. 192). For example, directive feedback in the form of instruction presents the supervisor as an authority figure and leaves little room for the negotiation of feedback. In contrast, questions express the supervisors’ desire to know more (Xu, 2017) and can initiate a dialogue and stimulate reflection (Winstone & Carless, 2020, p. 102). Given their responsibility for supporting students in writing their thesis as well as for ensuring the standard, supervisors usually tend to provide directive feedback (Filippou, 2020; Harwood & Petrić, 2020).

Students “generally welcome clear, unambiguous, instructional and directive feedback; they know how to interpret it and apply it” (Price et al., 2010, p. 285). Some students, especially academically less competent ones, tend to prefer explicit instructions (Katikireddi & Reilly, 2017; Wang & Li, 2011), while others expect suggestions (East et al., 2012). Directive feedback that dictates specific changes may not empower and encourage students to engage in deep learning through the negotiation of feedback and self-regulation (Van Horne, 2011; Vehviläinen & Löfström, 2016; Winstone & Carless, 2020). The students who only follow directive feedback may not improve their texts, develop their critical thinking, and advance their academic writing skills (F. Hyland & Hyland, 2001; Jonsson, 2013; Van Horne, 2011). Students’ expectations for directive feedback may also indicate that they consider themselves as receivers of information rather than active participants in the learning process (Price, Handley, & Millar, 2011). Therefore, the progression from more

explicit and directive to less directive feedback during supervision is taken to reflect students' growing self-regulation and independence (Morton et al., 2014). Previous research cautions supervisors to take the utmost care when constructing feedback comments because too much criticism may damage students' motivation and self-confidence as writers. In contrast, praise may boost their confidence and foster their self-esteem (F. Hyland & Hyland, 2001).

Some research has examined pragmatic functions of feedback comments. For example, K. Hyland and Hyland's (2001) in-depth case study analysed feedback comments on drafts, revisions, and final submissions on assignments provided by two experienced ESL instructors to six students at a New Zealand university during a 14-week proficiency course. The researchers collected data from multiple sources (text analysis, observation, interviews, and verbal reports) and triangulated multiple perspectives (those of teachers, students, and researchers). The comments were broadly categorized into three types: praise, criticism, and suggestions. The findings showed that praise was the most frequent type and was mostly used to soften criticisms and mitigate suggestions. The teachers were aware of the impact of positive and negative comments and emphasized the use of positive comments to enhance students' confidence. They made frequent use of mitigation strategies to tone down criticism, save students' faces, and maintain good relationships with students. However, sometimes the students failed to understand the messages expressed indirectly. K. Hyland and Hyland's (2001) study provided a useful framework for examining the functions of feedback comments. However, thesis writing is distinctly different from assessment essays in a proficiency course and may necessitate a different kind of feedback.

Research on the functions of feedback on a master's thesis is also limited. Some research on PhD theses (Kumar & Stracke, 2007; Stracke & Kumar, 2010; Xu, 2017) is broadly relevant to this study. Kumar and Stracke's (2007) study of in-text and overall feedback comments on the complete first draft of a PhD thesis in Applied Linguistics at an

Australian university identified three fundamental functions of feedback comments: referential, directive, and expressive. Referential comments provided information on content, editorial aspects, and organization; directive comments asked the supervisee to do something by asking questions, giving instructions, and providing suggestions; and expressive comments expressed supervisors' feelings in the form of praise, criticism, and opinion. Referential comments were predominant in the data. However, the supervisee found expressive comments the 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. Stracke and Kumar's (2010) study, employing the same framework (i.e., Kumar & Stracke, 2007), examined two supervisors' in-text and overall comments and three examiners' reports on three complete drafts of a PhD thesis and produced similar results to those of Kumar and Stracke (2007). In this case as well, the supervisee found expressive comments most valuable in promoting his self-regulated learning. In a study of supervisors' on-script feedback on the first four pages of 15 drafts of master's and doctoral theses in three disciplinary areas (i.e., Management/ Marketing, Arts/Humanities, and Maths/Computer) at six New Zealand universities, Basturkmen et al. (2014) found the prevalence of referential comments (238 out of 365 comments). The data contained very few expressive comments (7.56%), all of which except two were negative, possibly because positive evaluation was often implicit and unvoiced. Basturkmen et al.'s (2014) study developed a useful framework for categorizing feedback in terms of foci and functions. However, it did not explore students' views on feedback comments. As feedback is a dialogic process, research on feedback remains incomplete without considering its impact on students' learning.

A recent reflective case study (Xu, 2017) employed Kumar and Stracke's (2007) framework to explore supervisory feedback on the first draft of the author's PhD proposal. In

line with previous studies, the study found the prevalence of referential comments (62.4%). However, unlike in previous studies, expressive comments were more frequent (23.3%) than directive ones (14.3%), perhaps, according to the author, owing to the personal characteristics of the feedback provider. She also found expressive comments (the majority of which were positive) particularly useful because they raised her morale and confidence.

Notwithstanding their benefits, the studies reviewed above have some limitations. First, they involved small samples of supervisors. Second, the feedback need of master's students might be different feedback from than PhD students their limited research experience. Therefore, to gain better understanding of supervisory feedback on master's theses, it is necessary to take a larger sample and examine complete drafts. The present study, anchored by the conceptual framework developed by Kumar and Stracke (2007), examined 97 drafts from four disciplines.

2.3 Supervisors' and students' perceptions of supervisory feedback

People's perceptions of certain phenomena can significantly influence their practices. In the case of supervisory feedback, such perceptions include seeing feedback as social practices, understanding of shared responsibilities, and supervisors' practices of constructing feedback and students' subsequent actions (Davis & Dargusch, 2015; Vattøy & Smith, 2019).

Therefore, it is essential to examine both supervisors' and students' perceptions of supervisory feedback to better inform supervisory feedback practices.

Research has shown that students might benefit from feedback if they perceive it to be useful. A recent survey by Vattøy and Smith (2019) involving 1137 Norwegian lower secondary school students indicated that students who recognized the learning goal of teachers' feedback and were capable of self-regulating their activities considered the feedback useful. The perceived usefulness, in turn, positively predicted their use of feedback.

Similarly, Harks, Rakoczy, Hattie, Besser, and Klieme's (2014) study of secondary school students in German schools found that students' perceived usefulness of feedback had a positive effect on mathematics achievement and interest. In contrast, the students felt frustrated when their feedback expectations were thwarted. Extant research (e.g., Carless, 2006; MacKay et al., 2019) revealed that students are usually dissatisfied with the feedback they receive. For example, an examination of free-text comments of the National Student Survey at a large Scottish Russell Group university (MacKay et al., 2019) revealed that students felt frustrated and alienated because of perceived inadequate support from and limited contact opportunities with academic staff, 'unfair' and non-transparent assessment requirements, and different sets of rules for staff and students. Some students pointed out that they received a penalty for delayed submission of their assignment, whereas no such penalty was incurred by staff who delayed feedback. The students did not value the feedback that they could not use. It is worth noting that they appreciated it when they received care and support from teachers.

A body of research that examined staff's and students' perceptions of assessment feedback at schools and coursework feedback at universities has revealed dissonance in their views. For example, a large-scale questionnaire survey (460 staff and 1740 students) followed by interviews at 8 public Hong Kong universities reported significantly discordant feedback perceptions of staff and students (Carless, 2006). The staff viewed their feedback as more detailed and more useful than the students did. Similar conflicting views regarding coursework feedback were reported in Beaumont, O'Doherty, and Shannon's (2011) mixed-methods study involving 23 staff and 145 students across disciplines at three UK universities. While the students considered feedback as a process-oriented developmental activity to improve learning, the staff tended to view it as a post-submission summative event.

In comparison to assessment and coursework feedback, supervisors' and students' perceptions of supervisory feedback practices have received less research attention. There is some research on students' perceptions of supervisory feedback on master's theses. Three large-scale questionnaire surveys (i.e., de Kleijn et al., 2012, 2013, 2014) examining master's students' perceptions of different aspects of supervisory feedback at a large Dutch university underscored the importance of positive supervisory support to students' satisfaction and learning. De Kleijn et al.'s (2012) online questionnaire survey revealed that students who received positive personal support (i.e., affiliation) from their supervisors received higher final grades, were more satisfied, and perceived better supervisory contributions to their learning. Supervisory control (i.e., greater supervisor influence on students' activities) also had a positive linear effect on perceived supervisors' contribution to learning, although it had a quadratic effect (i.e., initial positive effect turning to negative when the control increased) on satisfaction and final grades. In another online survey (i.e., de Kleijn et al., 2013), master's students reported that positive supervisory feedback that not only informed them of their progress but also provided them with sufficient instruction for improvement was more supportive to their learning. Consistent with previous studies (de Kleijn et al., 2012; de Kleijn et al., 2013), de Kleijn et al. (2014) showed that supervisory support was the strongest predictor for student satisfaction and perceived supervisor contributions to learning.

Research has it that supervisors and students have different expectations and assumptions about feedback practices. For example, Strauss's (2012) exploratory study of the supervision practices of an experienced female supervisor and two of her master's students at a New Zealand university revealed a highly distressing situation in which the supervisor's and the students' diametrically different expectations led them to consider supervision and thesis writing a burden. The supervisor expected the students to be independent and self-regulated in their research, felt frustrated by their poor English and lack of initiatives, and

refused to engage with their work until it was finalized. In contrast, the students appeared to be highly dependent and expected clear guidance and hands-on support in every stage of their thesis writing. Consequently, the students saw themselves deficient, experienced plummeting self-esteem and agency, and felt ashamed and useless, although they managed to complete their thesis with the help of Strauss, who was their academic advisor.

Similar differences exist in academic staff's and students' perceptions of student engagement (Lam, 2017). A recent study by Mulliner and Tucker (2017) indicated a significant discord between staff's and students' opinions on students' engagement with and interest in feedback, satisfaction with current practice, and feedback preferences. The staff's views regarding these aspects were mostly negative. However, many students challenged the staff's perceptions that "they do not read feedback, are only interested in grades, and do not act on or use feedback" (p.282). This observation led the authors to conclude that "most students always access, read, and act on feedback and academic staff should not assume that they do not" (p. 2017). In this context it is relevant to quote Harks et al. (2014) at some length because their views shed light on differing perceptions:

Generally, teachers, feedback designers, and researchers assume that students automatically perceive feedback in the way they intended it to be perceived and expect that the information contained in the feedback is unproblematically taken as input into the information-processing, motivational, or self-regulation systems.

Relatively little is known about how students perceive feedback and even less about the immediate influence of this perception on further learning processes.

This study, set to address this knowledge gap, examines supervisors' and students' perceptions of different aspects of supervisory feedback (i.e., purposes, quality, student engagement, and challenges) as delineated in the section that follows.

2.3.1 Purposes of supervisory feedback

The primary purpose of feedback is to reduce discrepancies between current and desired performance (Hattie & Timperley, 2007). In this regard, supervisory feedback usually has two components: a judgemental component (i.e., feedback) and a suggestion component (i.e., feedforward for the next level of development) (Carter & Kumar, 2017; Kumar & Stracke, 2007). Feedback has a backward-looking purpose (e.g., correcting learners' performance, providing reinforcement, diagnosing problems in work, and benchmarking). In contrast, feedforward has a forward-looking purpose (i.e., longitudinal development) (Price et al., 2010). Feedback plays a central role in effective learning and is an essential component of the learning cycle as it informs students of their strengths and weaknesses, helps them to improve their future work, and encourages them to set goals for further development (Carless, 2006; Lee, 2007; Wang & Li, 2011; Weaver, 2006). It mediates the effectiveness of teaching and influences learning achievement in higher education (Basturkmen et al., 2014). Though some studies (e.g., Stracke & Kumar, 2014) have questioned the top-down nature of support in fostering graduate attributes like research skills in students, supervisors' feedback is typically highly valued by students. It provides supervisors with the opportunity to offer the kind of individualized attention that is otherwise rarely possible (K. Hyland, 2013). Feedback is also vital for making students become independent because it can nurture their "capabilities for independent judgement, problem-solving, self-appraisal and reflection" (Yang & Carless, 2013, p. 286). Supervisors can promote students' independent skills by "refraining from immediately supplying answers to students' questions or solving their problems, and instead encouraging them to identify and evaluate a range of options and then settle on a course of action to try" (Lum, 2018, p.117). Supervisory feedback is a means of socializing students into community's discursive and knowledge-making practices as it conveys "implicit messages" about the community's expectations, values and beliefs, the nature of disciplinary

knowledge, and student roles in the community (Basturkmen et al., 2014). It plays a crucial role in the quality of research and contributes towards achieving much-desired excellence in higher education. In other words, to help novice researchers (i.e., postgraduate students in this case) in writing a thesis, supervisors play a significant role by providing them with instruction in the form of written or oral feedback (Bitchener et al., 2010; East et al., 2012; Paltridge, 2002). Such feedback is essential, especially in programs where there are no courses to support the students, and “a student works alone on a dissertation topic in consultation with a supervisor” (Allison, Cooley, Lewkowicz, & Nunan, 1998, p. 201).

Thesis supervision heavily relies on the interpersonal relationship between students and supervisors and, as such, their understanding of the purposes to be pursued in the thesis influences the relationship (Anderson et al., 2006). In this regard, de Kleijn, Bronkhorst, Meijer, Pilot, and Brekelmans (2016) stress that an awareness of the overarching goals of Master thesis supervision helps supervisors to adapt their supervisory feedback to their students’ needs. Such an awareness would undoubtedly benefit students in writing their thesis. Therefore, students need to appreciate “the purpose of feedback processes and how they can operate to their benefit” (Henderson et al., 2019, p. 22).

Research on the purposes of supervisory feedback is beginning to emerge. One strand of this research has explored supervisors’ perceptions of the purposes of a master’s thesis. For example, in Anderson et al.’s (2006) study, supervisors expected their professional master’s degree students to be able to undertake a well-conceptualized research project with clear aims and sound theoretical underpinning. Besides, the students were expected to adopt a critical and questioning perspective, defend their decisions with rationales, follow an analytical approach in conducting and writing up a dissertation, report research in a logical, fluent and coherent manner, and make some contribution to knowledge. In helping students to meet these expectations, supervisors had to fulfil dual roles: acting as gatekeepers to

ensure the research standard and as mentors supporting the students in pursuing research of their interest. In Y. Hu, Rijst, Veen, & Verloop's (2016) comparative study, Chinese and Dutch supervisors identified five expected outcomes for master's theses, that is, developing research competencies, acquiring general competencies, contributing to the body of knowledge, promoting students' well-being, and preparing them for their future career. Although Chinese and Dutch supervisors mentioned all these outcomes, they differed in the relative emphasis placed on these aspects. For example, Chinese supervisors placed a premium on preparing students for a future career, whereas the Dutch supervisors underscored the importance of students' well-being and satisfaction.

A second strand of research has examined students' understanding of purposes. For example, Anderson, Day, and McLaughlin (2008) showed that professional master's degree students ($N=15$) in the UK were intrinsically motivated to conduct a dissertation to advance practice, make intellectual progress, and grow personally. Therefore, they had a great sense of agency and responsibility and were highly committed to their research. Consistent with these views, professional master's degree students in education in five European countries reported multiple benefits of writing a dissertation (Kowalczyk-Walędziak, Lopes, Underwood, Daniela, & Clipa, 2019). The benefits reported were enhancement of professionalism; promotion of personal development and growth; a better understanding of research-practice nexus; and a desire to apply results in pedagogical work, professional collaboration, and academic work.

Another strand of extant research has taken both supervisors' and students' views into consideration. For example, Ginn (2014), drawing on the collaborative reflections of five students and himself, pointed out that, in the neo-liberalized context of higher education, which treats students as customers and pressurizes them to develop employable skills, the supervisors have three primary purposes. These include: (a) creating space for students to

experience ‘being like a researcher’ along with a focus on employability; (b) helping them not only gain ethical clearance but also research and write ethically; and (c) ensuring that “both supervisor and student care together about the quality of the research” (p.115). A recent study by Katikireddi and Reilly (2017), based on in-depth interviews with eight supervisors and ten students in a Master of Public Health program in the UK, showed various benefits of writing a dissertation: acquisition of generic as well as disciplinary skills (e.g., writing, project management, and time management), application of learning from taught courses, establishment of a research-practice nexus, and, to some extent, publishing their research. Some researchers (e.g., Vehviläinen & Löfström, 2016) argued that the primary purpose of supervision should be academic learning and generic work processes such “as goal-setting, planning, evaluation, motivational processes and reorientation after encountering obstacles” (p. 509).

These studies showed that the purposes of thesis writing, and therefore supervisory feedback, may vary depending on supervisors’ views, students’ commitment to research, and the contexts the supervisors and students belong to. Therefore, notwithstanding their benefits, it is important to note that the studies reviewed above were conducted in the west and may not represent the views of supervisors and students in resource-starved context like that of Nepalese higher education, especially when coupled with a lack of supervisors’ expertise on scaffolding novice researchers. This paucity of knowledge on supervisors’ and students’ understanding of the purposes of supervisory feedback in non-western contexts suggests a clear need for further research.

2.3.2 Effective supervisory feedback

For any feedback to be useful, there should be an optimal interplay between the content of feedback, the social and interpersonal negotiation of feedback, and the organization and

management of feedback (Yang & Carless, 2013). First, feedback should help the students to solve problems identified in the feedback. Second, it should promote their self-regulation by encouraging them to use the given feedback productively. Third, it should stimulate them cognitively and engage them emotionally. As the purpose of feedback is to reduce discrepancies between current and desired performance (Hattie & Timperley, 2007), feedups (goals), feedback (information about the ongoing process), and feedforward (information about the next right step) are equally important. Carless et al. (2011) argue that feedback is useful, meaningful and sustainable if it can enhance students' autonomy, self-regulation, independence, and zeal for lifelong learning, making the feedback provider redundant in the long run. Such sustainable feedback should pose stimulating questions to students rather than providing answers, engage them in dialogue with peer and teachers, and encourage them to use technology. Consistent with this view, Henderson et al. (2019) posit that quality feedback should bring about a changed state in a student, and the "nature of that change could be related to their thinking processes, emotions, relationships, work strategies, identity and more" (p. 26).

A large and growing body of literature has examined the characteristics of quality feedback on graduate and undergraduate course work. For example, in Beaumont et al.'s (2011) study, both staff ($n = 23$) and students ($n = 145$) opined that quality feedback is process-oriented, involves students in dialogues, provides judgements of the standard reached, and offers instruction for improvement on learning. However, in interviews the supervisors seemed to endorse feedback as a post-submission summative event. In a recent exploratory study drawing on semi-structured interviews (K. Hyland, 2019), undergraduate students ($N = 24$) from four faculties (Business, Science, Engineering and Arts) at a Hong Kong university appreciated individualized feedback and opportunities to discuss feedback

with tutors. However, they were disappointed when they received delayed feedback with no opportunity for discussion because it suggested that the teachers did not value their work.

Much of the literature on quality of supervisory feedback concerns doctoral (e.g., Eyres, Hatch, Turner, & West, 2001; Wang & Li, 2011; Wisker et al., 2003) rather than master's thesis supervision. One strand of this research has focused on the nature of quality comments. For example, in Eyres et al.'s (2001) exploratory study, female doctoral nursing students ($N = 15$) at a university in Pacific Northwest appreciated feedback that challenged and helped them to expand their thinking, pointed out whether their writing was clear and fluent, and supported them to find their voice. In contrast, they did not appreciate editorial comments (especially on the first drafts) and unexplained compliments. In another mixed-methods study (Can & Walker, 2011), social sciences (Humanities, Health, Business, and Education) doctoral students ($N = 276$) at two US universities valued feedback that was straightforward, provided clear and detailed guidelines for improvement, offered content-related resources, and had a suggestive rather than a directive tone. They expected feedback on the "areas of content and arguments, organization and flow, and mechanical issues" (p. 518). A similar, exploratory study (East et al., 2012) involving students writing their first thesis (whether master or doctoral) at six New Zealand universities reported that students treasured direct feedback on organizational and language aspects and less direct feedback for promoting autonomy and intellectual thinking. Supervisory feedback detailed and tailored to individual needs, supporting self-regulation, and helping students develop their critical thinking and writing skills was admired by Science and Social Science doctoral students and graduates in the UK, Portugal, Canada, Australia (Odena & Burgess, 2015).

Some research on doctoral supervision posits that quality feedback is mediated by the personal characteristics of students (Wang & Li, 2011), supervisor-student relationship (Denis et al., 2018), and dialogic opportunities (Wisker et al., 2003). For example, students

with lower self-confidence and academic competence expected directive and specific feedback, whereas those with determination, self-confidence, and stronger academic competence desired for guidance (Wang & Li, 2011). A productive interpersonal relationship for quality feedback involves reciprocal respect, flexibility, cooperation, compatibility, trust, and frequent constructive communication (Denis, Colet, & Lison, 2018). Equally important are for quality feedback are dialogic opportunities. In this regard, Wisker et al.'s (2003) action research involving 150 PhD students at a UK university found that dialogues helped students develop research focus, select an appropriate methodology, pull the ideas together into a synthesis, and to have 'dialogue' with the literature and their work. They observed that the "most useful kinds of dialogues seem to take place where tutor and student can match their cognitive processes and move forward, leaving students suggesting developments and work that they will undertake for themselves" (p. 392).

What constitutes effective supervisory feedback to master's students seems to be a mostly uncharted territory. Master's students may have different expectations of supervisory feedback given their little prior experience with research and academic writing, the short duration of the master's program, and limited orientation to research-related career goals. The relatively small body of literature on master's theses is concerned with effective thesis supervision practices in general. One line of this research has examined broader approaches to quality supervision: a multi-voiced approach (Dysthe et al., 2006) and a whole school approach (S. Nicol & Cornelius, 2018). For example, Dysthe et al.'s (2006) case study at a Dutch university demonstrated the benefits of involving students in student colloquia and supervision groups in addition to one-on-one supervision. Five-to-six-member student colloquia offered a platform for students to share their experiences, challenges, and frustration with their colleagues in a safer, trusted, and informal environment and receive support and encouragement. Supervision groups, which included the same colloquia with

their supervisors, offered students the opportunities to provide feedback to their colleague's work, receive feedback both from their friends and supervisors, promote thinking and arguing skills, enculturate them into disciplinary knowledge, and negotiate divergent voices. Besides, these platforms helped students to refine their work, develop independence, and gain confidence in their work, which, in turn, reduced the onus on individual supervisors allowing them to focus on specific issues to ensure the quality of the thesis work. Although there is a consistent call to expand supervision practices from supervisor-student dyad to community (Strauss, 2012; Vehviläinen & Löfström, 2016), this is still a distant reality in many contexts. Taking a similar general perspective, S. Nicol and Cornelius (2018) presented a 'whole school approach' that made supervisors and students aware of their roles and responsibilities and offered multiple avenues of support to cater to their needs. Such supports included courses offered to develop students' critical thinking as well as academic reading and writing skills, exemplars and supportive materials, and opportunities to engage in online workshops. Besides, new supervisors were mentored regularly by experienced team members. According to the authors, many students found the approach useful because it enhanced their academic writing skills. Creating such conducive supervision is commendable. However, as Maunder, Gordon-Finlayson, Callaghan, and Roberts (2012) succinctly put it, "most of the real work of research training is done in the dissertation itself" (p.31).

Focusing on the thesis writing process itself, Beddoe and Maidment (2017) delineated an explicitly planned and stage-wise directive feedback approach that they found useful to develop academic writing and research skills of part-time professional health master's and honours students at two New Zealand universities. They reported placing a high premium on building a trusting relationship and providing feedback enabling "the timeliness of task completion, ethical yet rigorous data collection and the production of a well-argued thesis" (p. 120). Their feedback approach had three main features: "a writing focus from the

beginning, prescriptive feedback, and support that encourages the development of an academic voice” (p. 120). The writing focus feedback included setting expectations for the quality and quantity of writing and encouraging students to write from the beginning, agreeing on the ways of giving and receiving feedback, and helping them make methodological decisions in compliance with research ethics. They argued for prescriptive feedback such as rewriting a small portion of students’ work to set an exemplar for them to follow, setting ground rules (e.g., the amount of writing to be produced for each meeting, and time to return students’ work with feedback), ensuring the adoption of the prescribed format and referencing styles, and helping students avoid procrastination. With respect to developing students’ academic voices, they emphasized the need for constructive and directive feedback. Such an approach that might have addressed the needs of time-poor part-time professional students with full-time paid jobs might be too prescriptive to students who want to unleash their potential with supervisors’ guidance on their work. It may not allow them to experience “being like a researcher” (Ginn, 2014, p. 108).

A growing body of research on quality supervisory feedback stresses the need to adapt supervisory feedback to students’ needs and expectations such as providing more directive feedback for less well-performing students and more high-level feedback for aspiring students (Katikireddi & Reilly, 2017). From this perspective, as Pilcher (2011) argues, quality feedback is an elusive concept because it may mean different things to different people. However, the same elusiveness allows supervisors to adapt to students’ diverse needs and expectations. In de Kleijn et al.’s (2016) qualitative study, 12 Dutch supervisors with the reputation of being successful reported having the same goals (i.e., learning and progress) for all the students irrespective of their capabilities. However, they actively explored students’ needs and expectations and adjusted the level of support, the amount of directive and explicit feedback, and the severity of critical comments accordingly.

The students under their supervision corroborated this practice. However, holding up the same standard for all the students required the supervisors to provide too much support to students who were not well-prepared for the demanding task.

Subsequent research has consistently reported successful supervisors' preference for adaptive supervision (e.g., Filippou et al., 2017; Harwood & Petrić, 2020). Unlike de Kleijn et al.'s (2016) observation, Finish supervisors (Filippou et al., 2017) pointed out that sometimes it may be necessary to lower the bar if students are unlikely to meet the expectations given their capabilities and career goals. A recent longitudinal case study (Harwood & Petrić, 2020) involving an experienced and successful supervisor and an academically strong student at a UK university also demonstrated the benefits of flexible supervision adapted to students' diverse needs and capabilities (i.e., a student-sensitive partnership model). The supervisor reported that he would vary the style of supervision as required by different students or by the same student at different stages of the research process. Unlike supervisors in previous studies (e.g., Anderson et al., 2006; de Kleijn et al., 2016; Filippou, 2020), this supervisor managed to strike a balance in the amount and strictness of supervision provided, as required. He welcomed his student to regulate the supervisor-student meetings but chased him when necessary. The student appreciated this flexible approach because it allowed him freedom to work on his own and receive support whenever he needed it. These studies reported inspiring examples of successful supervision involving acclaimed supervisors and competent students in the resource-rich western context. Notwithstanding their contribution to our understanding of master's thesis supervision, they offered only a partial picture of the complex, demanding, and situated nature of supervisory feedback, which is not only characterized by success stories but also by failures and frustrations. This paucity of knowledge on quality supervisory feedback indicates a clear need for further research in different contexts.

2.3.3 Students' engagement with supervisory feedback

The usefulness of supervisory feedback largely depends on students' understanding and utilization of feedback (de Kleijn et al., 2016; Price et al., 2011) because feedback is a dialogic process (Winstone, Nash, Rowntree, et al., 2017). From this perspective, highly informative and constructive feedback remains useless without student agency and engagement (Winstone, Nash, Rowntree, et al., 2017).

Student engagement with feedback involves various stages from receiving feedback to enacting it (Price et al., 2011). Sometimes students might reject the feedback if they are unable to interpret it, consider it negotiable, or do not have the required resources. Furthermore, student engagement may remain invisible even if they decide not to enact feedback even after careful consideration (Handley, Price, & Millar, 2011). It is important to note that engagement is a multi-dimensional construct involving affective, behavioural, and cognitive aspects (Fredricks, Blumenfeld, & Paris, 2004; Handley et al., 2011; Yu et al., 2018).

Affective engagement might influence students' willingness to enact supervisory feedback (Fredricks et al., 2004, p. 60). It involves both positive (i.e., motivation, interest) and negative (i.e., boredom, sadness, anxiety) emotions associated with feedback (Han & Hyland, 2019; Philp & Duchesne, 2016; Skinner & Pitzer, 2012; Zepke, 2017). Affective engagement with supervisory feedback is manifested via students' "emotions expressed upon the receipt of feedback and while revising the draft" (Yu et al., 2018, p. 2). Such emotions mostly hinge upon the types of comments that students receive. For example, positive comments may provide students with a sense of support, encouragement, and the incentive to act on feedback (Finn & Zimmer, 2012, p. 5). In contrast, negative and upsetting comments can damage students' self-confidence (Henderson et al., 2019). In extreme cases, negative

feedback may even lead to failure and eventual drop-out (Tai, Dawson, Bearman, & Ajjawi, 2019).

Behavioural engagement refers to students' involvement and participation in desirable academic activities leading to a successful outcome (Fredricks et al., 2004; Philp & Duchesne, 2016; Zepke, 2017). It includes "effort, intensity, persistence, determination, and perseverance in the face of obstacles and difficulties" (Skinner & Pitzer, 2012, p. 24). It is worth noting that behaviourally engaged students tend to elicit better academic support (Skinner & Pitzer, 2012). In the context of supervisory feedback, it "can be indicated by student revision operations in response to the feedback and observable strategies that are taken to improve the quality of writing" (Yu et al., 2018, p. 2). Supervisors "want students to engage with their written feedback, not just because they have invested time and energy in providing it, but because they believe this engagement is crucial for students' development" (Han & Hyland, 2019, p. 247).

Cognitive engagement involves students' "investment in deep learning, self-regulation, perceived future relevance of learning, thoughtfulness, and willingness to exert necessary efforts" (Neupane-Bastola, 2020, p. 3). According to Skinner and Pitzer (2012), cognitive engagement "encompasses attention, concentration, focus, absorption, 'heads-on' participation, and a willingness to go beyond what is required" (p. 24). Cognitive engagement with supervisory feedback is concerned with students' understanding and the processing of the feedback information, monitoring the revision process, and self-regulating learning (Yu et al., 2018; Zhang, 2017).

Research focusing on student engagement with coursework or assessment feedback shows that students often do not engage with feedback in a meaningful way (Adcroft & Willis, 2013; Ali, Ahmed, & Rose, 2017; Carless et al., 2011; Price et al., 2011). A survey study by Ali, Rose, & Ahmed (2015) revealed that students' low engagement with feedback

became worse as they progressed in their study. Multiple student-, staff-, context-, and comment-related factors may mediate students' engagement with feedback. For example, students' previous feedback experiences, academic competence, understanding of the role of feedback, motivation to use feedback for ongoing improvement, and ability to self-regulate contribute to their engagement (Adcroft & Willis, 2013; Ali et al., 2015; Carless, 2019; Davis & Dargusch, 2015; Price et al., 2011; Winstone & Carless, 2020). In their study of undergraduates' engagement with assessment feedback, Adcroft and Willis (2013) found that students with excellent performance were more likely to engage with feedback than those performing poorly because the latter might have found feedback demotivating. Similarly, a recent five-year longitudinal study (Carless, 2019) involving four bachelor students at a Hong Kong university showed that academically competent students with positive feedback experiences and a strong volition to do better fared well in their feedback engagement. Recent scholarship explains students' engagement with feedback in terms of their feedback literacy, that is "an understanding of what feedback is and how it can be managed effectively; capacities and dispositions to make productive use of feedback; and appreciation of the roles of teachers and themselves in these processes" (Carless & Boud, 2018, p. 1316). In line with previous research, academically competent students are reported to have better feedback literacy and take agency in utilizing feedback in an iterative manner (Davis & Dargusch, 2015). Such an interactive approach involves reviewing the past work, reading feedback months and year later, remembering feedback while writing and revising their assignment, asking for clarification in case of confusion, and considering the reader's perspective.

Student engagement with feedback is also influenced by feedback providers, feedback context, and the quality of feedback comments. Students' judgement of teacher's credibility impacts on their interpretation and subsequent enactment of feedback (Ajjawi & Boud, 2018). Students value and internalize feedback most when it comes from a feedback provider who

they have a high degree of confidence in and trust for academic competence (Davis & Dargusch, 2015; Price et al., 2011). Besides, the feedback context, (such as course design, teaching inputs, learning activities, disciplinary culture, opportunity to use feedback in subsequent tasks, and availability of resources) influences students' uptake of feedback (Carless, 2019; Denis et al., 2018; Han & Hyland, 2019; Handley et al., 2011; Winstone & Carless, 2020; Winstone et al., 2017). There is little motivation for students to act on feedback provided on final submission. Finally, the quality and content of feedback comments is the most important factor influencing students' subsequent actions (Carter & Kumar, 2017; Esterhazy, 2019; Handley et al., 2011; Parkin, Hepplestone, Holden, Irwin, & Thorpe, 2012; Winstone & Carless, 2020; Winstone, Nash, Rowntree, et al., 2017). Students are unlikely to engage with feedback if it consists of illegible comments (Higgins, Hartley, & Skelton, 2002; Parkin et al., 2012)), is difficult to comprehend (Winstone & Carless, 2020), lacks guidelines for improvement (Winstone et al., 2017), and is beyond students' ability to interpret and integrate the feedback into their existing knowledge (Sadler, 2010).

Some research has examined student engagement with feedback on PhD dissertations. In a recent mixed-methods study by Carter and Kumar (2017), PhD supervisors at a New Zealand University reported that their students tended to ignore feedback. The students' minimal engagement was not only frustrating and annoying to supervisors but was also detrimental to students' own progress and learning of "the etiquette of social negotiation around academic writing" (p.72). It is worth noting that the supervisors did not mind but appreciated it if the students had a justifiable reason for rejecting their feedback. Such a legitimate disagreement implied engagement in the first place. As mentioned in the previous paragraph, the quality and content of feedback messages and students' ability to interpret and use the messages are crucial factors mediating student engagement. In this regard, Ridgway's (2017) case study investigating the negotiation of feedback between a student, his supervisor,

and an Academic Language Learning (ALL) adviser at an Australian University demonstrated that ALL advisor's detailed feedback on students' writing using metalanguage helped the student to better engage with supervisory feedback and develop academic writing skills. Without such support, the student would not have been able to engage with the supervisor's feedback, which was "neither systematic nor detailed in terms of the language focus" (p. 184). In exploring her own experience, Xu (2017) found that she responded to supervisory feedback in three ways: rejecting (no change), modifying (change/inspired), and accepting (change/directed). She rejected comments that were too abstract, illegible, and negotiable. As a self-regulated learner, she made more changes than suggested by her supervisors and accepted all comments related to linguistic issues because of her "lack of confidence in the English language" (251). In her case, even "no change" signified active engagement because she rejected comments only after careful consideration. She claimed that active inaction was not the same as passive resistance.

Despite a growing number of students writing their master's thesis (Cornelius & Nicol, 2016; Ginn, 2014), little has been written on master's students' engagement with supervisory feedback (Zheng et al., 2019). A recent qualitative case study (Zheng et al., 2019) involving three master's level students at a Macau University indicated students' affective engagement with feedback because they gained positive reassurance from the complimentary comments and trusted the feedback they received. However, they were selective and strategic in revising their drafts in the light of comments because they did not understand some comments. Instead of asking for clarification when there was confusion, they decided to let the comments go and moved on.

Further research has revealed the interconnectedness between behavioural, emotional, and cognitive engagement (Cooper, 2019; Wagener, 2018; Yu et al., 2018). Two studies (i.e., Cooper, 2019; Wagener, 2018) emphasized the importance of positive affect in students'

thesis writing performance. In an online survey of Humanities master's students ($N=95$) at French universities, Wagener (2018) found a significant effect of self-regulation, affect, and social relationship on students' experience and performance. Among these three aspects, affect played the most significant role because the students' feeling of independence and interest in their research mediated their self-regulation as well. It is worth noting that good supervisor-student relationships, better quality support, supervisors' positive attitudes, frequent communication, and constructive discussion contributed to students' positive affect. A recent case study (Cooper, 2019) involving an MA student at a UK university highlighted the huge impact of students' love for their research on their engagement. The MA student's passionate engagement with her work accompanied by her questioning perspective, the courage to go beyond received wisdom, critical reflection, and concern for research integrity led her to "authentic transformations in knowledge, understanding, and perspective" (p. 12).

The survey of literature points to the dearth of research on student engagement with supervisory feedback despite its significant role in the process as well as the quality of research they produce. The limited body of research highlights a clear need for further research. Besides, it is essential to identify and address challenges to student engagement to maximize their learning affordances. The next section focuses on the challenges associated with providing and engaging with supervisory feedback.

2.3.4 Challenges in supervisory feedback

Student engagement with feedback is a shared responsibility of supervisors, students, and institutions. Therefore, it is necessary to identify student-, supervisor-, and institutional structure-related factors that limit students' engagement with feedback and minimize its affordances. As mentioned in Section 2.3.2, an interplay of three aspects (i.e., the content, the social and interpersonal negotiation of feedback, and the organization and management of

feedback) mediate feedback quality (Yang & Carless, 2013). Existing research on assessment feedback has revealed that students were often unsure of the common terms used in feedback (Weaver, 2006) and considered feedback a “foreign language” (Sutton, 2012), which was ambiguous and less directive (Price et al., 2010). Their different beliefs about the required standards or their inability to locate actual problems in their work might have caused such uncertainty (Sadler, 2010). By way of illustration, if a feedback comment underlines a section and says, “rewrite”, the student may not know how he/she should rewrite it. Despite the difficulty they have in understanding the feedback, students might hesitate to ask for clarification due to power imbalance, demotivation, low self-esteem caused by negative feedback, less supportive institutional structure or for fear of exposing their weaknesses (Yang & Carless, 2013).

In the case of supervisory feedback, commonly discussed challenges are students’ language constraints, supervisors’ time constraints, resource constraints, and lack supervisors’ expertise students’ inaction on feedback (e.g., Carter & Kumar, 2016; Guerin, Kerr, & Green, 2015; McCallin & Nayar, 2012). Students may find it difficult to communicate in academic discourse, irrespective of whether students are using English as their first or additional language (Allison et al., 1998; Beddoe & Maidment, 2017; Cadman, 1997). Research students’ writing problems commonly are shown to include circumlocutory writing, poor grammar, unrefined sentence structure, and list-like summaries of literature (Lee, 2017). In Bitchener and Basturkmen’s (2006) study, all supervisors stated that “the level of English proficiency of L2 students, in general, could sometimes be a hindrance” (10), and students found this “as the major stumbling block to their writing well” (11). L2 students often are reported to face difficulty in maintaining accuracy and appropriateness in their writing, developing ideas, and expressing them coherently (e.g., Bitchener et al., 2010; Sadeghi & Khajepasha, 2015). Consequently, supervisors must spend much time providing

feedback to such students (Carter & Kumar, 2017; Ridgway, 2017). In some cases, the students who struggle to write accurately and in an academically appropriate style are further disadvantaged and marginalized in the process of supervision. By way of illustration, Salter-Dvorak's (2017) linguistic ethnography exploring feedback on a master's thesis at a UK university revealed that the supervisor focused on linguistic forms and plagiarism at the expense of in-depth feedback on content and argument development, which the student was actively seeking. The student received a lower grade because of, as the examiner pointed out, weak structure and methodological framework and unsubstantial argument. The author concluded that "had this student writer received more feedback on argumentation and structure, she may have gained a merit; instead, she has been denied the 'right to speak' on content" (p. 96).

The more detailed and timelier the supervisory feedback is, the more likely it is for the students to take the feedback seriously and act on it. An issue raised by both supervisors and students is supervisors' tight time frame (Ali et al., 2017; Beaumont et al., 2011; Carter & Kumar, 2017; Larcombe, McCosker, & O'Loughlin, 2007; Price et al., 2011). Supervisors have "multiple other academic, administrative and research demands" (Cornelius & Nicol, 2016, p. 5). Besides, the massification of higher education in neo-liberal contexts has added to supervisors' already strained time-resources (Ryan, Gašević, & Henderson, 2019; Tsai, 2008; Winstone & Carless, 2020). Time constraints are even more prominent with non-tenure track faculties who struggle "to balance day-to-day workloads with longer-term career progression" (Ginn, 2014, p. 107). Supervisors can deal with such an overextension if they can consider supervision "as a supreme labouring form" (Tsai, 2008, p. 452) and integrate intellect, body, emotion, and imagination; provide students with care, empowerment, and growth in addition to factual knowledge; and emphasize transformation rather than indoctrination. Such transformation can result when supervisors appreciate students' diverse

needs, make use of multiple channels of communications, and invest personal and academic meanings in students' research projects.

A further challenge in supervisory feedback is students' failure to act on the feedback provided by their supervisors, which makes the latter frustrated because they have to provide the same feedback repeatedly (Carter & Kumar, 2017). In this regard, a body of research reports students' lack of interest in learning from feedback (e.g., Winstone, Nash, Rowntree, et al., 2017; Withey, 2013). However, the problem may lie in the feedback delivery approach itself. Vehviläinen's (2009) analysis of two supervision meetings, where supervisors offered critical feedback to two master's students at a Finnish university, revealed the prevalence of students' resistance and misalignment of supervisors' and students' agenda. The seminar discussion led them nowhere because both the supervisors and the students persisted in their views: the former requiring a fundamental change in research problems, while the latter seeking an immediate solution in quantitative terms. The study warned that students might not engage with feedback without both parties agreeing on what is relevant activity. Moreover, students' lack of access to necessary disciplinary and non-disciplinary resources to make sense of and act on supervisory feedback might also contribute to students' inaction (Carless, 2006).

The successful use of feedback requires students' optimal participation in the learning community "by interacting with supervisors, experienced researchers, peers, and with other useful writing resources" (X. Wang & Yang, 2012, p. 327). The resources can be of two types: disciplinary and non-disciplinary (Yang & Carless, 2013). While disciplinary resources (e.g., exemplars of high-quality student work, guest presentations, books, journal articles, and suggestions from seniors to juniors) "embody the issues, practices and discourse characteristics of a discipline" (p. 291), non-disciplinary resources (e.g., encyclopaedia, dictionaries, and the Internet) are "learning tools applicable to all disciplines" (p. 291).

However, one of the major challenges is the “unavailability of knowledge resources that would be necessary for students to understand and make use of the provided comments during a feedback encounter” (Esterhazy, 2019, p. 78). As pointed out earlier, in a developing country like Nepal, limited access to resources is a prominent characteristic of graduate research and education.

Another prominent factor influencing students’ engagement with feedback is supervisors’ limited capabilities. Thesis supervision is a highly demanding, complex, and critical process. It is essential for supervisors to maintain good supervisory relationships (i.e., being approachable and maintaining professional authority) and convince students of the need for multiple revisions (Guerin et al., 2015). Surprisingly though, supervisors rarely receive formal and systematic preparation for such a complex role (Amundsen & McAlpine, 2011; Pare, 2011). As S. Nicol and Cornelius (2018) note, “The majority of supervisors have a limited portfolio of experiences to draw on for strategies to support master’s writers” (p. 127). In Amundsen and McAlpine’s (2011) study, 17 pre-tenure doctoral supervisors at two Canadian universities revealed that they relied “almost entirely on their own experiences as a doctoral student to guide them in the role of supervisor” (p. 38). In a study by Lei and Hu (2015), doctoral students at a Chinese university raised concerns about their supervisors’ limited English language proficiency to edit their manuscripts. The situation is “dismal in the context of Nepal because many supervisors hold only a master’s degree, which some of them completed without writing a thesis” (Neupane-Bastola, 2020, p. 5). Although supervisors in Nepal are sometimes provided with supervision training (Van den Ende & Jiang, 2014), such opportunities are rare and supervisors’ limited capabilities, at times, are reported to have hindered rather than facilitating the thesis writing process (Pokhrel, n.d.).

Some researchers (e.g., Emilsson & Johnsson, 2007; Vehviläinen & Löfström, 2016) consider the traditional product-oriented one-on-one supervision as a significant challenge for

quality supervision. In Vehviläinen and Löffström's (2016) exploratory study, Finnish supervisors reported facing challenges in maintaining a balance between students' autonomy and supervisory support, addressing students' diverse needs, and allocating time fairly to all students. They wished to have a 'crystal ball' that would empower them to understand students' needs and address them accordingly. The authors argued that the primary cause of these problems was the traditional product-oriented approach to supervision. The product-oriented approach makes supervision burdensome to supervisors because it places primary agency on supervisors, takes diversity as a distraction, seeks to eliminate challenges rather than working through them, and attributes successful practices to students' characteristics. Vehviläinen and Löffström (2016) advocate a process-oriented approach because such an approach considers supervision as a dialogic community process, emphasizes mutual responsibility, and values a caring interpersonal supervisor-student relationship. As process-oriented supervision is not common, supervisors might need training to see how it works (Emilsson & Johnsson, 2007). Such training would help them to not only reflect on the perceived problems and personal explanatory theories but also create new knowledge and new personal theories.

Exploring and identifying challenges is a prerequisite to addressing them. However, the review of the literature shows that limited research has been undertaken in this area. More striking is the dearth of research in non-western English-as-an-additional language context. Therefore, further research is warranted to understand the factors influencing the quality of the process as well as the product of supervisory feedback practices so that informed decisions can be made to translate the intended outcome of the most critical component of master's degree into reality. This study set out to bridge this knowledge gap.

2.4 Supervisors' attitudes conveyed in supervisory feedback

Previous research suggests that feedback should respect students' sense of being (i.e., self-confidence) and promote their academic identity as successful learners (Sutton, 2012). Students might misunderstand feedback if the language is opaque and complex (Sopina & McNeill, 2015). Thus, a feedback provider intending to encourage and motivate students "could, unwittingly, employ language and tone that undermines [the] purpose" (p. 881). Given the likelihood of feedback language to have an unintended impact on students, extant research cautions feedback providers to reflect on the language they use (Sutton & Gill, 2010) and not assume that "the language they use is inherently meaningful to students" (Higgins et al., 2002, p. 62). They are advised to make feedback language-neutral and non-judgemental (Schartel, 2012) and less authoritative (Jonsson, 2013) with "a tone that students will read, understand and think about" (p. 237). Too much judgement, excessive criticism, and ill-conceived feedback may make students feel vulnerable and powerless (Boud, 1995), undermine the sense of cordiality (Basturkmen et al., 2014), and have a damaging effect on students (Hyatt, 2005). In contrast, the use of informal language, inclusive pronouns, and hedging may soften the threat to face and promote common educational identity (Ajjawi & Boud, 2018). Some research in this area (e.g., Koen, Bitzer, & Beets, 2012; Sopina & McNeill, 2015; Sutton, 2012) has examined students' perceptions of feedback language. This body of research showed that students valued positive feedback that focused on strengths, had an encouraging tone (Koen et al., 2012; Sopina & McNeill's, 2015), and showed a sense of caring (Sutton, 2012).

However, only limited research has examined the language used in actual feedback comments (Hu & Choo, 2016; Hyatt, 2005; K. Hyland & Hyland, 2019; Starfield et al., 2015). Hyatt's (2005) corpus-based study of 60 feedback commentaries on 6000-word assignments found the frequent use of imperatives and obligation modality presenting tutors

as an incontestable authority. However, tutors also used passive structures and inclusive pronouns to elide their authority, provided positive comments, and sometimes invited students for further discussion. In contrast, K. Hyland and Hyland's (2019) study of feedback on written assignments on professional proficiency course showed that the teachers were highly conscious about the role of feedback in establishing harmony, trust, and cooperation with students and promoting their agency in learning. Therefore, they mostly used positive feedback; avoided overly negative comments like 'poor' and 'incomprehensible'; paired negative comments with positive ones; and used hedging devices, personal attribution, and interrogative forms to tone down the harmful and damaging effects of feedback.

Two studies employed Martin and White's (2005) appraisal framework to examine evaluative language used in examiner's report (Starfield et al., 2015) and schoolteachers' evaluative reports (Hu & Choo, 2016). According to Paltridge and Starfield (2019), a thesis is evaluated in term of an awareness and critical appraisal of relevant previous research on the topic, application of appropriate methodology to investigate the issue raised, thorough analysis of data and discussion, appropriate conclusion, result-based implications, academically standard presentation, and a contribution to the body of knowledge (especially in case of PhD thesis). Starfield et al. (2015) explored the use of evaluative language in 142 PhD examiners reports provided by international, national, and internal examiners on 50 theses across four disciplines (i.e., Health and Health Sciences; Science; Business, Economics, and Accounting; and Humanities) at a New Zealand university. Although the university criteria focused on the appreciation of a thesis as 'official evaluation', the examiners frequently passed judgements on candidates and expressed their affect, that is 'unofficial evaluation'. A recent study by Hu and Choo (2016) made a cross-disciplinary (i.e., hard vs. soft disciplines) comparison of attitude (i.e., affect, judgement, and appreciation) expressed in schoolteachers' feedback comments in 84 evaluative reports. The study found

that “[the] teachers from hard and soft disciplines were similar in the use of positive/negative capacity, negative tenacity, positive negative reaction, positive/negative composition/ and positive-negative valuation” (p.342). However, teachers from soft disciplines expressed satisfaction significantly more frequently than teachers from hard disciplines did. In contrast, teachers from hard disciplines expressed positive tenacity significantly more frequently than the teachers from soft disciplines did.

These two studies have made a significant contribution to our understanding of the language used in feedback comments. However, no study has been located that examined the supervisors’ attitudes conveyed in supervisory feedback. As argued by Starfield et al. (2015), feedback should evaluate the thesis, not the student, so that they can bridge the gap between their current and expected standard. Therefore, it is essential to examine the attitudes conveyed in supervisors’ evaluative language to “determine whether comments are appropriate, helpful, insightful or not” (Starfield et al., 2015, p. 132).

2.5 Disciplinary variations

A socio-cultural perspective on learning underscores the role of context and culture in academic practices (Winstone & Boud, 2019). In this regard, discipline as a primary cultural unit is shown to have a significant impact on pedagogic practices and policies in higher education (Lau & Gardner, 2019; Winstone & Boud, 2019; Yeo & Boman, 2019; Ylonen, Gillespie, & Green, 2018). Despite the promotion of interdisciplinary and multidisciplinary approaches to research (Manathunga & Brew, 2012; Muller, 2011; Trowler, 2012), disciplines still do have powerful influences on academic practices (Trowler, 2012) and the core of research (King & Mackey, 2016; Muller, 2011). According to Becher and Trowler (2001), disciplinary culture refers to “sets of taken-for-granted values, attitudes and ways of behaving, which are articulated through and reinforced by recurrent practices among a group

of people in a given context” (p. 23). Disciplines may be distinct in their objects of research, the nature and organization of knowledge, specific terminologies, and specific research methods (Krishnan, 2009, as cited in Trowler, 2012). There may be variations in kinds of valid evidence and legitimate arguments in research genres (Pare, 2011). Besides, “each discipline draws on, adapts, and augments the widely available resources of everyday language to shape particular, discipline-specific languages” (McAlpine & Amundsen, 2011, p. 57). Moreover, disciplinary norms and values “ultimately influence the experiences of the faculty, staff, and, students” (Gardner, 2009, p. 386). For example, “scholars in social sciences emphasize educating the whole student and evidence a more personal commitment to students than do those in physical sciences” (Biglan, 1973, p. 205). According to Gunn (2014), disciplinary culture may have four manifestations: formal and informal practices; cultural forms; and content themes (p. 70). This categorization supports the observation that most of the established cognitive and social elements of disciplinary culture are tacit and can only be acquired through meaningful participation in disciplinary practices (Ylijoki, 2000; Yousoubova, 2011). Lack of such socialization on the part of students indicates disciplinary incompetence (Ylijoki, 2000).

Based on their cultures, disciplines are broadly divided into four categories: hard-pure, soft-pure, hard-applied, and soft-applied (Becher, 1994; Becher & Trowler 2001). In hard-pure disciplines (e.g., Physics and Chemistry), knowledge is cumulative, atomistic, value-free, and concerned with universals. Hard-pure disciplines have rigorous criteria for the verification of knowledge. In contrast, in soft-pure disciplines (e.g., Humanities and Social Sciences), knowledge is value-laden and reiterative, the emphasis is on a more holistic perspective, there are no universally agreed-upon standards for knowledge verification, and there is no consensus regarding fundamental research questions. Unlike pure disciplines, applied disciplines are more concerned with the application of knowledge to solve real-world

problems. In this regard, hard-applied disciplines (e.g., Engineering and Computer Science) emphasize practical knowledge and the contextual aspect of research and combine qualitative and quantitative forms of inquiry. While practical aspect is vital in soft-applied disciplines (e.g., Education) too, their main focus is on the enhancement of professional practice.

From a discourse perspective, Bernstein (1999) makes a distinction between hierarchical and horizontal knowledge structures. Hierarchical knowledge structures, as found in natural sciences, are oriented to objects, focus on concrete objective ‘truth’, emphasize empirical observation, and are concerned with the production of general theories or rebuttal of the existing ones. In contrast, horizontal knowledge structures, as found in the Humanities and Social Sciences, are oriented to users, focus on abstract ideas, and “[consist] of series of specialized languages with specialized modes of integration and criteria for the construction and circulation of texts” (p. 161). Within horizontal knowledge structures, Bernstein (1999) distinguishes strong grammars (e.g., Linguistics) that aim at relatively precise descriptions and empirical models from weak grammars (e.g., Literature) that emphasize perspectives and require contextualization. Bernstein’s (1999) distinction of hierarchical knowledge structures from horizontal knowledge structures with strong and weak grammars corresponds with Becher’s (1994) distinction between hard and soft disciplines, which are further differentiated by a focus on pure or applied knowledge. Maton (2010, 2014) has developed the idea of disciplinary knowledge structure further by adding a knower structure in Bernstein’s (1999) categorization. Maton’s (2010, 2014) legitimation code theory suggests that “for every knowledge structure there is also a knower structure; that is, fields are *knowledge-knower structures* (original emphasis)” (p.161). Based on this perspective, disciplines with hierarchical knowledge structure (e.g., Physics) are knowledge codes with horizontal knower structure (i.e., primacy of knowledge), while those with horizontal knowledge structure (e.g., Humanities) are knower codes with hierarchical knower structure

(i.e., primacy of knower). Such a classification of disciplines into different categories (Becher, 1994; Becher & Trowler, 2001; Biglan, 1973) has inspired a significant amount of research on cross-disciplinary variations in recent decades (Gilbert, 2009; Gunn, 2014; Lau & Gardner 2019; Winstone & Boud, 2019; Yang & Carless 2013; Ylijoki 2000, 2001).

One strand of this research has examined disciplinary culture in general (Carberry & Baker, 2018; Gilbert, 2009; Ylijoki, 2000). For example, Ylijoki's (2000) anthropological study involving undergraduate students' ($N = 93$) across four disciplines at a Finnish university revealed that different disciplines had distinctly different moral orders, that is, "basic values, norms and aspirations" (p. 341). Sociology and Psychology emphasized intrinsic motivation, theoretical work, critical thinking, originality, open discussion, intellectual growth, long-term devotion, academic freedom, and alternative perspectives as virtues. On the other hand, following instruction, hurrying for graduation, and working for external rewards like a well-paid job were viewed negatively in the discipline. The students believed in the power of their discipline to change the plight of the marginalized and the oppressed. In contrast, the applied disciplines (i.e., Public Administration, Computer Science, and Library and Information Science) stressed rapid graduation, hard-expertise, practical knowledge, and employment. Another ethnographic study (Gilbert, 2009) at a Swiss technical university demonstrated nuanced differences in the apparently similar culture of Mechanical Engineering and Material Sciences. Although both departments had a strong sense of group life (e.g., gathering for lunch, Christmas party, and sports), such cultures were distinctly different. While group culture was formal, disciplined, homogeneous (all male), and uniform in Mechanical Engineering, it was informal, flexible, and diverse in Material Sciences owing to the traditionally male-dominated culture of Mechanical Engineering and the interdisciplinary nature of Material Sciences.

A second strand of research has explored the influence of disciplinary culture on research, especially in the context of neoliberalization of higher education. For example, Ylijoki, Lyytinen, & Marttila's (2011) mixed-methods study involving 255 academics from four disciplines (Humanities, Natural Sciences, Social Sciences, and Technology) at four Finnish universities revealed that the impact of neoliberalism in the form of market-driven research was more profound on Technology and Natural Sciences than on the Humanities and Social Sciences. Further research found that neoliberalism has not had the same impact on research in all disciplines because disciplinary groups did not operate in a single homogeneous market (Hakala & Ylijoki, 2001; Ylijoki et al., 2011). Instead, disciplinary research catered to multiple markets: Technology research fed to the corporate market; Natural Science and History research served the academic market; Medicine and Social Sciences research contributed to the policy and professional market, and Humanities and Social Science research addressed the need of the public and civic market (Hakala & Ylijoki, 2001; Ylijoki et al., 2011).

Further research has examined disciplinary variations in various aspects such as perceptions of students' success (Gardner, 2009) and originality (Barlösius, 2019). For instance, in Gardner's study (2009), PhD supervisors from high-completion (i.e., Communication, Oceanography, Psychology, English) and low-completion (i.e., Computer Science, Engineering, and Mathematics) disciplines tended to characterize students' success in doctoral study differently. In high-completion disciplines, success was conceived in more tangible terms (e.g., self-direction and publication), emphasis was placed on students' well-being, and faculties spoke highly and warmly of their students. In contrast, in low-completion disciplines, the supervisors characterized success in intangible terms (e.g., intelligence and hard work), tended to talk about their own problems, and did not think highly of their students. Interestingly though, seeking and providing support as a measure of success was

mentioned only by Oceanography supervisors. A recent study (Barlosius, 2019) examined the concept of scientific originality in 101 proposals submitted to Volkswagen's 'Experiment!' project, calling radically new and unorthodox ideas, identified three modes of originality argued in the proposals: (1) temporal (first of its kind or following a new approach), (2) partly different from what is customary (divergent from traditional ways), and (3) revolutionary (i.e., leading to a fundamental change or paradigm shift). The applicants "were more oriented to their field's own concepts of scientific originality than to the explicit stipulations in the calls for research proposals" (931). Therefore, the author argued that a fair assessment of originality would require this recognition of disciplinary variations in the concept of originality.

Disciplinary variations have also been explored in assessment culture (Yeo & Boman, 2019; Ylonen et al, 2018) and student's learning styles (Lau & Gardner, 2019). In this regard, Ylonen et al. (2018) found that hard disciplines like Physics and Chemistry with objective criteria for accuracy of information focused on smaller tasks in laboratory work and showed higher dispersions of marks. In contrast, soft disciplines like Arts and the Humanities assessed students on written tasks (usually long essays) and marks tended to cluster around the average, with students rarely receiving very high and low marks. A recent study by Yeo and Boman (2019) drawing on interviews with 27 faculty members at a Canadian university also observed disciplinary differences in assessment culture. While hard-pure disciplines relied on objective and quantifiable measures of assessment, soft-pure disciplines focused on creativity, thinking, and writing by means of tasks like reader responses, reflections, papers, and written projects. Likewise, while hard-applied disciplines placed a premium on practical problem solving that led to objectively accurate outcomes, soft-applied disciplines focused on the application of theory in practice, exploited cultural norms of communities in designing assessment tasks, and used methods like practicum, internship, clinical practices, story

writing, case studies, lesson planning, journal writing, reflections, and online discussion forums to assess students. Given the influence of disciplinary culture on various aspects of academia, it is not surprising that students in different disciplines vary in their learning styles. In this regard, Lau and Gardner's (2019) mixed-methods study at a Hong Kong University found that unlike their counterparts in hard-pure, hard-applied, and soft-applied disciplines, students from soft-pure disciplines were inclined to learn independently in solitary activities rather than working in groups because they considered collaborative work to be less fair to dedicated students. Students in soft-applied disciplines demonstrated commitment to independent learning, whereas their counterparts in hard-applied disciplines preferred a more receptive approach, though they considered independent learning to be relevant.

Understandably, distinct epistemological and ontological practices of disciplinary knowledge-making have their own legitimate rhetorical and discourse practices that reflect their epistemic (knowledge) and social (knower) relations (Hu, 2018; K. Hyland, 2005; Maton, 2014). In this regard, corpus-based studies examining disciplinary variations in (sections of) research articles across disciplines revealed that hedges, boosters, and reader pronouns were more frequent in soft sciences, whereas directives were prevalent in hard sciences (Cao & Hu, 2014; Hu & Cao, 2015; K. Hyland, 2005, 2008). These findings were attributed to the fact that "the soft-knowledge fields are typically more interpretative and less abstract than the hard sciences and their forms of argument rely more on a dialogic engagement and more explicit recognition of alternative voices" (K. Hyland, 2008, p. 15). Besides, the use of such attitudinal markers in soft disciplines reflected writers' "increasing commitment to their knowledge claims, asserting their authority, and positioning themselves as privileged knowers in their disciplinary communities" (Hu & Cao, 2015, p. 20). In contrast, directives frequently used in hard sciences (e.g., psychology) helped authors formulate an argument in a highly standardized manner (K. Hyland, 2008) and evidenced

“procedural adequacy and methodological rigor” (Hu & Cao, 2015, p. 20) in line with empirical authority valued in knowledge codes. Similar corpus-based study by Cao and Hu (2014) found a significant “cross-disciplinary differences in the use of exemplifiers, comparative transitions, linear references, and integral citations” (p. 15) in line with Maton’s (2014) knowledge-knower structure. While the disciplines with hierarchical knowledge and horizontal knower structure (e.g., psychology) used more exemplifiers to facilitate readers’ understanding of general and abstract knowledge, the disciplines with hierarchical knower and horizontal knowledge structure (e.g. applied linguistics and education) employed more comparative transitions (e.g., *however*, *but*), integral citations, linear references, and direct quotations to “foreground individual interpretations, alternative perspectives, and human agency in knowledge construction” (p. 28); build stronger social relations; and “guide the reader through the knowledge constructing process” (p. 29). Consistent with the findings obtained from the analysis of research articles, corpus-based studies involving students’ writing also found rhetorical variations across disciplines. To take examples, writing in soft disciplines (i.e., Philosophy, Education, Economics, and English studies) was highly involved academic narrative with frequent use of stance verb (e.g., *believe*), personal pronouns, hedges, boosters, active sentences, and past tense (Hardy & Römer, 2013; Lancaster, 2016), while that in physical sciences was descriptive and informational; and contained frequent use of nominalization and adjectives, passive structures, and present tense (Hardy & Römer, 2013).

Given distinct differences across disciplines, it is crucial to socialize students into their respective disciplinary culture if they are to become successful members of their community (Gunn, 2014). Such socialization is exactly the role the supervisory feedback.

2.5.1 Socializing students into disciplinary culture and discourse

Disciplinary socialization of newcomers is one of the aims of disciplines, and such socialization mostly takes place with language use (Becher & Trowler, 2001). According to (K. Hyland, 2013), “the ability to construct disciplinary arguments is at the heart of conceptual understanding of a field and this means that students must learn to craft their writing in community-specific ways” (p. 241). Some scholars call it academic discourse socialization, the process “by which newcomers and those they interact with learn to participate in various kinds of academic discourse in their communities and other social networks” (Kobayashi, Zappa-Hollman, & Duff, 2017, p. 239). Such socialization is necessary for students to both communicate their knowledge and gain membership in their disciplinary community (K. Hyland, 2009). Students may find it frustrating and feel alienated if feedback does not help them to understand the socio-cultural aspects (e.g., assessment criteria) of their disciplines (MacKay et al., 2019). It is essential for students to feel inducted into their discipline and understand disciplinary norms and values. Without such a shared understanding, students might want to “appropriate proxies rather than disciplinary ways of thinking and being” (Gunn, 2014, p. 75). As Pitt (2019) points out, “it is a real challenge for students to understand and be able to distinguish what quality looks like in their discipline” (p. 133).

In this regard, Gunn (2014) suggests ‘mimetic desires’ (internalizing the desires of valued others) as a model for disciplinary socialization. Disciplines make socialization possible by creating intersubjective spaces (i.e., shared understanding) between experienced and novice members. For example, if academic staff can present themselves as a credible and admirable model for their students and provide enough opportunity for interaction, students might want to appropriate their enthusiasm for becoming a valued member of their discipline. In contrast, if there are limited interaction opportunities, little trust in academics’ capabilities,

and low perceptions of the discipline, there may be intersubjective conflicts and misunderstandings, which, in turn, can limit students' engagement and lower the chances of disciplinary learning. Academics' affective and epistemological support can enhance intersubjectivity and, consequently, increase the chances of disciplinary socialization. Equally important for intersubjectivity is students' self-regulation because those who better regulate themselves can receive better cognitive support for deep learning (Skinner & Pitzer, 2012; Winstone & Boud, 2019; Winstone & Carless, 2020; Yang & Carless, 2013).

2.5.2 Disciplinary variation in (supervisory) feedback

Disciplines may have varying needs, preferences, and feedback cultures (Esterhazy, 2019; McKay et al., 2019; Winstone & Boud, 2019; Winstone & Carless, 2020; Yang & Carless, 2013). However, research on disciplinary variation in feedback (e.g., K. Hyland 2013) in general and supervisory feedback in particular is still at an embryonic stage. A small body of literature has focused on course work feedback. For example, K. Hyland's (2013) exploratory study involving 20 undergraduate tutors in four broader disciplines (Business, Science, Engineering, and Arts) at a research-intensive Hong Kong university revealed variations in feedback practices across disciplines. By way of illustration, tutors in soft disciplines (i.e., English, History, and Economics) commented on students' assignments through writing, consultation meetings, and peer feedback activities. They considered writing to be a multi-layered aspect of disciplinary learning, although they admitted that they did not have enough time to help students hone their disciplinary discourse through feedback. In contrast, tutors in hard disciplines (i.e., Engineering, Biology, and Chemistry) rarely focused on disciplinary writing because they viewed that assignments were primarily for learning content. While they considered succinct and logical writing as important, they did not consider themselves responsible for developing students' disciplinary literacy. Overall, the tutors across

disciplines seemed to consider academic literacy as a naturalized, self-evident, non-contestable, and common-sense knowledge, and failed “to provide the kind of support that students need to acquire these rhetorical understandings” (p. 251).

Van Heerden et al.’s (2017) study, drawing on legitimation code theory, conceptualized appropriate tutor feedback in English Studies (knower code) and Law (knowledge code). From the perspective of legitimate code theory, English Studies aims to develop students as knowers “who can legitimately produce knowledge in the field” (p. 972). Therefore, students’ academic socialization in English Studies takes time and a sustained academic-student relationship because it is concerned with the acquisition of tacit knowledge, which can rarely be “explicitly formulated and relayed through pedagogy” (973). The socialization process may be interrupted if feedback focuses on “on grammar over students’ critical response to a text” (p. 973). In contrast, Law, characterized by a knowledge code, places an emphasis on “grasping and using particular forms of procedural or technical knowledge, downplaying the development of personal aptitudes or characteristics of knowers” (p. 972). Unlike English Studies, Law values trained gaze (i.e., mastering and applying accepted principles and procedures of legal reasoning), which also takes time to develop. However, “as the procedures and principles may be codified in relatively explicit ways, it is potentially more open to learning” (973). Therefore, unlike in English studies, feedback in Law “could rather focus students on using concise, grammatically correct sentences as being essential to realizing clarity of meaning and attention to detail, both important aspects of working in the legal field” (p. 974).

However, there is minimal research on how supervisory feedback varies across disciplines. A very limited body of exiting research has explored students’ narrative constructions of thesis writing experience (Ylijoki, 2001) and foci of feedback comments (e.g., Basturkmen et al., 2014). Ylijoki’s (2001) narrative analysis of interviews with 72

thesis writing students from four disciplinary groupings (Sociology and Psychology, Computer Science, Public Administration, and Library and Information Science) at a Finnish university identified four prominent narratives about thesis writing: heroic, tragic, business-like, and penal. The students with a heroic narrative considered thesis writing to be something mythical, were ambitious and highly dedicated to their research, wanted to produce the best thesis, mostly worked on their own like a real researcher, and consulted supervisors to get their perspectives rather than guidance. Although they took a long time and struggled during the process with many depressing moments, they sustained the process and felt victorious in producing much-cherished work. At the opposite end, the students holding a tragic story also considered thesis writing mythical work and had a high ambition for producing an excellent piece of work. However, unlike students with heroic narratives, these students felt unprepared for the much demanding task, could not overcome the challenges on their own, and did not dare to seek support from their supervisors for fear of exposing their limitations. As a result, they regrettably gave up their project. For the third category of students with business-like narratives, thesis writing was like other requirements. They worked in a planned manner, sought help from supervisors and other people when necessary, and completed it on time with a sense of accomplishment. In contrast, penal narratives were associated with students who never viewed thesis writing a worthwhile endeavour. Instead they perceived it as an unrealistic requirement just for creating a hurdle not to allow them to graduate smoothly, likened their supervisors to prison-guards (interested in maintaining the lofty standards without supporting the students to meet them), and worked for completing their thesis in the quickest and easiest possible manner to get out of the torture house. They had little concern for the quality of their thesis or grades whatsoever. The study showed that a master's thesis meant quite different things to different students, and the narratives they lived by made all the

difference. Although four disciplines were involved, the study did not link the narratives to particular disciplines.

Two studies (Basturkmen et al., 2014; Bitchener et al., 2010) that examined supervisory feedback across disciplines found little disciplinary variation because the supervisors across disciplines tended to focus on the same aspects. It is worth noting that both these studies involved a modest sample. Besides, examining disciplinary variations in in-text feedback only gives an incomplete picture as students receive a great deal of oral feedback from their supervisors as well as other research committee members throughout the process of their research. A recent online survey (Winstone & Boud, 2019) involving academic and support staff ($N = 688$) at UK and Australian universities observed a significant disciplinary effect on the role of formal learning and development in feedback practices. Interestingly, the study revealed that informal learning had more influence on feedback practices than formal learning.

Although supervisory feedback plays a crucial role in socializing students into discipline-specific discourse culture (K. Hyland, 2013; Kobayashi et al., 2017; Kumar & Strake, 2011; Wang & Li, 2011) and familiarize them with legitimate ways of writing and meaning making in their discipline (Van Heerden et al., 2017), in many instances, research on feedback does not “fully consider the concerns of the disciplines in terms of who they want their students to become, what they want their students to know or how they want their students to construct knowledge” (Van Heerden, Clarence, & Bharuthram, 2017, p. 968). Instead, the extant research produced general claims, which might be useful for some disciplines but not for others (van Heerden et al., 2017). As van Heerden et al. (2017) claim, experienced members of a discipline tend to take disciplinary requirements for granted and ignore the challenges faced by novice researchers to navigate those requirements. Therefore, more focused research within disciplines could add to our understanding of supervisory and

feedback, provide input to enhance students' disciplinary socialization, and inform policy in graduate research and education (Becher, 1994; McKay et al., 2019). This study is an attempt towards this end.

2.6 Research gaps

2.6.1 Methodological gaps

The review of research reveals that most of the studies employed a case study approach (e.g., Adamson et al., 2019; Dysthe et al., 2006; Ginn, 2014; Han & Hyland, 2019; Kumar & Stracke, 2007, 2011; Morton et al., 2014; Stracke & Kumar, 2010; Strauss, 2012; Xu, 2017; Zheng et al., 2019). While case studies are well suited for an in-depth understanding of supervisory feedback, we need large-scale studies to get a broader picture. Some studies have drawn a more substantial sample but involved only students (e.g., Anderson et al., 2008; Can & Walker, 2011; de Kleijn et al., 2012, 2013, 2014) or supervisors (e.g., Anderson et al., 2006; Filippou, 2020). Notwithstanding their contribution to our understanding of supervisory feedback, such studies present a partial picture of the feedback process. Therefore, it is essential to examine supervisory feedback from multiple perspectives by conducting large scale mixed-methods studies. This study is an attempt towards this end.

2.6.2 Contextual gaps

Supervisory feedback is largely mediated by the context in which it takes place. However, the existing research is concentrated in the west: the UK (e.g., Anderson et al., 2006, 2008; Cooper, 2019; Cornelius & Nicol, 2016; Ginn, 2014; S. Nicol & Cornelius, 2018; Pilcher, 2011), Canada (e.g., Amundsen & McAlpine, 2011), the Netherlands (e.g., de Kleijn et al., 2012, 2013, 2014, 2016; Dysthe et al., 2006), Norway (e.g., Vattøy & Smith, 2019), Finland (e.g., Filippou, 2020; Filippou et al., 2017; Vehviläinen, 2009; Vehviläinen & Löfström,

2016), France (e.g., Wagener, 2018), New Zealand (e.g., Basturkmen et al., 2014; Bitchener et al., 2010; Bitchener & Basturkmen, 2006; East et al., 2012; Xu, 2017), and Australia (e.g., Kumar & Stracke, 2007). In the east, some research has been conducted in Hong Kong (e.g., Han & Hyland, 2019; Yang & Carless, 2013), Macau (Yu et al., 2018; Zheng et al., 2019), Mainland China (e.g., Hu et al., 2016; Lei & Hu, 2019), and Japan (Adamson et al., 2019). The findings obtained from these highly developed contexts might not be extrapolated to an underdeveloped and resource-poor context like that of Nepal. This points to a clear need for research in the Nepalese context.

2.6.3 Theoretical gaps

From a theoretical perspective, previous studies (e.g., Anderson et al., 2006, 2008; Basturkmen et al., 2014; Bitchener et al., 2010; Bitchener & Basturkmen, 2006; Davis & Dargusch, 2015; Dysthe et al., 2006; East et al., 2012; Filippou, 2020; Morton et al., 2014; Vehviläinen, 2009; Vehviläinen & Löfström, 2016; Xu, 2017) mostly drew on sociocultural theory (Vygotsky, 1978). Sociocultural theory has gained increasing prominence in learning because of its focus on “the interdependence of social and individual processes in the construction of knowledge” (John-Steiner & Mahn, 1996, p. 191). However, cultural-historical activity theory, which is an extension of socio-cultural theory, is more suitable to examine supervisory feedback because it offers a more systematic perspective by paying close attention to multiple perspectives and historically accumulated contradictions (Engeström; 2001, 2009, 2015; Haneda, 2008; Kang & Pyun, 2013). Therefore, the insights obtained from such a broader perspective can pave the way for improving supervisory practices and creating a conducive learning environment.

2.7 Summary

This chapter has reviewed the literature relevant to key variables to be examined in the present study. The review has been instrumental to contextualizing the research, examining the key issues, identifying research gaps to advance the frontiers of knowledge. The next chapter describes the theoretical framework that informs this study and conceptualizes supervisory feedback from an activity theoretical perspective.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 Chapter overview

This chapter introduces cultural-historical activity theory employed as a theoretical framework in the present study. The chapter is divided into six sections. The first three sections provide a brief introduction to cultural-historical activity theory, describe its key components, and delineate contradictions inherent in an activity system. The remaining sections review previous studies drawing on cultural-historical activity theory, conceptualize supervisory feedback from an activity theoretical perspective, and present the rationale for using cultural-historical activity theory as the theoretical framework for this study.

3.2 An activity theoretical perspective on supervisory feedback

Cultural-historical activity theory, developed by Engeström (1987, 2015) and based on Vygotsky (1978) and Leont'ev (1981), informs this study on supervisory feedback. Cultural-historical activity theory stresses the interconnection between social and individual processes in human learning and development (Haneda, 2008; Kang & Pyun, 2013). The theory has evolved into three generations (Engeström, 2001, 2009, 2015). The first-generation theory was represented by Vygotsky's triangular model of complex mediated acts that incorporated: (a) subject (i.e., an agentic individual or group), (b) mediating artefacts (i.e., physical or symbolic tools), and (c) object (i.e., the overarching goal) (see Figure 1). It emphasized the interconnection between human agency, cultural means and objectives of human activities. In the words of Engeström (2001), with such understanding, "[o]bjects became cultural entities and the object-orientedness of action became the key to understanding human psyche" (p. 134). The seminal model that connected human learning and understanding to sociocultural

context laid the foundation and provided the basis for all contemporary variants of cultural-historical activity theory (Lektorsky, 2009; Wertsch, 1981). However, despite its emphasis on socio-cultural aspects, the unit of analysis in Vygotsky’s model “remained individually focused” (Engeström, 2001, p. 134).

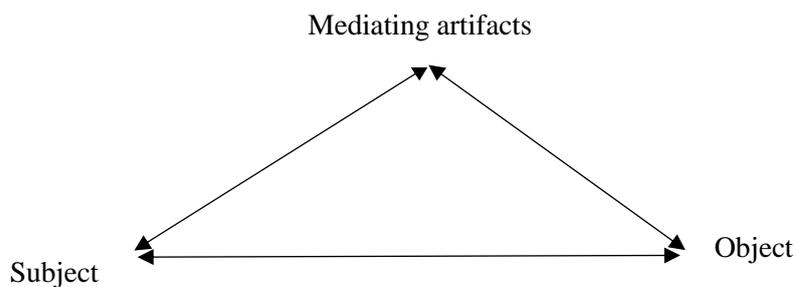


Figure 1. Common reformulation of Vygotsky’s mediated act (Engeström, 2001, p. 134)

In the second-generation theory, the unit of analysis shifted from an individual focus to a collective one when Leont’ev introduced the concept of division of labour (i.e., shared responsibility among members) into the human activity system (Engeström, 2015; Lektorsky, 2009; Leont’ev, 1981; Wertsch, 1981; Yamagata-Lynch, 2010). Besides, Leont’ev (1981) distinguished three levels of an activity system: (a) activities (energized by motives), (b) actions (subordinated to conscious goals), and (c) operations (subordinated to conditions under which a concrete goal is attained) (Engeström, 2015; Lektorsky, 2009; Leont’ev, 1981; Wertsch, 1981; Yamagata-Lynch, 2010).

An activity directed by its motive. Besides, a motive is the fundamental defining element of an activity because “there can be no activity without a motive” (Leont’ev, 1981, p. 59). From this perspective, a student with the motive of developing research and literacy skills from writing a thesis engages in a different activity from the one whose primary motive is to complete a thesis as a requirement for graduation. Goal-oriented actions are the basic components of human activities to translate activities into reality. According to (Leont’ev, 1981), “[t]he actions that constitute activity are energized by its motive but are directed

toward a goal” (p. 59). A series of goal-oriented actions are necessary to realize a motive. In the activity of thesis writing, supervisor-student consultation meetings, proposal defence, and thesis defence are a series of actions with specific objectives or goals. Condition-oriented operations particularly become apparent in using tools. What operations are required to achieve a goal depends on under what circumstances the action is performed. For example, a thesis writing student with access to a computer and the Internet will engage in different operations from the one who lacks such facilities for searching materials.

Leont’v (1981) stresses that these three levels constitute the same entity, not different ones. The relations between these different levels are flexible because “an action can become an activity, a goal can transform into a motive, a task can become an operation, and so on” (Lektorsky, 2009, p. 77) in the course of development. This level-specific approach “allows the investigator to examine a single segment from a variety of viewpoints” (Wertsch, 1981, p. 18) and observe their interrelationship.

However, Leont’ev did not provide a graphic model of a collective activity system (Engeström, 2001). It was Engeström (1987) who expanded the famous triangular model (i.e., consisting of subject, object, and mediating artifacts) by adding three more elements (i.e., rules, community, and division of labour) (See Figure 2).

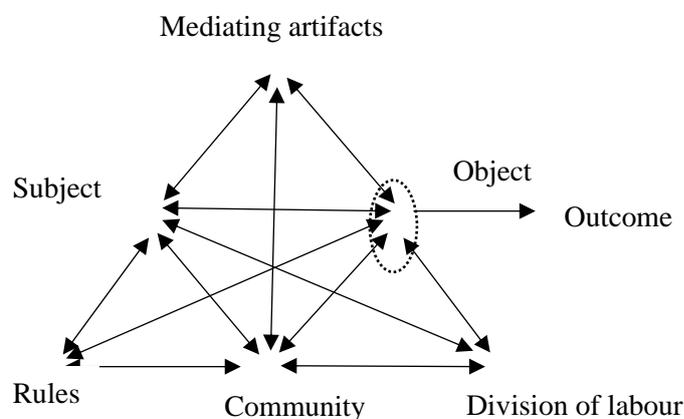


Figure 2. The structure of a human activity system (Engeström 2001, p. 135)

The expanded triangular model allows for an analysis of the fundamental elements of interaction as a systemic whole (Engestrom, 2009; Russell, 2009) and overcomes “the dualism in existing traditional theories based on subject-object, learner–knowledge, and individual–environment relations” (Sannino, Daniels, & Gutierrez, 2009, p. 13). In the figure, the circle surrounding the object indicates that “object-oriented actions are always, explicitly or implicitly, characterized by ambiguity, surprise, interpretation, sense-making, and potential for change” (Engeström, 2018, p. 15).

In its third-generation version, Engeström (2001, 2009, 2015) further extended cultural-historical activity theory to the analysis and understanding of interconnected human activity systems (Yamagata-Lynch, 2010). Figure 3 depicts the basic model of two interacting activity systems.

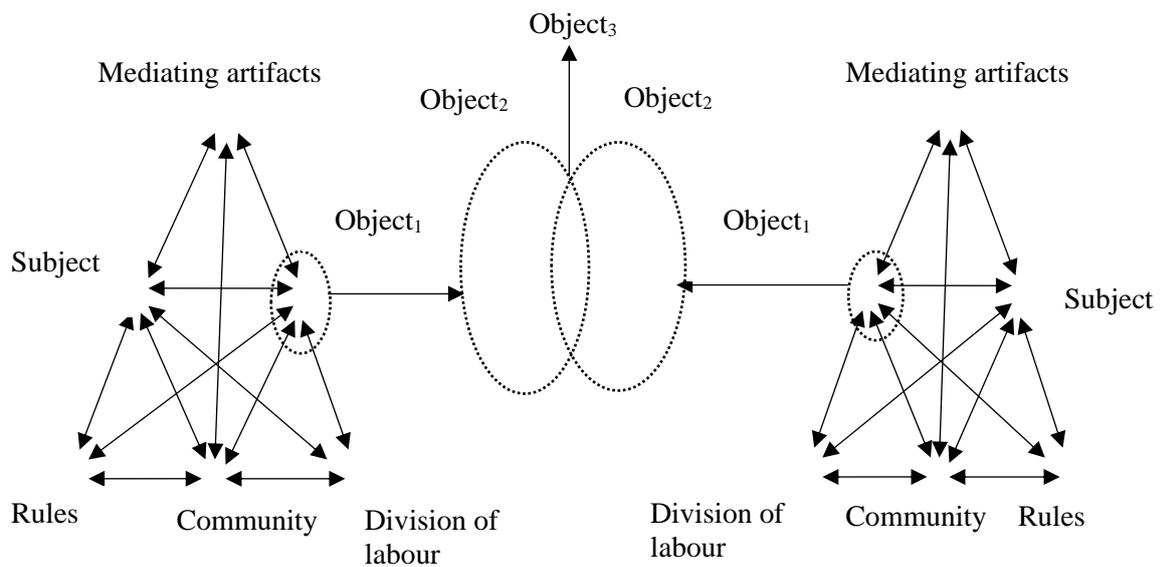


Figure 3. The interacting activity systems as a minimal model for the third generation of cultural-historical activity theory (Engeström, 2001, p. 136)

The latest model not only tackles multiple interconnected activity systems moving “away from analyses that are too person-focused” (Yamagata-Lynch, 2010) but also incorporates

issues of subjectivity such as identity and morality (Engeström, 2009, 2015). Individuals' actions within an activity system at a particular time are mediated by the artifacts that are available, the community which owns the activity, its rules, and the division of labour (Haneda, 2008).

3.3 Components of cultural-historical activity theory

As mentioned in the previous section, an activity system is composed of six elements: (a) subject, (b) mediating artifacts, (c) object, (d) rules, (e) community, and (f) the division of labour (Davydov, 1999; Engestrom, 1987, 1999, 2015). According to Roth and Lee (2007), “[a]ll of these theoretical units must be understood as threads that make a strand or fibre” (p. 199). This section provides a brief description of each of the components in the context of thesis writing and supervisory feedback.

3.3.1 Subject

The subject is a participant in an activity system, in which “the subject’s agency, his or her ability to change the world and his or her own behaviour, becomes a central focus” (Engeström, 2014, p. 77). Supervisors and students are the subjects of the supervisory feedback and thesis writing activities. They have different positions, plans, and responsibilities specified in the activity (Lektorsky, 2009). If the activities are to function well, they are expected to engage in intelligent analysis and mastery of situated supervisory activity and understand inherent contradictions therein: such as a supervisor’s responsibility to support and evaluate students’ work and a student’s responsibility to learn and demonstrate research skills at the same time (Engeström, 2015). Therefore, they need to exercise their agency to negotiate and develop intersubjectivity, “a shared understanding or shared focused attention” (Chizhik & Chizhik, 2018, p. 70) for achieving the intended outcomes. To quote

Gunn (2014), “intersubjectivity is defined as the links made between two or more subjectivities through interaction” (p. 70). It is a mutual inner understanding rather than an outer form of communication. Supervisors and students may be motivated and feel responsible to take agency when they feel that they have control over their activity; such sense of control make them emotionally prepared to accomplish the object, whereas a loss of control may result in the avoidance of agency (Roth, 2009).

3.3.2 Object/motive

The object/motive is the purpose or function of an activity system. In other words, it refers to ‘raw material’ or ‘problem space’ for an activity system (Taylor, 2009). Underscoring the central role of the object/motive, Leont’ev (1981) argues that “[t]here can be no activity without a motive. ‘Unmotivated’ activity is not activity devoid of motive; it is an activity with a motive that is subjectively and objectively concealed” (Leont’ev, 1981, p. 59). The object of supervisory feedback as an activity system is the completion of a defensible thesis; it connects different actions related to thesis writing, provides motives, generates foci of attention, and gives continuity, coherence, and meaning to supervisory feedback (Engestrom, 1999, 2000, 2009, 2014; Leont’ev, 1981; Sannino et al., 2016; Yamagata-Lynch; 2010; Yu & Lee, 2015). The completion of a thesis is the underlying reason underpinning supervisory feedback; it directs and regulates the respective supervisor and student and establishes the relation between them (Lektrosky, 1999).

The object of an activity has a double existence: as a material entity in the world (such as a completed thesis), and as a vision (i.e., a present or future mental image) (Roth & Lee, 2007). In this sense, the subject and object are so closely interrelated that “learning is equivalent to the mutual change of object and subject in the process of activity” (Roth & Lee, 2007, p. 198). The object “need[s] to be understood as simultaneously given, socially

constructed, contested, and emergent” (Blackler & Gutierrez, 2009, p. 27) because it is shaped by historical practices and is “responsive to changes in material and conceptual tools, shifts in the division of labour, and so on” (Edwards, 2009, p. 198). Such a contested and emergent nature of object is evident in thesis writing because the target keeps on moving in the process as the learning progresses.

3.3.3 Mediation

In his seminal work *Mind in society*, Vygotsky (1978) emphasized the role of mediating artifacts in human learning. He identified “tools as a means of labour, of mastering nature, and language as a means of social intercourse” (pp. 53–54). In other words, tools help human beings gain control of the outer environment, whereas signs (i.e., language) enables them to regulate others and oneself (Vygotsky, 1978; Wertsch, 1981). Human-made things, more capable social others, and communication are fundamental to the very existence of an activity system (Lei & Hu, 2019; Lektorsky, 2009; Yamagata-Lynch, 2010). In his recent publication, Engeström (2018) considers material tools, signs, and symbols as prime mediators, whereas rules, community, and division of labour as the less visible social mediators. This section provides a brief description of each type of mediator.

Tools/mediating artifacts. Subjects use tools or mediating artifacts to attain their object by regulating themselves or their environment and such tools “embody the accumulated history of human ingenuity and creativity” (Roth & Lee, 2007, p. 199). In using tools and artifacts, “humans’ activity assimilates the experience of humankind” (Leont’ev, 1981, p. 56). The subject’s access to these resources is of crucial importance because “[t]he different means (tools, instruments) mediate the productive activity in alternate ways, leading, not surprisingly, to dissimilar outcomes” (Roth & Lee, 2007, p. 194). In the activity of thesis writing, although a final thesis, to a large extent, shows the student’s effort, the availability

and deployment of resources such as books, research articles, academic writing support, lab resources, and funding significantly determine the choices that students and supervisors can make, thereby affecting the quality of the final product (Gruba & Zobel, 2017; 2017; Pyhältö, Vekkaila, & Keskinen, 2015).

Community. An activity system is social in all its components as it always takes place in a community governed by its rules. Community refers to “the simplest social unit that has the characteristics of a social learning system” (Wenger, 1998, p. 5) which “the subject belongs to while engaged in an activity” (Yamagata-Lynch, 2010, p. 2). There is a two-way relationship between the subject and the community, each constituting the other. The subject’s relation to the object of the activity is mediated by his/her relation with people in the community (Engeström, 2015). In the activity of thesis writing, “[b]oth supervisors and students are part of a network of colleagues, management, and rules, and both have private life and professional commitments to consider” (Wichmann-Hansen, Bach, Eika, & Mulvany, 2012, p. 57). This community is characterized by mutual engagement, shared responsibility among participants, and a shared repertoire of resources. These participants relate to each other in terms of a shared object (Taylor, 2009) that is the completion of a defensible thesis. Thesis writing and supervisory feedback have their own mechanism to determine “what it is to be a competent participant, an outsider, or somewhere in between” (Wegner, 1998. p. 137).

A competent thesis writing student is expected to have certain qualities. As Wisker et al. (2003) note:

It is important that students are clearly aware of requirements, dates, rules, but it is also essential for their work as largely independent learners that they are fully involved, creative partners, in the inception, clarification, development, progression of the research and then the interpretation of data. (p. 390)

In the same way, a supervisor should be skilful to provide quality supervisory feedback

According to Vilkinas (2002), a competent supervisor:

needs to be a person who has vision (who can see the wood for the trees so to speak); is creative in the supervisory process; has the ability to acquire the necessary resources; is able to motivate the student to produce; can direct the work of students; can check on and coordinate the various activities that need to be undertaken in the research journey; monitors the student's progress; can nurture, create capabilities; and is able to foster growth of individuals. Perhaps most importantly a good supervisor knows when to do these things and can move comfortably between these functions and has the skills, knowledge and abilities to perform them. (p. 136)

There is some sort of authority that holds the community together (Taylor, 2009). Cultural-historical activity theory views authority from a historical perspective as manifested in terms of coordination, cooperation, and reflective communication (Engestrom, 2009). In the case of thesis writing and supervisory feedback, such authority can be observed at different levels: university, university research ethics committee, respective departments, and the departmental research committee. The subject gains “authority and agency by being recognized by a community and by receiving support from a community” (Engestrom, 2009, p. 317).

Division of labour. Human activity is collective by its very nature, “always takes place within a community governed by a certain division of labour” (Engeström, 2015, p. 114), and “is divided into separate actions, each of which is assumed by a particular individual in coordination with the others” (Tolman, 1999, p. 72). In this sense, the division of labour refers to the division of tasks among community members (Lei & Hu, 2019; Yamagata-Lynch, 2010). It creates different positions and responsibilities for the participants (Engeström, 2018, p. 16). Such a shared obligation implies that no single individual has total

control over the activity. Each component of an activity system (i.e., subject, object, mediating artifacts, rules, community, and division of labour) will have three levels: overall activity, actions, and operations with the societal, organizational, and interpersonal division of labour respectively (Engeström, 2015). As described in the previous section, thesis writing is an overall activity, which includes actions in the form of proposal defence, fieldwork, experiment and thesis defence. There can be multiple operations at different stages of actions. From a societal perspective, thesis writing is a larger activity of wider academic significance “forming ever more complex networks and hierarchies of interaction” (Engeström, 2015, p. 124). Like all other societal activities, thesis writing is affected by the socioeconomic status of the society because it determines the extent of resource access (both human and material) for institutions of higher education. At the organizational level, it is evident that well-resourced universities can ensure better quality of graduate research. Besides, thesis writing is “continuously constructed and reconstructed by its [participants]” (Engeström, 2015, p. 127) in actions such as proposal defence and thesis defence. Supervisors and students engage in different operations to complete the process. For example, a thesis-writing student is expected to familiarize himself or herself with the dissertation guidelines, select a suitable research topic with the help of supervisor, meet supervisor and submit work on regular basis for feedback (Biggam, 2017). In addition, students are expected to demonstrate the ability to engage in a critical appraisal of extant research on the topic, implement well-designed and informed methodology, present and interpret results thoroughly, draw appropriate conclusions, suggest implications based on findings, report research in a well-articulated and coherent manner, and contribute to existing body of knowledge (Paltridge & Starfield, 2019). Supervisors are responsible for advising students on the selection of a researchable topic, formulation of research questions and objectives, and designing of methodology; guiding students to produce standard work; providing constructive feedback on students’ work-in-

progress on a regular basis, and treating students fairly (Biggam, 2017). However, such expectations may not be well articulated and remain “as invisible or unclear and frequently existed as taken-for-granted practices” (McAlpine & Amundsen, 2011), hence giving rise to contradictions.

Rules. Rules constitute essential resources for situated actions. Given its collective nature and social significance, human activity is governed by specific rules that constitute a historically accumulated repertoire of procedures, contracts, processes, policies, norms, and conventions that determine the appropriateness of actions and interactions in an activity system (Engeström, 2015; Lei & Hu, 2019; Wenger, 1998). The existence of rules does not mean that the individuals will accept them as a way of life because “[r]ules, explicitly enforced, are an instance of the overt exercise of authority and tend to be resented” (Taylor, 2009, p. 235). However, it should be noted that although individuals are free to set their own goals, pursue their own interest, and, at times, may obviate shared norms and rules, “they cannot have norms and rules of activity that are only theirs” (Lektorsky, 2009, p. 79). As Biggam (2017) notes, thesis writing has its own formal as well as informal *rules of the game*. Formal rules include the maximum length and format (e.g., line spacing, font type and size, style of referencing, structure, etc.), formal submission cut-off date, disciplinary knowledge making practices, major areas to be covered in a dissertation, evaluation scheme, and supervisor and student responsibilities. In some cases, formal rules are articulated in graduate handbooks, while in other cases there might be “lack of guidance and clarity” (Amundsen & McAlpine, 2011, p. 38). Informal rules refer to unwritten processes and procedures that supervisors and students are expected to observe during the thesis-writing journey. For example, students are expected to “[e]ngage in meaningful discussion, seek clarification, probe perceived wisdom, [and] meet [their] deadlines” (Biggam, 2017, p. 18). Irrespective of whether rules are explicit or tacit, the participants should play by the rules to negotiate their identity.

3.4 Contradictions

Contradictions are of special significance in cultural-historical activity theory. Contradictions refer to “historically accumulating structural tensions within and between activity systems” (Engeström, 2001, p. 137). Unlike formal logic, which states that two contradictory statements cannot be true at the same time, cultural-historical activity theory views contradictions dialectically as being unified in an activity system (Engeström & Sannino, 2011). For example, an activity is simultaneously individual and collective, and its object always has a use value and an exchange value. Leont’ev (1981) gives an example of such a contradiction:

The doctor who buys a practice in some little provincial place may be very seriously trying to reduce his fellow citizens’ suffering from illness and may see his calling in just that. He must, however, want the number of the sick to increase, because his life and practical opportunity to follow his calling depend on that (p. 254; as cited in Engeström, 2015, pp. xxix-xxx).

Similar situations can be observed in thesis writing: a student may want to take time to learn and develop academic writing and research skills. However, he or she must complete the work within stipulated time. Such dialectical units, which cannot be reduced to each other, “harbor inner contradictions, which come with the coexistence of mutually exclusive elements” (Roth & Lee, 2007, p. 203) and “need to be creatively and often painfully resolved by working out a qualitatively new ‘thirdness’” (Engeström & Sannino, 2011, p. 371). In this regard, “the idea of ‘thirdness’ refers to the generation of novel mediating models, concepts and patterns of activity that go beyond and transcend the available opposing forces or options, pushing the system into a new phase of development” (Engeström & Sannino, 2011, p. 371). In the case of thesis supervision, contradictions can be observed in the need for supervisory direction and the goal of student independence, the norms for giving an equal

amount of time and varied competencies of students, and the importance of process and the focus on product (Vehviläinen & Löfström, 2016). Consequently, supervision becomes a burdensome activity for supervisors. The qualitative new ‘thirdness’, as suggested by Vehviläinen and Löfström (2016), could be the adoption of process-oriented dialogical supervision, where supervisors have realistic expectations, create local interventions that work well with their students, and engage in group processes in supervision.

Viewed from this perspective, contradictions can become the primary source of change and development (Engeström, 2001, 2015, 2018; Roth & Lee, 2007; Russell, 2009) because “new qualitative stages and forms of activity emerge as solutions to the contradictions of the preceding stage or form” (Engeström, 2018, p. 17). The analysis of inner contradictions might help “gain insights into how larger sociopolitical and economic struggles mediate local practices, subjectivities, and therefore learning among [students]” (Roth & Lee, 2007, p. 204). Unresolved contradictions, however, may give rise to unintended ways to circumvent the difficulty. For example, as Eco (2015) observes, if students are forced to write a thesis when they cannot manage sufficient time for this demanding task, they might pay for having their thesis written or submit someone else’s already approved thesis as their own.

Cultural-historical activity theory has identified four types of contradiction (i.e., primary, secondary, tertiary, and quaternary) depending on where they appear in an activity system. Primary and secondary contradictions are inner to the given activity system, whereas tertiary and quaternary contradictions move beyond the activity concerned (Li, 2013).

Primary contradictions may occur within any of the six elements of an activity system because of the duality of the exchange value and the use value (Engeström, 2015; Engeström & Sannino, 2010, 2011). Such contradictions are the result of the commodification of all spheres of human life. For example, there is a primary contradiction in the process or product

oriented-ness of thesis writing. Emphasizing the importance of the process, Eco (2015) compares thesis writing to cooking a pig where “nothing goes waste” (p. 221); however, students are always evaluated based on the product. The grade that a student obtains (i.e. exchange value) seems to have more value in the marketplace than the actual skills (i.e., use value) that the student develops in the process. Similarly, supervisors as subjects are caught in the duality of supporting and evaluating students (Anderson et al., 2006).

Secondary contradictions occur between two elements of an activity system such as between a new object and an old tool (Engeström, 2015; Engeström & Sannino, 2010; Roth & Lee, 2007). For example, students are expected to identify and validate a research gap to justify the research worthiness of their topic (object); however, they lack access to research in the field (tool). Contradictions between different elements might generate disturbances and conflicts. They can also be potential sources of innovation if taken seriously (Engeström, 2018).

Tertiary contradictions may appear “between a newly established mode of activity and remnants of the previous mode of activity” (Engeström & Sannino, 2010, p. 7). According to Roth and Lee (2007), “they exist between the object (motive) of the dominant and the object of a culturally more advanced form of the activity” (Roth & Lee, 2007, p. 203). In this view, such contradictions are the result of participants’ resistance to change or difficulty in adjusting to new requirements. In thesis writing, a tertiary contradiction may arise when publication of research becomes mandatory for graduation. Although the publication of research can be an effective motive for the third-party verification of research, supervisors and students habituated to the old motive might consider it unrealistic, find it difficult to adjust to the new system, and even challenge the motive.

Quaternary contradictions may occur between the newly recognized central activity and its neighbouring activity systems (Roth & Lee, 2007; Engeström & Sannino, 2010; Engeström, 2015). Such contradictions make it necessary to pay attention to neighbouring activities such as those that produce instruments (instrument-producing activities), subjects (subject-producing activities), and rules (rule-producing activities) (Engeström, 2015). Such contradictions are abundant in the thesis writing and supervisory feedback activities. For example, the activities that prepare supervisors and thesis writing students (subject-producing activities), in many cases, seem to be inadequate. As Amundsen and McAlpine (2011) notice, “[y]et as vital as supervision is to the individual academic and student, to the discipline and to the institution, most academics receive no formal or systematic preparation for this complex role” (Amundsen & McAlpine, 2011, p. 38). Students find it daunting because research writing that appears to be normal, universal, and objective for supervisors who have been seasoned members of research culture - by presenting papers at conferences, writing for publication, working as peer reviewers, and supervising students to take examples- is very new for students, who are rarely involved in such activities. Therefore, they struggle to figure out the approved ways of producing and reporting knowledge (Starke-Meyerring, 2011). Frequent contradictions are also observed between the thesis writing activity and the rule producing activity. For example, the maximum completion period for a master’s program in Nepal is five years. Because of this rule, quite a few students disappear after their course and reappear towards the end of the fifth year and want to complete their study within their remaining candidature. The situation is exacerbated when the Controller of Examination issues notices to clear residues of students who have left their thesis incomplete. For these students, thesis writing just becomes a ritual, as reflected in the description of such students’ thesis defence as ‘samuhik bratabandha’ (a Hindu ritual performed to mark the acceptance of a group of students by a guru) given by a professor in my study. In such cases, the graduation

motive becomes so dominant that the learning motive of thesis writing almost disappears; supervisors and research committee members might be compelled to accept theses that do not meet the required standard.

Two things are of crucial importance in examining contradictions. First, contradictions need to be examined in their structural and historical context because they are historically accumulated tensions. Second, they must be approached through their manifestations because they cannot be observed directly (Engeström & Sannino, 2011). Contradictions manifest in the forms of conflicts, critical conflicts, dilemmas, and double binds (Engeström, 2015). Engeström and Sannino (2011) have identified linguistic cues associated with these different manifestations of contradictions. *Conflicts* are expressed through resistance, disagreement, argument, and criticism in expressions like ‘no,’ ‘I disagree’ or ‘this is not true.’ *Critical conflicts* are individually unsolvable contradictory motives giving rise to inner doubts. They appear in emotionally and morally charged personal accounts usually containing metaphorical expressions (Engeström & Sannino, 2011). Vehviläinen and Löfström (2016) present a thesis evaluator’s account of a critical conflict arising from the lack of clarity in authorship and responsibility in a master’s thesis:

I am an external evaluator for a master’s thesis. There are weird things in the text. I check the original sources, which do not contain these oddities. The student has made them up. I report this to the professor in charge. The professor says that as this has passed the supervisor unnoticed, the supervisor has done a poor job. In my view, the student seems not-so-good since the references are wrong. I would like to lower the grade. In the professor’s view the supervisor has acted badly, and it is not the student’s fault. I’ve been told to evaluate the product. Whom am I assessing? What am I assessing? (p. 513)

The person might feel liberated and emancipated when such *critical conflicts* are resolved. *Dilemmas* are expressions of incompatible evaluations that are “usually expressed in the forms of hedges and hesitations, such as ‘on the one hand [...] on the other hand’ and ‘yes, but’” (Engeström & Sannino, 2011, p. 373). *Double binds* situations where individuals face equally unacceptable alternatives. *Double binds* manifest in the form of rhetorical questions, which reveal a pressing need and an impossibility to take an action at the same time. In Vehviläinen and Löfström’s (2016) study, supervisors felt that they were responsible for making students act/think/ behave academically. However, they lacked the means to fulfil the responsibility and tended to take supervision as a burden. They often used ‘How do I make...’ constructions (e.g., How do I make the students work harder?) to express the double binds they were facing.

An understanding of contradictions is a prerequisite for identifying innovative ways to improve supervisory feedback so that students can get most out of their thesis writing activity. Identification of contradictions provides the basis for negotiation, progress, and development. As mentioned in the previous sections, if such contradictions remain undetected and therefore unresolved, they lead to unintended outcomes such as plagiarism.

3.5 Studies drawing on cultural-historical activity theory

In this section, I will discuss some important studies that were informed by cultural-historical activity theory to illustrate its theoretical affordances and justify the adoption of the framework in the present study. Cultural-historical activity theory has been used extensively in health care research (Engestrom, 2000, 2001; Engeström & Sannino, 2010; Nummijoki, Engeström, & Sannino, 2017) and education (Chizhik & Chizhik, 2018; Engestrom, 2000; Roth & Lee, 2007; Roth, Lee, & Hsu, 2009; Sannino et al., 2016). A growing body of research in applied linguistics has also drawn on the theory in the areas of academic writing

(Bhowmik, 2012; Blin & Appel, 2011; Haneda, 2008; Kang & Pyun, 2013; X. Lei, 2008; Li, 2013; Zhu & Mitchell, 2012), doctoral students' scholarly publication (Lei & Hu, 2019), peer feedback (Yu, 2014; Yu & Lee, 2015), and teacher feedback (Lee, 2014). However, research on supervisory feedback within a similar framework has been virtually non-existent until recently. Some studies that are broadly relevant to thesis/academic writing have been reviewed below.

One line of the small body of existing research has focused on roles of motives in an activity system and the role of socio-cultural factors shaping the motives (Cummings, 2008). A study (Haneda, 2008) involving nine Japanese-as-a-foreign-language learners made an interesting observation that students' use of similar essay composing strategies was underpinned by different modes of engagement (i.e., motives). The research identified three different (but not mutually exclusive) modes of engagement with writing: a) to practice lexico-grammatical knowledge and learn new expressions, (b) to develop a general rather than language- and culture-specific rhetorical writing competence, and (c) to communicate with an educated and specialized audience in a culturally appropriate and acceptable manner. These modes of engagement were largely determined by the learners' language proficiency, their interaction with artifacts (i.e., reading materials), and future career goals (i.e., what they wanted to achieve with the language). Similar study by Kang and Pyun (2013) also revealed the influence of motives on two Korean EFL learners' use of process writing strategies and their subsequent writing product. Learners' motives, in turn, were shaped by their language proficiency, the nature of their motivation, and their sense of identity. The students engaged in artifact-mediation (e.g., dictionaries, computer), language-mediation (i.e., L1 and L2), self-mediation (i.e., self-monitoring and self-assessment), and other mediation (i.e., online communities and teacher). The more proficient and instrumentally motivated learners made

greater use of artifacts- and self-mediated strategies and produced better outcomes, whereas the less proficient ones with integrative motivation largely relied on teacher mediation.

Two recent studies (Yu, 2014; Yu & Lee, 2015) investigating group peer feedback also underscored the significance of motives in students' use of feedback strategies. In a study involving six Chinese EFL university students, Yu (2014) found that students' varied motives (i.e., learning from giving and receiving feedback, improving the quality of writing and learning, fixing errors in writing, and completing the peer-feedback task assigned by the teacher) greatly influenced their peer feedback strategies. Students' motives, in turn, depended on their "individual belief systems and different social, cultural and historical backgrounds" (p. 114). Yu and Lee's (2015) study also showed that students' motives, based on a myriad of individual, cultural, and historical factors, greatly influenced their group peer feedback activities.

Another line of research informed by cultural-historical activity theory has focused on contradictions and strategies used to resolve them. In this regard, Blin and Appel's study (2011) investigating a dynamic relationship between collaborative activity and individual actions in the computer-supported collaborative writing of distance learners noticed that the students' goal-oriented activities were restricted to coordination and cooperation only. They rarely engaged in reflective communication, a prerequisite for developing higher order thinking skills. The authors suggested that compliance with explicit as well implicit rules might have prevented them from taking meaningful autonomous steps to expand their learning opportunities (i.e., the contradiction between rules and object). Using cultural-historical activity theory as a theoretical lens, van Barneveld (2011) uncovered the contradictions that arose with the introduction of problem-based learning in undergraduate engineering education. The students faced difficulty in getting used to the new system, and their teachers struggled to maintain the balance between instruction and facilitation as well as

the breadth and depth of the curriculum. Over time, the teachers addressed the tensions by aligning activities to learners' level and optimizing instruction during the class time.

Three other studies have drawn on cultural-historical activity theory to examine contradictions and strategies adopted to resolve them in the context of source-based writing (Li, 2013), teacher feedback (Lee, 2014), and doctoral students' scholarly publication (Lei & Hu, 2019). Li's (2013) study of three female ESL students' source-based academic writing activity revealed primary contradictions within all the elements of the activity system and secondary contradictions between subject and tools (students' difficulty in grasping English medium literature), object and tools (selecting useful sources from many), and rules and objects (avoiding plagiarism and using source). The students borrowed and transformed the source materials as "efforts to resolve these source-bound cross-component tensions" (p. 79), though plagiarism-related tensions still prevailed in their writing. In a study investigating conventional feedback activity system in the Hong Kong context, Lee (2014) identified contradictions resulting from the policy requiring teachers' meticulous attention to errors (rule), parents and administrations valuing quantity of error correction (community), teachers' powerless identity as 'marking machines' preventing them from introducing any change, students' passivity (division of labour), and provision of timely feedback (object). These contradictions led to a 'no-win' outcome that frustrated teachers and discouraged students. The author made insightful suggestions for transforming the conventional activity system by reconceptualizing the object (to provide mediated learning experience), mediating artifacts (i.e., detailed, focused, and process-oriented feedback), rules (process-oriented writing instruction), division of labour (i.e., active students and autonomous teachers), and community (widened professional community). Very recently, Lei and Hu's (2019) multiple-case study exploring six Chinese nursing doctoral students' endeavours to publish in English scholarly journals unveiled inherent contradictions emerging from their dual role as students

(with a limited grasp of conceptual tools, limited understanding of disciplinary norms and conventions, and inadequate research skills) and expert scholarly writers. However, by leveraging mediation by artifacts (published articles) and community (supervisors, friends, editors, and reviewers), they were able to resolve the contradictions and publish their articles in scholarly journals. The study underscored the role of cultural and social mediation in providing learners with many opportunities to develop their skills and be socialized into the disciplinary community. If rich resources and mentorship are not available, such inherent contradictions might result in unwanted outcomes, thereby thwarting universities' "product-oriented 'publish or no degree' policy" (p.72).

These studies examining motives, mediation, and contradictions have demonstrated the value of cultural-historical activity theory for better understanding and transforming activity systems. Although studies on supervisory feedback continue to expand, little attention has been paid to the sociocultural and historical dimensions of supervisory feedback. In this regard, cultural-historical activity theory is a useful theoretical lens through which to examine and understand supervisory feedback.

3.6 Conceptualizing the graduate research and education activity system from a cultural-historical activity theory perspective

Drawing on Engeström's (1987, 2015, 2018) work, this section sketches out an approach to understanding supervisory feedback as an activity system. From the foregoing discussion, it has been clear that cultural-historical activity theory is grounded in practice, focuses on real-life activities, relies on the theory-practice nexus, and keeps transformation of practice at its core (Sannino et al., 2009). Therefore, cultural-historical activity theory with its strong theory-practice nexus (Roth & Lee, 2007, p. 191) is well suited to examine the complexity of links in the activity of graduate research and education, uncover the structural tensions underlying the activity (Lei & Hu, 2019), and pave the way for its transformation to make it

more conducive to student learning. This study employs the third-generation cultural-historical activity theory to examine supervisors' and students' interconnected activity systems. It also explores the subjective experiences of students and supervisors in terms of agency, responsibility, emotion, and engagement. From a cultural-historical activity theory perspective, thesis writing, and supervisory feedback can be understood as object-oriented activities mediated by artifacts, rules, community, and division of labour.

Figure 4 presents the complex object/motive-driven and culturally situated framework of supervisors' and students' interacting activity systems in the broader activity system of graduate research and education. Graduate research and education activity involves different actions by students (e.g., selecting a topic, reviewing the relevant literature, defending a proposal) and supervisors (e.g., providing feedback and evaluating students' progress). Each action has different operations. For example, the operations of students include searching for relevant research, printing useful materials, writing a proposal, preparing presentation slides; supervisors' operations include reading students' work, having consultation meetings with students, and identifying faculty members to comment on the students' work. As can be seen in Figure 4, the objects of the student's and supervisor's individual activity systems (i.e., writing a thesis and providing supervisory feedback) transform to a collectively important object to both the student and the supervisor (i.e., writing a thesis according to the supervisor's guidance and providing feedback according to the student's needs), and finally to a jointly constructed object (i.e., completion of a defensible thesis with desirable learning outcomes). Object 1 is like raw material which is situationally given. This is the object when a student registers for thesis writing and a supervisor agrees to supervise him or her. When the supervisor and the student meet to discuss the latter's proposed research, the research proposal becomes collectively important to both.

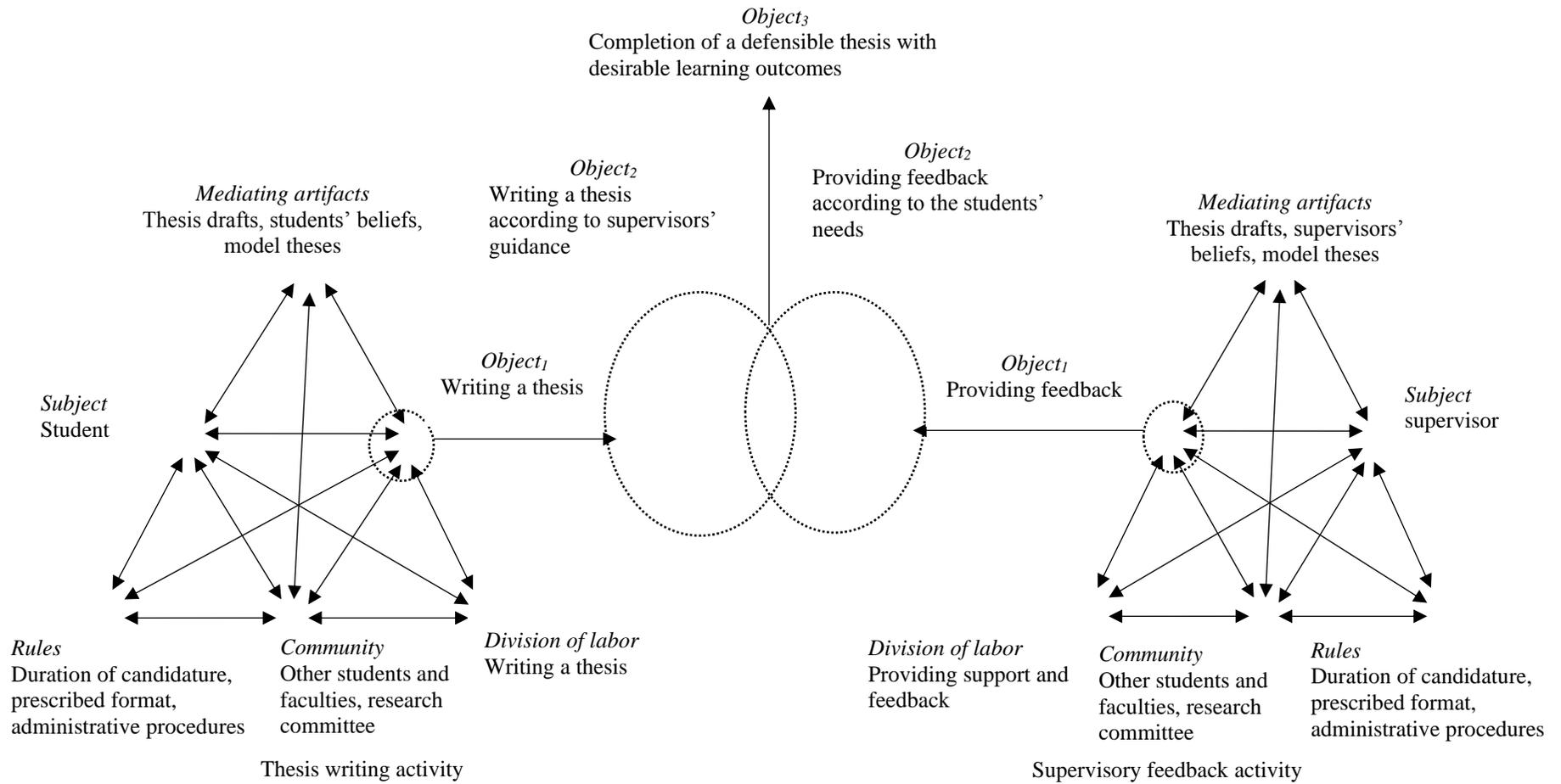


Figure 4. Conceptual framework for the graduate research and education activity system (adapted from Engeström, 2001, p. 136)

Then in the process, when the student starts working and receiving supervisory feedback, a new object (i.e., object 3) comes into existence; the supervisor and the student have a collaborative understanding of the research topic and plans to accomplish the research. Because of its situated nature, the object of thesis writing and supervisory feedback can be understood differently in different contexts (Pilcher, 2011). In Pilcher's study, some supervisors emphasized original research contribution, but others did not consider such an object essential for master's level dissertations. In Anderson et al.'s (2006) study, supervisors in the Faculty of Education at a UK university identified multiple purposes that students were expected to pursue: setting out a well conceptualized project with clear aims, reading the literature critically, reporting research in coherent and fluent write-ups, evincing personal interest and involvement, and providing convincing rationales to defend their research.

Supervisors and students are the subjects of the graduate research and education activity system. The object of the activity embodies their unique histories, identities, agency, motives, and emotions. The level of intersubjectivity can be reached between the supervisor and the student if the former provides directive and specific feedback in line with the latter's previous learning experience and current needs, and the latter takes responsibility for his or her work. Students' underlying values and attitudes related to writing a thesis determine their mode of engagement (Haneda, 2008). This study examines intersubjectivity as well as emotional and identity-related aspects of supervisors and students to interpret the findings related to the effectiveness of and student engagement with supervisory feedback.

As mentioned earlier, the graduate research and education activity system is mediated by different artifacts, rules, community, and division of labour. Mediating artifacts include theses that are already approved, lab resources, published articles, and methodology texts, to name but a few. Students can appropriate these artifacts to learn disciplinary requirements (Lektorsky, 2009), and their access to these resources is of crucial importance because "[t]he

different means (tools, instruments) mediate the productive activity in alternate ways, leading, not surprisingly, to dissimilar outcomes” (Roth & Lee, 2007, p. 194). The activity of graduate research and education takes place in a community consisting of academic staff, students, language specialists, research committee members, thesis examiners, editors, and reviewers. Students’ relation with other members (e.g., supervisors and colleagues) of the community influences the outcome of the activity. The activity is guided by different rules such as the use of English as the medium, the completion of a thesis within the stipulated period, the prescribed format, and administrative procedures, to give some examples.

The division of labor makes it possible for novice graduate researchers to learn from more capable and significant others, mainly their supervisor(s). The division of labour also creates an opportunity for students’ academic discourse socialization (ADS). ADS is concerned with the means that help novices participate effectively in various kinds of academic discourse communities, their practices, and networks through social processes, negotiation, and interaction (Duff, 2010; Kobayashi et al., 2017). Interactions with the more proficient others are at the core of academic discourse socialization. Even students having English as their home language may face challenges in academic discourse, and such challenges are more pronounced and salient with students using English as their second/foreign language (Duff, 2010; Platridge & Starfield, 2019). However, not all programs, activities, or instructors are equally effective socializing agents (Zappa-Hollman, 2007). The most successful ones are those who “not only display, but also make explicit, the values and practices implicit in the culture and provide novices with the language, skills, support, and opportunities they need to participate with growing competence in the new culture and its core activities” (Duff, 2010, p. 176). Therefore, it is crucial to examine how supervisors provide the best scaffolding to students who struggle to enact their agency in thesis writing (Duff & Doherty, 2015). In the case of graduate research and education, such

scaffolding manifests in supervisory feedback. The completion of a thesis is a shared responsibility of the student and his or her supervisor. The collaboration between them allows new forms of actions that create possibilities for students to develop their academic writing and research skills (Roth & Lee 2007).

Writing a thesis is a very demanding task, and supervisory feedback alone is insufficient for students' disciplinary socialization. In addition to supervisory feedback, the student's disciplinary socialization is facilitated by other components of the activity system: mediating artifacts, rules, and community. Students need to "take up all available avenues of feedback and support with writing—academic learning centres, online resources and peer-writing groups—in order to complement supervisory input" (Lauris, 2018, p. 42). Academic learning centres have learning advisors with writing-related expertise; they can help students refine their writing to make it more reader-centric, hone students' thinking by being their intelligent readers, and interpret and translate the supervisor's feedback into action (Lauris, 2018). Students can also benefit from reading, reviewing and providing feedback to peer's work. In addition, "membership in a writing group can develop ties of mutual responsibility, reciprocity and trust, contributing the valuable sense of belonging to a scholarly community, and building confidence in their academic and researcher identities as a result" (Guerin & Aitchison, 2017, p. 52). Moreover, students can "record interesting academic phrases that they come across as they read in their subject area" or consult online academic phrase banks to develop discipline specific use of word combinations (Kumar & Stracke, 2017, p. 18). Therefore, the division of labour is not limited between supervisors and students but rather extends beyond them.

Furthermore, this study aims to uncover different types of contradictions in the graduate research and education activity in terms of challenges faced by supervisors and students. As discussed earlier, cultural-historical activity theory has identified four types of

contradiction (i.e., primary, secondary, tertiary, and quaternary) depending on where they occur in an activity system (Engeström, 1987, 2015; Engeström & Sannino, 2011). One of the *primary contradictions* surrounding graduate research and education activity is in its object's use value (such as developing research skills, writing skills, and critical thinking skills) and exchange value (i.e., completing a master's degree). Besides, supervisors may struggle to fulfil the responsibility of both controlling the quality of a thesis and supporting students (Anderson et al., 2006), whereas students may find it difficult to reconcile the requirements to simultaneously demonstrate and learn research skills (de Kleijn et al., 2016). From the perspective of the division of labour, supervisors might not be able to provide adequate support due to multiple responsibilities, and students may not engage sufficiently with the feedback they receive because of their own constraints. Roth and Lee (2007) believe that failing to unpack or resolve these critical issues may lead subjects to make expedient choices. One of such expedient choices in thesis writing is plagiarism to cope with writing demands. Another one is to make just enough effort to produce a low-quality thesis that can earn a pass grade.

Secondary contradictions may arise when supervisors cannot provide enough support to students to produce a quality thesis (object) because they have to supervise many students simultaneously (rule) in the resource-constrained environment (tools). Similarly, the need to complete a thesis within the specified period (rule) and the students' motive to wait until the end to get through without doing rigorous work (object) might generate tensions. *Tertiary contradictions* may appear "between a newly established mode of activity and remnants of the previous mode of activity" (Engeström & Sannino, 2010, p. 7). For example, in the context where the completion of a thesis is a dominant motive, students and their supervisors may find the task difficult if asked to follow a rigorous research process. Human activities constantly influence and are influenced by their neighbouring activities such as rule-

producing activities, subject-producing activities, and instrument-producing activities causing *quaternary contradictions* (Engeström, 1987; Roth & Lee, 2007). For example, supervisors lacking sufficient research skills might not be able to facilitate the development of such skills in students, and the students who have not developed a certain level of academic skills at their undergraduate level might find themselves unprepared for thesis writing. It is essential to identify such contradictions to improve and transform graduate research and education activity.

3.7 The rationale for applying cultural-historical activity theory

Cultural-historical activity theory provides a sound theoretical framework for analysing complex human activity systems because of its five central tenets (Engeström, 2001). First, it considers the collective, artifacts-mediated, and object-oriented activity system as the prime unit of analysis (Engeström, 2001). It is against singling-out individual aspects for isolated analysis because an individual component cannot “be understood or theorized apart from the others that contribute to defining it” (Roth & Lee, 2007, p. 196). In addition, separating experience into variable units results in the loss of richness found in real-world activities (Yamagata-Lynch, 2010). Therefore, this study draws on cultural-historical activity theory to grasp the systemic whole and reveal a close connection between individual and cultural-historical aspects (Engeström, 2001, 2015; Sannino et al., 2009).

Second, cultural-historical activity theory acknowledges multi-voicedness in an activity system and provides a comprehensive framework for examining “dialogue, multiple perspectives, and networks” from a holistic perspective (Engeström, 2001, p. 135). Different participants in an activity system have their own positions and histories in addition to the history of the activity system itself. Such multiple perspectives may equally result in

difficulties (e.g., student dropping out from the process) or innovations (e.g., improvement in the system).

Third, cultural-historical activity theory assumes that as activity systems are shaped and transformed over time, “their problems and potentials can only be understood against their own history” (Engeström, 2001, p. 136). Such a contextual understanding of challenges is necessary for bringing about transformation in an activity system. In this sense, cultural-historical activity theory is both a historical and a future-oriented theory (Sannino, Daniels, & Gutierrez, 2009b, p. xiv). It assumes that human knowledge solely depends on their engagement in situated real-world activities (Leont’ev, 1981; Roth, Lee, & Hsu, 2009; Yamagata-Lynch, 2010). In this regard, context-specific traditions, theoretical insights underpinning feedback practice, and mediating artifacts (e.g., approved theses, syllabus, and guidelines) shape the activity system. Therefore, it is necessary to examine the challenges and possibilities of thesis writing and supervisory feedback in the historical context to understand the practices better. This study aims to achieve this end. Moreover, cultural-historical activity theory advocates that we need to dig where we stand to find solutions to our problems (Engeström, 2018). As an insider to the practice of graduate research and education, I feel prepared to explore the practice “to change our conditions and to experiment with new solutions” (Engestrom, 2009).

Fourth, cultural-historical activity theory identifies contradictions as an inherent aspect of a human activity system. Multi-voicedness in an activity system gives rise to such contradictions (Yamagata-Lynch, 2010). However, as discussed in the previous section, contradictions are not a negative phenomenon because they can play a central role as sources of change, development, and innovation (Engeström, 2015). It is important to note that, if they are not resolved creatively, they may unwantedly alter the nature of subjects’ participation in the activity or even result in their failure to attain the object.

The fifth principle states that any activity system has the possibility of transformation. An activity-theoretical perspective can be useful identifying contradictions in supervisory feedback in English-medium master's theses so that measures can be taken to address the tensions to transform the practice.

3.8 Summary

This chapter has presented cultural-historical activity theory as the theoretical framework informing the present study. The conceptualization of thesis writing and supervisory feedback as interacting activating systems situated in historical and cultural context has been provided. Also discussed in the chapter is the rationale for drawing on cultural-historical activity theory to understand thesis writing and supervisory feedback practices.

CHAPTER 4

METHODOLOGY

4.1 Chapter overview

The present study examines supervisory feedback on mater's theses from multiple perspectives. This chapter first provides an account of the research design and methodology used in this study, outlines the exploratory mixed-methods research (MMR) design, and explains the rationale for employing such a design. Then, it describes the setting and participants of the study, methods used for data collection, and procedures followed in the analyses of data. Topics also addressed in this chapter are a pilot study, issues concerning validity and reliability of data, and ethical considerations.

4.2 Research paradigm

Research paradigms bring clarity to research by providing the underlying ontological, epistemological, and methodological assumptions about research. A paradigm is “constituted by sets of interconnected philosophical assumptions regarding reality, knowledge, methodology, and values” (Greene, 2007, p. 69). It is “the underlying philosophical view of what constitutes knowledge or reality as the researcher seeks to gain an understanding of a particular topic” (Paltridge & Phakiti, 2015, p. 15). It provides a shared belief system and a way of pursuing knowledge (Cohen, Manion, & Morrison, 2018). The two paradigms that are commonly used in social sciences are the normative (positivist) and the interpretative paradigms. The normative paradigm “assumes the existence of one reality that can be known objectively” (Schoonenboom, 2019, p. 289) by using empirical methods such as those applied in natural sciences. However, the normative paradigm has met with criticism for being mechanical, reductionist, and alienating human beings from their subjective experience. The

interpretive (i.e., anti-positive) paradigm, in contrast, endeavours to understand the subjective world of human experience from an emic perspective. It resists the use of external form and structure and focuses on human action as behaviour-with-meaning from the perspective of actors situated in context. The normative and interpretive paradigms are associated with quantitative and qualitative research, respectively.

Social sciences are increasingly characterized by methodological pluralism rather than simple dichotomies like quantitative vs. qualitative, objective vs. subjective (Cohen et al., 2018). MMR considers the world not exclusively quantitative or qualitative but a mixed world. Since research problems are neither qualitative nor quantitative in their very nature, “using only one kind of data (quantitative or qualitative), one methodology, one paradigm, one way of looking at the problem or one way of conducting the research, may not do justice to the issue in question” (Cohen et al., 2018, p. 08). Therefore, MMR combines quantitative and qualitative research approaches to better understand social phenomena by collecting “all of the information that is potentially relevant to the purpose(s) of the study” (Johnson et al., 2007, p. 127).

MMR is informed by different philosophical perspectives: the dialectic stance, critical realism, pragmatism, and performativity (Schoonenboom, 2019). The dialectic stance considers mixed methods as a dialogue between the qualitative and quantitative paradigms. From this perspective, the quantitative and qualitative paradigms are not mutually exclusive. They can be constructively brought into dialogue “to achieve the dialectical discovery of enhanced, reframed, or new understandings” (Greene, 2007, p. 69). The objective and relative views on reality give rise to distinct quantitative and qualitative methods, which researchers keep distinct before they bring findings together. However, switching between realities and bringing findings from two distinct paradigms is difficult, if not impossible.

The second philosophical perspective on MMR is critical realism, which “assumes that there is one objective reality that can be known in various ways” (Schoonenboom, 2019, p. 286). It also emphasizes the use of a scientific methodology that uncovers the objective reality. Unlike the dialectical stance, it does not require the researcher to switch between realities as it has a single ontological stance, which integrates the findings obtained from different methods. However, the problem with critical realism arises with its assumption of the existence of an “objective reality that can be achieved in various ways” because it does not offer any mechanism to guide the conduct of the research and verify the objectivity of findings. Furthermore, though it approves various ways of uncovering objective reality, it rejects the idea of multiple realities. However, “in certain situations, the assumption of different realities may be a fruitful standpoint” (Schoonenboom, 2019, p. 287).

The third philosophical perspective on MMR is pragmatism (Morgan, 2014). Pragmatism “requires reconsidering the philosophy of knowledge by replacing the older emphasis on ontology and epistemology with a concentration on inquiries about the nature of human experience” (Morgan, 2014, p. 1048). Pragmatism considers that two views on reality (objective reality apart from our understanding vs. subjective reality constructed by an individual’s conception) are equally crucial for understanding the world because our experience is both constrained by the natural world and shaped by our interpretation. It considers objectivity and subjectivity just to be two sides of the same coin. From this perspective, “pragmatism acts as a new paradigm to replace an older way of thinking about the differences between approaches to research by treating those differences as social contexts for inquiry as a form of social action, rather than as abstract philosophical systems” (Morgan, 2014, p. 1049). Pragmatism considers knowledge as ‘warranted assertions’ that hold communities’ shared belief without the need for metaphysical assumptions regarding ontology, epistemology, and methodology (Morgan, 2014, p. 1051). In this regard, a

pragmatist worldview allows the combination of qualitative and quantitative approaches in the best interest of the research questions posed (Cosgrove & Jonas, 2016; Creswell & Plano Clark, 2017; Crotty, 1998, Denscombe, 2008; Greene et al., 1989; Johnson & Onwuegbuzie, 2004; Mette & Jones, 2016; Tran, 2016). However, pragmatism has its own issues (Schoonenboom, 2019). First, it lacks a set of shared beliefs for a mixed-methods research community following this perspective. Second, combining a research element assuming one reality with another assuming multiple constructed realities is challenging. Therefore, Schoonenboom (2019) proposes a performative paradigm that assumes the existence of multiple, dynamic, and changing realities that can be known in various ways. The performative paradigm does not require the researcher to switch between ontological and epistemological worlds. It takes research as an attempt to better understand the laws and habits of worlds which are not objectively given but temporary and created. The researchers create and operationally define concepts and constructs to better understand the issues they are investigating.

Researchers can use various methods to discover properties of worlds that were previously unknown and make statements with context-specific truth-value. Therefore, “while researchers define their worlds by their constituting concepts, they then discover these worlds’ often hidden properties” (Schoonenboom, 2019, p. 291). The characteristics discovered through scientific research are dynamic, not eternally valid. The researcher first defines the concepts and sets the goals, then observes the outcomes of the ideas he or she has imposed on the world, and finally, assumes the active role to make meaning of the observations based on the constitutive concepts. This cycle can be repeated until the researcher feels that he or she has achieved objective outcomes. It is important to note that objectivity is a matter of degree. The use of multiple methods enhances the degree of objectivity. A performative perspective views a mixed-methods researcher “as someone who

accepts different kinds of objectivity as legitimate and who accepts that different methods may be used to obtain a higher degree of objectivity” (Schoonenboom, 2019, p. 294). My mixed-methods study is informed by the performative research paradigm.

4.3 Research design

The present study adopted an MMR design to gain an in-depth and comprehensive understanding of supervisory feedback from multiple perspectives (Johnson & Onwuegbuzie, 2004). The word ‘design’ has two distinct meanings: the process of designing (as a verb) and the product of design (as a noun). In MMR, according to Schoonenboom and Johnson (2017), both meanings are relevant because better designing is necessary for a better product. MMR is characterized by the combination of quantitative and qualitative research components so as to overcome the limitations of an individual component (King & Mackey, 2016; Schoonenboom & Johnson, 2017). When the two components are effectively integrated, the strengths of one can offset the deficiencies of the other. Furthermore, the combination will allow a more practical and outcome-oriented focus to better understand supervisory feedback from a holistic perspective (Denscombe, 2008; Johnson & Onwuegbuzie, 2004). Therefore, it is expected to generate generalizable as well as context-specific knowledge (Cosgrove & Jonas, 2016; Tran, 2016). The methodology literature suggests multiple benefits of MMR (Bryman, 2006; Creswell & Plano Clark, 2017; Greene et al., 1989; Mette & Jones, 2016; Tran, 2016). This section briefly describes the rationale for using an MMR design in this study.

Triangulation. Triangulation “refers to the designed use of multiple methods, with offsetting or counteracting biases, in investigations of the same phenomenon to strengthen the validity of inquiry results” (Greene et al., 1989, p. 254). The combination of multiple forms of inquiry helps to obtain a fuller understanding of the research phenomenon (Creswell & Plano Clark,

2017). In this study, quantitative (i.e., questionnaire surveys) and qualitative methods (i.e., written and oral feedback, and multiple case studies) were used to examine supervisory feedback. Information and evidence obtained from one form of inquiry (e.g., questionnaire surveys) was used to verify or corroborate the results obtained from the other components of the investigation (e.g., written as well as oral feedback and the case study). The use of multiple forms of investigation provided a more comprehensive picture of supervisory feedback. As both providers (i.e., supervisors) and receivers (i.e., students) of supervisory feedback were involved in the study, there was a triangulation of multiple perspectives as well.

Complementarity. To achieve complementarity, “qualitative and quantitative methods are used to measure overlapping but also different facets of a phenomenon, yielding an enriched, elaborated understanding of that phenomenon” (Greene et al., 1989, p. 258). The supervisors’ and students’ perspectives on supervisory feedback obtained from the questionnaire surveys have been complemented, elaborated, and explained with the in-depth information gathered from multiple case studies as well as the analysis of in-text written feedback provided on thesis drafts and oral feedback provided during presentations. Different methods, in this case, were used to measure the same as well as different yet overlapping aspects of supervisory feedback. Complementarity has not only added to the depth and meaningfulness of the interpretation of the findings but also enhanced the validity of the research. The in-depth information obtained from the analyses of written and oral feedback has enhanced the internal validity of the study, while the information obtained from the questionnaire surveys on larger samples of supervisors and students has contributed to the external validity (i.e., the generalizability) of the study.

Development: Research drawing on a mixed-methods design for a development purpose “seeks to use the results from one method to help develop or inform the other method, where development is broadly construed to include sampling and implementation, as well as measurement decisions” (Greene et al., 1989, p. 257). Although there is sizable research on supervisory feedback, such research in the Nepalese context is virtually non-existent. Therefore, in the first phase, in-text written feedback provided on thesis drafts and oral feedback provided during presentations were examined in detail, and an in-depth study of some selected cases was conducted. The insights obtained from the analysis of written and oral feedback, case study data, and literature review were utilized to design the questionnaires for use with larger samples of supervisors and students to examine their perceptions of supervisory feedback. Designing the questionnaires based on findings obtained from the qualitative data has contributed to the construct validity of the study. This was also an opportunity “to test whether the qualitative results generalize” (Creswell & Plano Clark, 2017, p. 10).

However, it is worth pointing out that MMR is also demanding when it comes to research skills, time, and resources (Creswell & Plano Clark, 2017; Hesse-Biber, 2010). I was able to take the challenge as a learning opportunity because I was fortunate to have my supervisor with great expertise in MMR. Furthermore, MMR, in some cases, may give rise not only to convergence but also inconsistencies and contradictions (Creswell & Plano Clark, 2017; Hesse-Biber, 2010). When such discrepancies or disagreements arose in this study, plausible explanations have been provided drawing on the evidence obtained from different data sources (Tran, 2016). Attempts have also been made to identify factors contributing to such discrepancies or contradictions.

4.4 Integration in mixed-methods research

As presented in the previous section, there are multiple benefits of integrating qualitative and quantitative data. According to Fetters, Curry, and Creswell (2013), such integration can be achieved “at the design, methods, and interpretation and reporting levels of research” (p. 2135). In this study, integration has been made at all levels as delineated in the section that follows.

4.4.1 Integration at the design level

At the design level, there are three basic ways of integration: convergent design, explanatory sequential design, and exploratory sequential design (Creswell & Plano Clark, 2017). In a convergent design, qualitative and quantitative data are collected simultaneously with the aim of converging the results from different forms of inquiry. In explanatory and exploratory sequential designs, qualitative and quantitative data are collected in different yet interactive phases. The purpose of an explanatory sequential design is to use qualitative results to explain quantitative results, whereas, in an exploratory sequential design, qualitative results are used to develop and design the quantitative phase (Creswell & Plano Clark, 2017; Fetters et al., 2013)

This study employed an exploratory sequential design. In the first phase, qualitative data were collected through the analysis of in-text supervisory feedback provided on thesis drafts, oral feedback provided on proposal and thesis defences, and in-depth case studies. The results from the qualitative data were utilized to design questionnaires. Finally, the questionnaire surveys were administered to relatively large samples of supervisors and students to determine if the results from the qualitative data were generalizable to the broader population. Equal priority was given to both qualitative and quantitative data (i.e., a QUAL+QUAN design) (Creswell & Plano Clark, 2017), with the belief “that qualitative and

quantitative data and approaches will add insights as one considers most, if not all, research questions” (Johnson et al., 2007, p. 123).

4.4.2 Integration at the methods level

Integration at the methods level occurs through connecting (i.e., linking one type of data with the other through sampling frame), building (one data collection procedure informing the other procedure), merging (bringing two databases together for analysis and for comparison), and embedding (linking qualitative data collection to quantitative data collection recurrently at multiple points) (Fetters et al., 2013). This study made use of connecting, building, and merging. First, the supervisors and students from the same population contributed thesis drafts, participated in case studies, and responded to the questionnaire surveys. Second, the findings obtained from the examination of supervisory feedback provided on thesis drafts and presentations, as well as information obtained from interviews, informed the designing of questionnaire items; some questionnaire items contained phrases used by supervisors and students during interviews and phrases identified in the in-text feedback. Third, different methods of data collection were designed with the purpose of bringing them together for analysis and comparison. Therefore, the feedback provided in the thesis drafts, the questions asked in the interviews, and the items in the questionnaires were interrelated.

4.4.3 Integration at the interpretation and reporting level

Integration at the interpretation and reporting level occurs through narrative, data transformation, and/or joint displays (Fetters et al., 2013). Integration through narrative can be achieved through the weaving approach (writing both qualitative and quantitative findings together), the contiguous approach (reporting qualitative and quantitative findings separately in the same report), and the staged approach (reporting the results of different stages

differently). Integration through data transformation takes place when one type of data is converted to another type (e.g., converting qualitative data into quantitative data), and both types of data are interpreted together. In joint displays, different types of data are brought together “through a visual means to draw out new insights beyond the information gained from the separate quantitative and qualitative results” (Fetters et al., 2013, p. 2143). In this study, qualitative and quantitative findings were synthesized both in the results and discussion using narrative weaving. Data transformation has also been used in coding the qualitative data (i.e., supervisory feedback provided on thesis drafts), using content analysis to count the frequency of codes identified for quantitative analysis, and using both qualitative and quantitative data to answer the research questions.

The integration at the different levels has led mostly to confirmation because findings from one type of data have corroborated the results of the other type.

4.5 Setting and participants

This study was conducted at a comprehensive university in Nepal. This section provides an overview of English language education and higher education in Nepal before it moves on to present the procedures adopted to select the sample.

4.5.1 An overview of English language education in Nepal

Nepal is a multilingual country that is home to 123 languages (Central Bureau of Statistics, Nepal, 2011). The Nepali language is the only official language of Nepal and enjoys a privileged position in education, administration, business, and day-to-day communication (Giri, 2009; B. K. Sharma, 2012). Nepali is also a lingua franca among people speaking different languages in Nepal. Although English has the status of a foreign language in Nepal (Giri, 2011), it occupies the second largest number of domains of use throughout the country

(B.K. Sharma, 2012). English was imported to and adopted in Nepal during the Rana Oligarchy for the benefits of the ruling class, following the colonial model of education in India. According to Crystal (2008, as cited in B. K. Sharma, 2012), 15 million people speak English in Nepal. In the present context, English is considered a “powerful tool for social mobility, linguistic superiority, and economic benefits” (Giri, 2009, p. 39). It occupies a very important position in the education system in Nepal and is taught as a compulsory subject from grade one to the bachelor level (Shrestha, Pahari, & Awasthi, 2015). It was introduced from grade one in 2003 (Phyak, 2011). Before that time, it used to be taught from grade four onwards. The National Curriculum Framework (Curriculum Development Centre, 2007) allowed both English and Nepali to be used as the mediums of instruction in school education. The School Sector Reform Plan (2009-2015) empowered School Management Committees to decide on the medium of instruction in consultation with the local government bodies. Following the policy, there is a growing trend to teach English not only in urban centres but also in rural areas of Nepal; English-medium schools are proliferating throughout the country; and public schools are shifting the medium of instruction from Nepali to English (G. R. Bhattarai & Gautam, 2005; Giri, 2011; Phyak, 2011).

At present, a trilingual approach to education is in practice in Nepal. In this approach, the mother tongue is used in elementary education (grades 1-3), both (Nepali and English) in primary education (grades 4-8), and English for some or all subjects from grade 9 onwards if students and teachers are competent enough to follow and deliver English medium instruction (Ministry of Education, 2016). However, the bitter reality is that there is no measure in place to assess whether teachers and students are capable of coping with English as a medium of instruction.

Although both Nepali and English are the official mediums of instruction in higher education (UGC/N, 2017), English is preferred (Giri, 2009). According to Evans and

Morrison's (2011) categorization of students undertaking degree programs through English medium instruction, Nepal is a non-Anglophone country where Nepali is normally the main medium of instruction and assessment and where students take individual subjects or individual programs in English. Usually both English and Nepali are used in classroom instruction. However, examination questions – except in language subjects such as Nepali, Hindi, and Sanskrit – are exclusively set in English. Students can use either English or Nepali to answer questions in the exam. In some disciplines like Engineering and Physics, English is the sole medium of instruction and examination (Shrestha et al., 2015). Even when options are available, students, as well as teachers, tend to prefer English for producing an extended piece of work such as a report. A similar preference is given to the English language in writing theses across disciplines in the university concerned.

4.5.2 Higher education in Nepal

Higher education in Nepal has just a brief six-decade-long history. The first institution of higher education, Tribhuvan University, was established in 1959 after the end of the autocratic Rana-regime (1846-1951). Since then, the country has undergone multiple political transformations: the ultranationalist Panchayat system (1960–1990), the reestablishment of multiparty democracy (1990), the Maoist insurgency (1996–2006), and the federal democracy (2015). These transformations have had a significant impact on higher education policies and practices. While the education policy of the Rana-regime (1846-1951) kept the mass ignorant and dutiful to the system, the democratic revolution of the 1990s has tremendously increased people's access to higher education (Bista, Sharma, & Raby, 2020). At present, there are eleven full universities (Tribhuvan University, 1959; Nepal Sanskrit University, 1986; Kathmandu University, 1991; Purbanchal University, 1995; Pokhara University, 1997; Lumbini Bouddha University, 2005; Far-Western University, 2010; Mid-Western University, 2010; Agriculture and Forestry University, 2010; Nepal Open University, 2016;

and Rajarshi Janak University, 2017) and four medical academies (B.P. Koirala Institute of Health Sciences, 1993; the National Academy of Medical Sciences, 2002; Patan Academy of Health Sciences, 2010; and Karnali Academy of Health Sciences, 2011) (UGCEN, 2017). Altogether there are 1,425 higher education campuses (137 constituent, 780 private, and 508 community campuses) affiliated to different universities across the country with the current enrolment of 423,996 students (UGCEN, 2017, p. 1). While universities oversee academic programs and examinations on constituent as well as affiliated (i.e., private and public) campuses, only constituent campuses receive public funding and are under the direct administration and management of the universities (Thapa & Maharjan, 2020). The government of Nepal provides financial support to the universities through the University Grants Commission (UGCEN, 2017). The Higher Education Quality Assurance and Accreditation Council, established in 2010, assesses the performances of universities and gives out quality assurance awards every five years.

However, despite significant gains in quantitative terms, Nepalese higher education is replete with critical issues concerning the quality of pedagogy, assessment, research, and publication. As Bista et al. (2020) note,

Fundamental components of the education system, such as curriculum design and change, teacher autonomy and reward for productivity, assessment practices and the role of students, and the culture of leadership do not reflect the progress that has taken place in politics (democratization), economics (liberalization), and culture (social justice equity) at large. (p. 10)

The issues concerning graduate research and publication are particularly pertinent to this study. Higher education in Nepal is yet to embrace a rigorous research culture, and “higher education institutions are struggling to establish themselves as a knowledge centre” (Gautam, Bhattarai, & Sharma, 2020, p. 51). In a recent study (Gautam et al., 2020), Nepalese

university faculties, students, and administrators acknowledged the role of universities in the generation, management, and dissemination of knowledge. However, they pointed to limited engagement of faculties and students in research activities and the ritualization of graduate research.

The study was conducted at Tribhuvan University (TU), Nepal. TU, established in 1959, is the first national institution of higher education in Nepal. It has 60 constituent and 1,080 affiliated colleges throughout the country (UGCEN, 2017). As of 2017/2018, TU has 7,592 teaching staff and 335,126 students enrolled at different levels. It accounts for 79.04% of the higher education load in Nepal and was declared as the Central University of Nepal on January 8, 2013, by the Government of Nepal (TU, 2018). TU offers bachelors (4-5 years), master's (2 years), M.Phil. (1.5 years), and PhD (3-5 years) programs. It has five technical institutes (i.e., Science and Technology, Engineering, Medicine, Forestry, Agriculture, and Animal Science), four faculties (Education, Humanities and Social Science, Management, and Law), and four research centres (the Centre for Economic Development and Administration, the Centre for Nepal and Asian Studies, the Research Centre for Applied Science and Technology, the Research Centre for Education Innovation and Development). Although one of its major goals is to involve “people in extensive, empirical and timely creation of knowledge and research in the fields of arts, science, technology and vocation” (TU, 2017, p. 1), there seems to be a lack of concerted efforts in this direction.

Despite English being the preferred medium of writing a thesis, academic writing courses are rarely offered except in the department of English Studies and English Education. Individual Departments offer research methodology courses and organize short (usually one week) programs to orient students to proposal and thesis writing. However, such courses and orientation programs are of little help to students to enhance the kind of writing expected of them in thesis writing.

4.5.3 Sample and sampling procedures

The sampling procedure involved three levels of selection - academic disciplines, supervisors and students, and supervisor-student pairs. First, four disciplines were selected following Becher's (1994) classification of disciplines and Bernstein's (1999) distinction between hierarchical knowledge structures and horizontal knowledge structures. These four disciplines included Physics (hard-pure), Engineering (hard-applied), English Studies (Soft-pure) and Education (Soft-applied). There are similarities as well as differences regarding thesis writing in these disciplines.

In English Education, thesis writing is compulsory. It carries six credits (1 credit from academic writing, two credits from proposal, and three credits from thesis) out of 69 credits. The research project aims to help students apply different approaches and methods of research learned in the research methodology course, develop academic and research skills, acquire an in-depth knowledge in the area of their research and write a thesis in a standard APA format. As students are assigned to a supervisor before they prepare a proposal, there is no practice of matching students' and supervisors' research interests. Each student prepares a detailed proposal and thesis under the guidance of his or her supervisor and defends each of them before the Departmental Research Committee for evaluation and approval. The Committee is composed of the respective supervisor, the Head of the Department as the research committee chair, and an external examiner. The final evaluation accounts for 60% (viva voce = 20%; the quality of thesis = 40%), whereas 40% is allocated to internal evaluation (academic writing assignments and the quality of the proposal) (<http://tufoe.edu.np/notice>).

In English Studies, thesis writing is optional and carries three credits out of 60 credits. Students take Academic Writing (I), Academic Writing (II), and Thesis Writing (an optional course) in the first, third, and fourth semesters, respectively. Both Academic Writing (I) and

Academic Writing (II) engage students in the knowledge-making process through writing workshops and aim to develop students' critical reading and writing skills as well as their ability to analyse and produce arguments. The Thesis Writing course is intended to familiarize the students with the process of writing a thesis of international standards. An English Studies thesis is intended to enable students to prepare a well-researched report (23-25 pages) with a persuasive argument presented in the MLA format. Students are assigned to supervisors after they prepare and defend their proposal. The final evaluation consists of 75% of cumulative assessment of the quality of work and 25% oral examination (English Subject Committee, 2014).

In Physics, a 6-credit thesis (out of 60 credits) is an optional component offered in the fourth semester. Students must secure at least a B grade in the first semester to qualify for writing a thesis. Besides, they need to find a faculty member willing to supervise them, prepare a proposal, and defend it before the Departmental Research Committee by the end of the third semester. The research project is intended to promote students' in-depth knowledge in the areas of their interest and develop their research, analytical writing, and argumentative skills. An M.Sc. thesis is expected to make some original contribution to knowledge and contain materials that are worth publishing. Finally, the students must defend their thesis before a four-member thesis-evaluation committee (including the Head of the department, the supervisor, an internal examiner, and an external examiner). Every committee member has an equal contribution to the final evaluation of the thesis (Central Department of Physics, 2014).

A 16-credit thesis (out of 60 credits) is a compulsory component in Engineering, and students must pass all the core courses before registering for thesis writing. Engineering students defend their proposal by the end of the third semester. They are assigned to supervisors only after they defend their proposal. Any faculty can take a maximum of 4 students from the same academic year. The students are required to make a mid-term defence

after completing 70% of their work and publish their research in a journal or make a conference presentation before their final defence. The supervisory committee comprising the program coordinator, the Head of the Department, and the instruction committee chairperson evaluates the thesis. Other members of the department are also invited to attend and comment on students' presentations. For the overall evaluation, 60% of the marks are awarded by the supervisor and 40% by other members.

Second, the principle of maximum variation was followed to select the required samples from each discipline. The study involved the collection and analysis of in-text feedback on drafts ($n = 97$), oral feedback on proposal and thesis defences ($n = 87$), multiple-case studies with sixteen supervisor-student pairs, and questionnaire surveys involving students ($n = 442$) and supervisors ($n = 102$). Of the 442 students, 310 (70.1%) were males, and 132 (29.9%) were females. They were between the ages of 20 and 32 ($M = 24.06$, $SD = 2.83$) at the time the research was carried out.

Of the 102 supervisors, 86 (84.3%) were males and 16 (15.7%) were females. They were between the ages of 30-67 ($M = 44.93$, $SD = 8.24$). Their teaching experience ranged between 2-45 years ($M = 18.38$, $SD = 8.83$), with the number of theses supervised ranging from 1 to 350: around 60% of them had supervised 1-23 theses, 20% had supervised 25-50 theses, and 20% had supervised 70-350 theses. Fifty-seven (55.9%) supervisors had received a PhD, 24 (23.5%) had an M.Phil., and 21 (20.6%) had master's degree only. The number of publications ranged from 0-130: 51% of them had 0-12, 29% had 13-24, and 20% had 25-130 publications. Table 1 provides the distribution of the sample across disciplines.

Table 1. Distribution of the sample by method of data collection and discipline

Disciplines	Observation of feedback practices		Case studies	Questionnaire surveys	
	Thesis drafts	Oral defences	Supervisor-student pairs	Supervisors	Students
Education	25	20	4 pairs	26	108
English Studies	20	15	4 pairs	30	93
Physics	24	12	4 pairs	27	86
Engineering	28	40	4 pairs	19	147

4.6 Methods for data collection and analytical frameworks

The study employed three methods – corpus-based analysis of written and oral supervisory feedback, case study, and questionnaire surveys – to collect the data needed to investigate the research problem and answer the research questions. This section describes these different methods in some detail.

4.6.1 *The corpus-based analysis of written and oral supervisory feedback*

As stated above, the corpus-based method was used to analyse a corpus of in-text supervisory comments on 97 draft theses and oral feedback provided on 89 oral defences. The corpus was divided into four sub corpora based on the selected disciplines (English Education, English Studies, Physics, and Engineering). In this study, a corpus has been defined broadly as a collection of texts useful for examining language variations (Adolphs, 2006; McEnery & Hardie, 2012; Tognini-Bonelli, 2001). Corpus-based analysis has the potential to reveal otherwise invisible patterns of language (Adolphs, 2006; Biber, Conrad, & Reppen, 1994; Hyatt, 2005). According to Biber et al. (1994), a corpus-based method can be used to examine lexicography, grammar, and register variations. In this regard, this study seeks to investigate disciplinary variations in foci and functions of supervisory feedback as well as supervisors' attitudes conveyed in such feedback. Supervisory feedback is defined as

comments provided by supervisors on drafts or during proposal and thesis defences (Basturkmen et al., 2014; Kumar & Stracke, 2007).

4.6.4 Case study

Case studies are suitable for developing an in-depth, holistic, and multi-dimensional understanding of a complex contemporary social phenomenon in a real-life context to answer how and why questions (Thomas, 2011; Yin, 2014). Flyvbjerg (2004) argues that context-dependent knowledge, as obtained from case studies, is at the very heart of expertise in any field, reflects a nuanced view of reality, and is central to human learning. In this regard, “language learning and use cannot be understood without a close analysis of the context” (King & Mackey, 2016. p. 219), a task that case studies are well equipped to complete. Therefore, multiple cases were investigated to gain an in-depth understanding of supervisory feedback on English-medium master’s theses in the Nepalese EFL context (Compton-Lilly, 2013; Simons, 2009; Thomas, 2011).

In this study, the cases were selected by observing the principle of maximum variation “to obtain information about the significance of various circumstances for case process and outcome” (Flyvbjerg, 2004). Four supervisor-student pairs from each discipline were interviewed. First, the supervisors were sampled according to two criteria: supervisory experience and research output. Then one student under each of the supervisors was selected for the interview according to supervisor-assessed progress with their thesis writing (i.e., making smooth progress or struggling). The supervisors and students were interviewed separately so that their views could be triangulated, inconsistencies could be explained, and confidentiality and anonymity could be protected (Patton, 2015). Each interview was between 45 minutes and one hour.

An interview protocol was used to guide the interview (see Appendix-I). There were two interviews with each focal participant. The first interview was used to establish rapport, collect some background information, and set time for the second interview. The second interview explored the supervisors' and the students' views regarding purposes, perceived foci, useful feedback practices, challenges, and student engaged with supervisory feedback. Finally, a copy of transcription was sent to each participant through email for ensuring that their views were represented correctly. Beside interviews, other documents related to thesis supervision issued by the university and records maintained by the specific departments were also collected and analysed. The analysis of these documents provided insights into rules, norms, and values that guided graduate research and education. Table 2 and Table 3 present supervisor and student profiles, respectively. The codes EduS/EduSt, HS/HSt, MES/MESSt, and PS/PSSt refer to Education, English Studies, Mechanical Engineering, and Physics supervisors/students, respectively. The numbers are used to identify individual supervisors and students.

Table 2. Supervisor profile

ID	Age	Gender	TE	SE	TNP	HQ	Foreign degree
EduS1	40s	Male	14	100+	35 (I*)	PhD	TESOL (UK), PhD (USA)
EduS2	30s	Male	8	100+	8 (NI*)	MPhil	No
EduS3	30s	Male	8	100+	10 (NI)	MPhil	Teaching Excellence Award (USA)
EduS4	50s	Male	25	50+	10 (I)	PhD	TESOL (UK), Humphrey Fellow (USA)
HS1	40s	Male	10	100+	7 (NI)	MPhil	No
HS2	50s	Male	25	60+	10 (NI)	PhD	PhD (USA)
HS3	50s	Female	25	60+	5 (NI)	MPhil	No
HS4	40s	Male	15	100+	10 (NI)	MPhil	No
MES1	50s	Male	25	20	20 (I)	PhD	BE (India)
MES2	40s	Male	5	10	50 (I)	PhD	PhD (China)
MES3	30s	Male	6	8	5 (I)	Masters	No
MES4	30s	Male	5	6	12 (I)	PhD	PhD (China)
PS1	50s	Male	22	100+	73 (I)	PhD	PhD (Germany), Postdoc (USA, Germany)
PS2	50s	Male	20	100+	96 (I)	PhD	PhD (Austria), Postdoc (USA, Japan)
PS3	40s	Male	15	2	15 (I)	PhD	PhD (in collaboration with TU, Nepal and ICTP, Italy)
PS4	40s	Male	22	80+	48 (I)	PhD	PhD (Austria)

Notes: TE = Teaching Experience, SE = Supervisory Experience, TNP = Total Number of Publications, I* = Indexed in (social) science citation, NI* = Not-indexed in science citation, HQ = Highest Qualification, ICTP* = International Centre for Theoretical Physics

Table 3. Student profile

Pseudonyms	Age	Gender	Schooling	Job during thesis writing	Region of secondary education
EduSt1	20s	Male	Public	No	Rural
EduSt2	20s	Male	Public	Yes	Rural
EduSt3	20s	Female	Public	No	Rural
EduSt4	20s	Female	Public	No	Rural
EduSt5	20s	Female	Public	No	Urban
HSt1	20s	Female	Public	No	Urban
HSt2	20s	Male	Public	No	Rural
HSt3	20s	Female	Public	No	Rural
HSt4	20s	Female	Private	Yes	Urban
MESSt1	20s	Male	Public	Yes	Rural
MESSt2	20s	Male	Private	No	Urban
MESSt3	20s	Female	Private	Yes	Urban
MESSt4	20s	Male	Private	Yes	Urban
PSt1	20s	Male	Public	No	Rural
PSt2	20s	Male	Public	No	Rural
PSt3	20s	Male	Public	Yes	Rural
PSt4	20s	Female	Public	No	Urban
PSt5	20s	Male	Public	No	Rural

4.6.5 Questionnaire surveys

A questionnaire survey is for examining participants' behaviour, beliefs, and attitudes (Dörnyei, 2014; Phakiti, 2014). Two questionnaires (one for supervisors and one for students) were developed and administered to collect supervisors' and students' perceptions of supervisory feedback, respectively (see Appendices IV and V). The questionnaires comprised close-ended questions, open-ended questions, and demographic information. The close-ended items targeted five different aspects of supervisory feedback: purposes, foci, students' expectations, challenges, and student engagement. The close-ended questions allowed the

participants to report their perceptions on a 6-point Likert scale (i.e., 1 = strongly disagree, 2 = disagree, 3= somewhat disagree, 4= somewhat agree, 5 = agree, 6 = strongly agree). A 6-point Likert scale was used due to the concern that on a five-point scale, some participants “might use the middle category... to avoid making a real choice” (Dörnyei, 2014, p. 37). The open-ended questions asked the participants to share their memorable experience and offer suggestions for the improvement of supervisory feedback practices.

The questionnaires were developed using the ideas and insights drawn from the relevant literature as well as the corpus-based analysis of supervisory feedback and the case studies. I extensively probed the first few participants (5 students and 3 supervisors) while they were completing the questionnaire in my presence. This probing was significant to uncover any confusion and misunderstandings in the questionnaires and make modifications accordingly. Most modifications were made to the wordings of the questions, examples were provided to illustrate a case in point, phrases were replaced with complete sentences, and the items that were redundant were discarded. After these initial modifications, the questionnaires were piloted with 120 students and 60 supervisors.

The pilot data collected with the student and supervisor questionnaires were submitted to principal component analysis for reducing the dimensions of data. The piloted versions of the questionnaires contained 73 and 77 items for students and supervisors, respectively (see Appendices II and III). As a result of the pilot, seven items from the student engagement sections were removed, and the remaining items were reordered to make the progression more logical. No changes were made to the open-ended questions. Principal component analysis conducted on the final administration confirmed the factor structure obtained in the pilot stage in most of the cases. Some items that did not form a reliable scale common to both supervisors’ and students’ questionnaires were not included in the analysis (see Table 4).

Table 4. Information about the questionnaires

Variables measured	Total number of items	Item number	Items not included in the analysis
Purposes	8	1-8	7,8
Foci	22	9-30	12, 28
Student expectations	9	31-39	31, 32, 36, 38
Challenges	10 (students' version) 14 (supervisors' version) *	40-49 (students' version) 40-53 (supervisors' version)	43
Student engagement	17	50-66 (students' version) 54-70 (supervisors' version)	54, 58

* = The questionnaire for supervisors contained four unique items.

The initial field experience showed that the original plan to meet a large number of participants and administer the questionnaires in person was not feasible. Therefore, the plan was modified, and online versions of the questionnaires were designed using Google forms. However, electronic communication is still not common at the university concerned. Therefore, with the due permission of the departments concerned, I collected the names and contact numbers of the students who had defended their theses within the last 18 months. I called the students and informed them of the purpose of the study. Those who agreed to participate in the study provided their email address and I emailed them the online questionnaire. The process was time-consuming in the beginning, but it offered a tremendous opportunity to reach and talk to many potential participants in various parts of the country. More importantly, talking to individual participants offered a deeper understanding of their experience because some participants shared their stories in detail over the phone as well. Besides, this individual approach significantly increased the response rate and allowed the participants to provide detailed and well-constructed responses to the two open-ended

questions included in the questionnaires. The online administration of the questionnaires also saved a considerable amount of data entry time because the data from online surveys could be easily transferred to Excel spreadsheets and then to SPSS for analysis. Therefore, the questionnaires for the main study were administered online, with a small number of participants completing the questionnaires in hard copy, too. The final questionnaires were completed by 102 supervisors and 442 students.

4.7 Validity and reliability

4.7.1 Validity and reliability of qualitative data

Qualitative data in the present study consisted of thesis drafts with in-text feedback, audio recordings of verbal feedback provided during proposal and thesis defences, and multiple case studies involving supervisor-student pairs. Thesis drafts with supervisory feedback and verbal comments on proposal and thesis defences were selected following the principle of maximum variation (Patton, 2015). The comments were transcribed carefully and coded inductively and deductively using NVivo. A PhD student in applied linguistics was invited to code 10% of the data to establish intercoder reliability (Cohen's kappa). The Cohen's kappa values ranging from .87 to .97 indicated good intercoder reliabilities. All intercoder disagreements were resolved through discussion before coding the remaining data.

I followed a principled approach to enhance the validity of case study research (Yin, 2014) by collecting data from multiple sources (i.e., documents, in-text and oral supervisory feedback, and interviews). I selected multiple cases from each discipline purposively and used the case study protocol as a guide for data collection to enhance the validity and reliability of the results (Flyvbjerg, 2004; Yin, 2014). I audio-recorded the interviews, transcribed them carefully, verified the accuracy of transcription by listening to the audio records multiple times, and shared the transcripts with the participants for member checking.

I used Braun and Clarke's (2006) framework to develop themes from the interviews. Besides, I created a case study database, including all the data and established a chain of evidence across the data set. To strengthen the internal validity of the results, the patterns identified from the review of the literature, questionnaire surveys, and the analysis of written and oral supervisory feedback comments were matched with those emerging from the analysis of the case study data.

4.7.2 Validity and reliability of quantitative data

The relevant literature and the exploratory phase of this study informed the design of the questionnaires. The questionnaires contained multiple items measuring the same construct, and two open-ended questions at the end of the questionnaires added to the scope and richness of the data (Dörnyei, 2014). The questionnaires were piloted with 60 supervisors and 120 students to establish their reliability and validity of psychometric qualities based on principal component analyses and internal consistency analysis (Cronbach's alpha). In the analysis, factor loadings lower than 0.4 were not displayed because they were not considered to be substantive (Field, 2009). Preliminary analyses were conducted to find out the adequacy of the sample size (KMO and Bartlett's Test) and multicollinearity for each section of the questionnaires. The two versions (i.e., for supervisors and students) of the questionnaires were mostly the same (except a few items in the "challenge" sections), and the aim was to obtain identical scales for both versions so that comparisons could be made. The items that did not load on the expected factors, as well as those that loaded differently, were deleted based on direct oblimin rotation (with Kaiser normalization) to obtain an optimal factor structure. Both Eigenvalues and scree plots were examined to decide on the number of factors to retain. This section describes the factor structure for different scales of the questionnaires.

Purposes of supervisory feedback. A single factor solution for both questionnaires was

obtained when two items were deleted. The six-factor solution explained 43.3% and 53.38% of the variances for the supervisors' and the students' versions, respectively. The sample size was adequate for both the supervisors' version ($KMO = .69$, Bartlett's test = 122.99, $p = 001$), and the students' version ($KMO = .87$, Bartlett's test = 783.31, $p = 001$). Tables 5 and 6 display the items loaded on the factor, which captured the purposes of supervisory feedback. Cronbach's alpha values were .73 for the supervisors' version and .82 for the students' version, indicating that the scales were reliable for the given participants.

Table 5. Component matrix for the "purposes of supervisory feedback" scale (supervisors' version)

Item	Factor loadings
Developing ethical research practice	.766
Applying theoretical knowledge	.689
Developing independent learning skills	.671
Making informed choices	.657
Developing academic writing skills	.630
Developing research skills	.511

Table 6. Component matrix for the "purposes of supervisory feedback" scale (students' version)

Item	Factor loadings
Developing academic writing skills	.753
Developing independent learning skills	.746
Developing research skills	.743
Applying theoretical knowledge	.728
Developing ethical research practice	.725
Making informed choices	.686

Foci of supervisory feedback. The second component of the questionnaire was designed to capture what supervisors perceived to focus on in their supervisory feedback. The section consisted of 22 items. The deletion of six items resulted in a two-factor solution for the supervisors' version ($KMO = .69$, Bartlett's test = 122.99, $p = 001$, variance explained = 43.35%) and the students' version ($KMO = .93$, Bartlett's test = 3867.07, $p = 001$, variance explained = 57.12%) as displayed in Tables 7 and 8. Items loaded on Factor 1 appeared to

address “feedback on core research aspects”, while the factors loaded on Factor 2 were concerned with “feedback on language use and academic writing conventions”. Cronbach’s alpha values for the supervisors’ version (Factor 1 = .87 and Factor 2 = .80) and the students’ version (Factor 1 = .90 and Factor 2 = .88) indicated that the scales were reliable.

Table 7. Component matrix for the “feedback foci” scales (supervisors’ version)

Item	Factor 1	Factor 2
I provide feedback on identifying research gaps.	.930	
I provide feedback on drawing conclusions from the findings.	.811	
I provide feedback on the theoretical framework.	.709	
I provide on the selection of a research area/topic.	.670	
I provide feedback on developing arguments with supporting details.	.650	
I provide feedback on the interpretation and discussion of results.	.637	
I provide feedback on formulating research questions/objectives.	.582	
I provide feedback on the overall significance of research.	.449	
I provide feedback on research methodology.	.435	
I provide feedback on language accuracy in writing.		.836
I provide feedback on structure of the thesis, formatting, and mechanics.		.746
I provide feedback on coherence and cohesion in writing (i.e., making ideas/sentences flow well).		.746
I provide feedback on the appropriate use of language.		.726
I provide feedback on citing sources to support ideas.		.535
I provide feedback on how to avoid plagiarism in writing.		.484
I provide feedback on building connections among different sections of a thesis (e.g., between research questions, methodology, and findings).		.473

Table 8. Component matrix for the “feedback foci” scales (students’ version)

Item	Factor	
	1	2
I received feedback on identifying research gaps.	.826	
I received feedback on developing arguments with supporting details.	.780	
I received feedback on the research methodology.	.751	
I received feedback on the theoretical framework for my research.	.747	
I received feedback on developing research questions/objectives.	.738	
I received feedback on the interpretation and discussion of results.	.728	
I received feedback on the overall significance of the research.	.724	
I received feedback on the selection of a research area/topic.	.618	
I received feedback on drawing conclusions from the findings.	.567	
My supervisor corrected language problems in my writing.		.947
My supervisor provided feedback on the appropriate use of language.		.932
I received feedback on the structure of the thesis, formatting, and mechanics.		.691
I received feedback on maintaining coherence and cohesion (i.e., making ideas/sentences flow well).		.675
I received feedback on how to avoid plagiarism in my writing.		.581
My supervisor provided suggestions on citing sources to support ideas.		.563
I received feedback on building connections among different sections of my thesis (e.g., between research questions, methodology, and findings).		.530

Four of the six items not included in the previous analysis formed a one-factor common solution (i.e., content) for the supervisors’ version ($KMO = .69$, Bartlett’s test = 102.28, $p = 001$, variance explained = 57.35%) and the students’ version ($KMO = .81$, Bartlett’s test = 611.58, $p = 001$, variance explained = 65.69%) when they were submitted to separate factor analyses. The same factor structure was obtained for both versions, as can be seen in Tables 9

and 10. Cronbach’s alpha values were .75 and .83 for the supervisors’ and the students’ versions, respectively, showing that the scales were reliable for these participants.

Table 9. Component matrix for the “content” scale (supervisors’ version)

Item	Factor loadings
I provide feedback on consistency in writing.	.791
I provide feedback on content accuracy.	.769
I provide feedback on content coverage (i.e., content that is necessary to include in their thesis).	.745
I provide feedback on the relevance of content (e.g., crossing out unnecessary information).	.722

Table 10. Component matrix for “content” scale (students’ version)

Item	Factor loadings
I received feedback on the relevance of content (e.g., crossing out unnecessary information).	.830
I received feedback on content coverage (i.e., content that is necessary to include in my thesis).	.823
I received feedback on consistency in writing.	.745
I received feedback on the accuracy of the content in my writing.	.792

Students’ expectations of feedback. This section contained nine items. When four items that loaded differently were removed from the analysis, the same single factor solution was obtained for the supervisors’ version ($KMO = .63$, Bartlett’s test = 53.104, $p = .001$, variance explained = 39.07%) and the students’ version ($KMO = .73$, Bartlett’s test = 273.14, $p = .001$, variance explained = 42.99%) (See Tables 11 and 12). Cronbach’s alpha values were .58 and .64 for the supervisors’ and the students’ versions, respectively indicating that the scales had relatively low but acceptable levels of reliability.

Table 11. Component matrix for the “students’ expectations of feedback” scale (supervisors’ version)

Item	Factor loadings
Supervisors should avoid brief comments.	.691
Supervisors should provide both oral and written comments.	.690
Supervisors should respect students’ ideas when giving feedback.	.666
Supervisors should read drafts thoroughly.	.575
Supervisors should provide positive comments along with negative comments.	.477

Table 12. Component matrix for the “students’ expectations for feedback” scale (students’ version)

Item	Factor loadings
Supervisors should provide positive comments along with negative comments.	.778
Supervisors should provide both oral and written comments.	.727
Supervisors should respect students’ ideas when giving feedback.	.592
Supervisors should avoid brief comments.	.578
Supervisors should read drafts thoroughly.	.574

Challenges in providing and receiving supervisory feedback. The number of items in the supervisors’ and the students’ versions varied in this section. The supervisors’ and students’ versions contained 14 and 10 items, respectively. The first 10 items were identical in both versions, whereas the last four items in the supervisors’ version were uniquely related to supervisors only. The first analysis of the 10 items resulted in a common two-factor solution for the supervisors’ version ($KMO = .71$, Bartlett’s test = 1252.59, $p = .001$, variance explained = 76.8%) and the students’ version ($KMO = .71$, Bartlett’s test = 1252.59, $p = .001$, variance explained = 76.8%), as can be seen in Tables 13 and 14. Items loaded on Factor 1

and Factor 2 appeared to address “supervisors’ time constraints” and “students’ language constraints”, respectively. Cronbach’s alpha values for the supervisors’ version (Factor 1 = .81 and Factor 2 = .64) and the students’ version (Factor 1 = .89 and Factor 2 = .78) indicated that the scales were reliable for the given participants.

Table 13. Component matrix for the “time-” and “language-related challenges” scales (supervisors’ version)

Item	Factor 1	Factor 2
I do not have time to provide detailed guidelines to students.	.901	
I do not have time to read students’ drafts thoroughly.	.883	
I find it difficult to manage time to provide feedback because of teaching and other service-related commitments.	.773	
Students find it difficult to decide which information from reading material is appropriate to include in their writing.		.861
Students cannot develop an argument with supporting details.		.771
Students find it difficult to express their ideas clearly in English.		.676

Table 14. Component matrix for the “time-” and “language-related challenges” scales (students’ version)

Item	Factor 1	Factor 2
My supervisor does not have time to provide me with proper guidelines.	.938	
My supervisor does not give me enough time.	.905	
My supervisor does not have time to read my work carefully.	.869	
I find it difficult to decide which information from reading materials is appropriate to include in my writing.		.890
I find it difficult to develop arguments with supporting details.		.853
I find it difficult to express my ideas in English.		.765

Resource constraints. The remaining 3 items resulted in a single-factor solution for the supervisors’ version ($KMO = .64$, Bartlett’s test = 184.63, $p = .001$, variance explained = 56.25%) and the students’ version ($KMO = .55$, Bartlett’s test = 216.05, $p = .001$, variance explained = 57.54%) when submitted to factor analysis separately, as can be seen in Tables

15 and 16. The factor is concerned with the “resource constraints” and was reasonably reliable for the given participants, as indicated by Cronbach’s alpha values of .61 and .63 for the supervisors’ and the students’ versions, respectively.

Table 15. Component matrix for the “resource constraints” scale (supervisors’ version)

Item	Factor loadings
There are limited lab resources.	.769
Students do not have access to reference materials.	.745
There is a lack of financial support to conduct quality research.	.735

Table 16. Component matrix for the “resource constraints” scale (students’ version)

Item	Factor loadings
There are limited lab resources.	.870
There is a lack of financial support to conduct quality research.	.820
I cannot find reference materials related to my study.	.545

Four extra items included only in the supervisors’ version were loaded on a single factor ($KMO = .72$, Bartlett’s test = 115.64, $p = .001$, variance explained = 58.28%), as shown in

Table 17. The factor seemed to capture “institutional culture”. Cronbach’s alpha value obtained (.61) indicated that the scale was reasonably reliable for the given participants.

Table 17. Component matrix for the “institutional culture” scale (supervisors’ version)

Item	Factor loadings
Students tend to ignore feedback, and I have to provide the same feedback repeatedly.	.880
Students are not committed to research.	.841
Students tend to plagiarize.	.787
Remuneration for thesis supervision is not encouraging.	.481

Students’ engagement with feedback. There were 18 items related to student engagement with feedback broadly divided into three categories (i.e., affective engagement, behavioural engagement, and cognitive engagement). Principal component analyses were run separately for the items in the different categories. The analyses resulted in a two-factor solution for

affective engagement (i.e., Factor 1 = students’ positive affect and Factor 2 = students’ negative affect) for both the supervisors’ version ($KMO = .62$ Bartlett’s test = 73.74, $p = .001$, variance explained = 53.01%) and the students’ version ($KMO = .68$, Bartlett’s test = 817.46, $p = .001$, variance explained = 69.54%) (see Tables 18 and 19). Cronbach’s alpha values for the supervisors’ version (Factor 1 = .68 and Factor 2 = .36) and the students’ version (Factor 1 = .82 and Factor 2 = .71) indicated that the scales were reliable except for Factor 2 in the supervisors’ version.

Table 18. Component matrix for the “students’ affective engagement” scales (supervisors’ version)

Item	Factor 1	Factor 2
Students look forward to feedback on their work.	.853	
Students pay attention to feedback that I provide.	.785	
Students actively approach me for feedback on their thesis.	.690	
Students are disappointed if they receive comments that only point out problems but do not advise them on how to improve their work.		.821
Students find it frustrating if they are asked to revise a draft multiple time.		.589
Students are discouraged by negative comments.		.538

Table 19. Component matrix for the “affective engagement” scales (students’ version)

Item	Factor 1	Factor 2
I look forward to feedback from my supervisor.	.904	
I pay attention to feedback from my supervisor.	.873	
I actively approach my supervisor for feedback on my thesis.	.812	
I feel discouraged if I receive negative comments.		.825
I feel disappointed if I receive comments that only point out problems but do not advise me on how to improve my work.		.781
I find it frustrating to revise a draft many time.		.781

A one-factor solution was obtained for students' cognitive engagement for both the supervisors' version ($KMO = .80$, Bartlett's test = 252.27, $p = .001$, variance explained = 65.88%) and the students' version ($KMO = .84$, Bartlett's test = 993.54, $p = .001$, variance explained = 62.56%) (see Tables 20 and 21). The scales were reliable, as indicated by Cronbach's alpha value of .84 for both the supervisors' and the students' versions.

Table 20. Component matrix for the "students' cognitive engagement" scale (supervisors' version)

Item	Factor loadings
Students think it is important for them to utilize feedback.	.870
Students take feedback as an opportunity to learn.	.847
Students read feedback carefully to understand it.	.807
Students consider that feedback might be useful for their future work (e.g., further study and research).	.807
Students self-assess their work before submitting it to me.	.719

Table 21. Component matrix for the "students' cognitive engagement" scale (students' version)

Item	Factor loadings
I think it is important for me to utilize the feedback that I receive from my supervisor.	.879
I take feedback from my supervisor as an opportunity to learn.	.840
I think my supervisor's feedback will be useful in my future work (e.g., further study and research).	.829
I read feedback carefully to understand it.	.813
I self-assess my work before submitting it to my supervisor.	.549

A single factor solution was obtained for students' behavioural engagement for both the supervisors' version ($KMO = .71$, Bartlett's test = 69.43, $p = .001$, variance explained = 52.29%) and the students' version ($KMO = .73$, Bartlett's test = 294.53, $p = .001$, variance explained = 52.44%) (see Tables 22 and 23). Cronbach's alpha values of .69 and .68 for the

supervisors’ and the students’ versions, respectively indicated that the scales were reliable.

Table 22. Component matrix for the “students’ behavioural engagement” scale (supervisors’ version)

Item	Factor loadings
Students discuss feedback with their friends.	.795
Students take note of useful comments for future reference.	.787
Students accommodate all the comments that I provide.	.713
Students talk to me if they do not understand feedback that I provide.	.576

Table 23. Component matrix for the “students’ behavioural engagement” scale (students’ version)

Item	Factor loadings
I attend to all the comments from my supervisor in revising a draft.	.800
I talk to my supervisor if I do not understand feedback.	.746
I take note of useful comments for future reference.	.723
I discuss feedback with my friends.	.615

4.8 Ethical considerations

Ethical issues deserve rigorous attention in research involving human participants (Simons, 2009; Thomas, 2011; Yin, 2014). The research received ethical approval (HSEARS20180326003) from the Departmental Research Committee, The Department of English, The Hong Kong Polytechnic University, and closely followed the University’s guidelines for sound research. I duly informed the participants of the purpose of the research, made them aware of the voluntary nature of participation, and obtained informed consent. The participants’ personal information has been kept confidential, and their identity has been anonymized in reporting the findings. Ethical issues concern research scholarship as well (Yin, 2014). A high standard for research scholarship has been maintained throughout the

study by acknowledging the sources appropriately and following a rigorous process of data collection, analysis, and reporting. Furthermore, the limitations of the methodology have been properly acknowledged in the final chapter of the thesis (see Section 9.5.4).

4.9 Data preparation and analysis

This section describes the procedures followed to prepare the data and statistical procedures used to answer the research questions that this study set out to address.

4.9.1 Data preparation

Three main steps were taken in preparing the data collected from written feedback on thesis drafts, oral feedback on proposal and thesis defences, multiple-case studies, and questionnaire surveys. Feedback comments on proposal and thesis defences were transcribed, and an individual file was created for each draft and defence. Then in-text feedback comments were segmented into feedback points and coded into different foci and functions of feedback using NVivo. Subsequently, the data were transferred into SPSS for further statistical analysis. The audio-recorded interviews were transcribed and shared with the interviewees for verification and authenticity. Interview transcripts were also analysed using NVivo. The data collected from the questionnaire surveys were transferred from Excel to SPSS spreadsheets, and screened for any errors and outliers. In the process of screening and cleaning the data, six outliers (indicated with * in box plots) were deleted from the students' data set. This deletion improved the distribution of data. Descriptive statistics for the data were computed to examine the central tendencies, variability, and distribution of raw score data. The data were generally normally distributed.

4.9.2 Data analyses conducted to answer each research question

4.9.2.1 Analyses conducted to answer the first research question

First, to answer research question 1 (foci and functions of feedback comments), all supervisory feedback on the collected thesis drafts were 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). In a few cases, comments focused on both content and thesis sections. When a stretch of feedback addressed multiple aspects, each chunk of text that dealt with a distinct aspect was counted as an individual feedback point, as illustrated by example (1):

- (1) 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. A small number of comments ($n = 232$) fell into more than one category, and they were coded for all the relevant categories, following previous research (Basturkmen et al., 2014; East et al., 2012). 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 et al., 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 24 presents these categories and subcategories illustrated with examples from my 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 24. Categories and subcategories of feedback comments

Focus	Example
Content (accuracy, coverage, clarity, originality, and relevance of content)	<ul style="list-style-type: none"> • <i>There is some mistake in the graph. (Accuracy)</i> • <i>What do you mean by small, medium, or large granule size? Don't you have to measure the size? (Clarity)</i> • <i>Which poems are you going to deal with? Note them down here.... (Coverage)</i> • <i>All copied and compiled here. (Originality)</i> • Technique is a real strategy, trick or stratagem of teaching language. <i>No need to define technique. (Relevance)</i>
Coherence/organization (logical connection of content at sentence, paragraph and text levels)	<ul style="list-style-type: none"> • <i>There is a lack of coherence. Three sentences in a paragraph are talking about three different and unrelated things. (Coherence)</i> • <i>Reorganize based on objectives. (Organization)</i>
Expected components (various components conventionally expected of a thesis)	<ul style="list-style-type: none"> • <i>What is the value addition of your work? (Significance)</i> • <i>Your research is a narrative inquiry. How did you develop narratives from these teachers? Describe in methodology. (Methodology)</i> • <i>Discuss your results by comparing it with the work done by previous researchers. (Analysis and discussion)</i> • <i>Use feminism in talking about the agency. (Theoretical framework)</i> • <i>What is the main research gap for this study? (Identification of research gaps)</i>
Linguistic forms (accuracy and appropriateness of language use)	<ul style="list-style-type: none"> • <i>We can't draw water tie tight distinction between them. (Accuracy)</i> • <i>Do not use evaluative words such as good, better, etc. Describe in line with the indicators. (Appropriateness)</i>
Mechanics (style and referencing conventions)	<ul style="list-style-type: none"> • <i>The name of the book should be in italics. (Format)</i> • <u>Views on good instruction have shifted.</u> <i>Who said? (Reference)</i>
Miscellaneous (focus not ascertained)	<ul style="list-style-type: none"> • <u>The purpose of the study varies according to the types of the nature of the study.</u> ?

Second, the data were scrutinized to identify the pragmatic functions expressed in supervisors' feedback comments (Kumar & Stracke 2007) using NVivo (Pro 12). The principle of constant comparison was employed during the coding process to establish internal consistency within categories and subcategories of eight pragmatic functions: directive (instruction, question, and suggestion), expressive (positive response and negative response), and referential (content, editorial, and organisational). When a stretch of written comment served different functions, each chunk of the text was counted as an individual point. Example (2) was coded under two feedback categories: expressive (positive response) and directive (question)

(2) Nice. // What meaning did you draw from these examples?

Based on supervisors' and students' interpretations, a tick mark (✓) was coded as expressive feedback registering a positive response. Question marks without any comments, underlining, cross marks, circling, arrows, and wavy lines in the margins were coded as expressive feedback registering negative response because supervisors used them when they came across what they considered a problematic text (i.e., incorrect, irrelevant, unclear, incoherent or not convincing). Table 25 presents the examples of pragmatic functions identified in the data.

~~Strikethroughs~~ indicate deletions, supervisors' comments are in italics, and my comments are in parenthesis. Finally, 12 drafts (4 from each discipline) were coded independently by myself and a PhD student in Applied linguistics to establish inter-coder reliability regarding the foci and functions of feedback comments. The obtained Cohen's kappa value of .96 for foci and .87 for functions of feedback comments indicated excellent inter-coder reliability. All inter-coder disagreements were resolved through discussion. I then coded all the remaining data. The codes were then transferred to SPSS for statistical analysis.

Table 25. Pragmatic functions of feedback comments

Pragmatic function	Subcategory	Example
Directive (asking the supervisee to do something)	Instruction (directive framed as imperatives, mandatory)	<i>Mention specific stances from the classes that you observed. Revise your conceptual framework.</i>
	Question (directive framed as questions)	<i>Which equation did you use? What do the increase and decrease show?</i>
	Suggestion (directive framed as statements, less mandatory)	<i>One theme should be added in each paragraph. It would be better to provide a comparison among methods.</i>
Expressive (expressing speakers' opinion and feelings)	Positive response (Expressing approval)	<i>Good!</i> ✓
	Negative response (expressing disapproval)	<i>Reference and reference listing are not at all in format!</i> The technique is a real strategy, plan, trick, or stratagem of teaching language in a classroom. Question mark (?) Cross mark (X) Wavy line ≈ <u>It shows that any researchable topic gets background knowledge from the literature.</u>
Referential (providing information)	Editorial (corrective feedback)	Therefore, the study intends to investigated has investigated student-centered techniques...
	Content (content information added or corrected)	<i>The combination of these two polymers produces a new compound...</i> (information added by the supervisor) We observed similar band diagrams in case 2x-2 3X2.
	Organizational (Correction made on organization)	<i>3.3. Numerical Method</i> <i>3.3.1 The PS Model</i> <i>3.3.2 The Set of EEG</i>

4.9.2.2 Analyses conducted to answer the second research question

To answer the second research question (i.e., attitudes conveyed in supervisory feedback), supervisors' comments on proposal and thesis defences and qualitative comments on thesis drafts were analysed employing the attitude system in appraisal theory (Martin & White, 2005) based on Systemic Functional Linguistics (SFL). SFL is considered an "applicable" theory because it is concerned with identifying and tackling problems associated with the use

of language in context (Halliday, 2009; Halliday & Matthiessen, 2014; Starfield et al., 2015). SFL has identified three major functional components of meaning: ideational, interpersonal, and textual (Angermuller, Maingueneau, & Wodak, 2014; Halliday & Matthiessen, 2014; Martin & White, 2005), which are used to construe the world that we perceive, social relations that we enact, and information that we exchange, respectively (Martin, 1999). Among these three functions, appraisal theory focuses on lexico-grammatical resources that can be used to mark the speaker's/writer's intersubjective stances in the negotiation of their social relationship. In this regard, language of appraisal provides individuals with evaluative resources to demonstrate intersubjective relationships and affiliations by presenting themselves "as recognising, answering, ignoring, challenging, rejecting, fending off, anticipating or accommodating actual or potential interlocutors and the value positions they represent" (Martin & White, 2005, p. 2). Appraisal theory consists of three main systems: attitude (feelings), graduation (strength of the feelings), and engagement (positioning of the speaker) (Martin & Rose, 2003; Martin & White, 2005; Martin, Zappavigna, & Dwyer, 2010; Starfield et al., 2015). According to Martin and White (2005), "[a]ttitude is concerned with our feelings, including emotional reactions, judgements of behavior and evaluation of things" (p. 35, e.g., *I am satisfied with your work; You have not written the objectives properly; This is a good piece of work*). Engagement is concerned with the positioning of the speaker/writer with respect to the potential responses to their opinions "by quoting or reporting, acknowledging the possibility, denying, countering, affirming and so on" (p.36, e.g., *Your study seems to be a duplication of previous studies*), and graduation expresses the strength of evaluation (e.g., *We are not satisfied at all with your work*).

Because this study focuses on the attitude of supervisors conveyed in supervisory feedback, the rest of this section provides a detailed discussion on the attitude component of appraisal theory. Attitudinal meanings comprise of *affect* (emotional reactions), *iudgement*

(assessment of human behaviour and characters according to normative principles), and *appreciation* (assessment of the value of objects, artefacts, texts, state of affairs, and processes) (Martin & White, 2005; Martin et al., 2010; White, 2015). Unlike affect, which is individual, judgement and appreciation are “institutionalised feelings, which take us out of our everyday common-sense world into the uncommon sense worlds of shared community values” (Martin & White, 2005, p. 45).

Affect is further divided into four subcategories: dis/inclination (e.g. *Why do you want to conduct your thesis in this area?*), un/happiness (e.g., *I cannot check your accuracy; I do not mind if you feel bad*), in/security (e.g., *I am worried about you all*), and dis/ satisfaction (e.g., *Today we are not satisfied at all with your work*). Judgements are broadly categorized into social esteem and social sanctions. Judgements about esteem has to do with normality (e.g., *You are in your own way*), capacity (e.g., *You are not clear about what you are going to do*) and tenacity (e.g., *You worked hard*). Judgements of sanction is concerned with veracity (e.g., *You have cheated us*) and propriety (e.g., *You have not written the objectives properly*) (Martin & White, 2005). Appreciations has to do with the evaluation of inanimate objects in terms of our reactions to things in terms of impact and quality (e.g., *Your work is interesting; This is a good piece of work*); composition in terms of balance and complexity of the text (e.g., *There is a lack of connection between sentences in your writing; There are so many misleading headings*); and their value (e.g., *There is a high degree of negligence in your work; There is no evidence for this claim*). Valuation includes the instances of judgements expressed implicitly (e.g., *You are not serious vs. Your work shows lack of seriousness*). Starfield et al. (2015) have extended subcategories of valuation by introducing a new component, that is standard. The standard concerns with sufficiency, relevance, authenticity, timeliness of content (e.g., *It is not suitable even for a BE project*).

Attitudinal meanings are distinguished in terms of polarity (positive vs. negative). They are mainly expressed through lexical resources (e.g., *satisfied, careful, in-depth* vs. *dissatisfied, careless, superficial*). However, the interpersonal grammar of mood (e.g., *This domain needs research*) and modalities (e.g., *You must review recent literature*) also express such meanings. Figure 5 presents the analytical framework employed in this study.

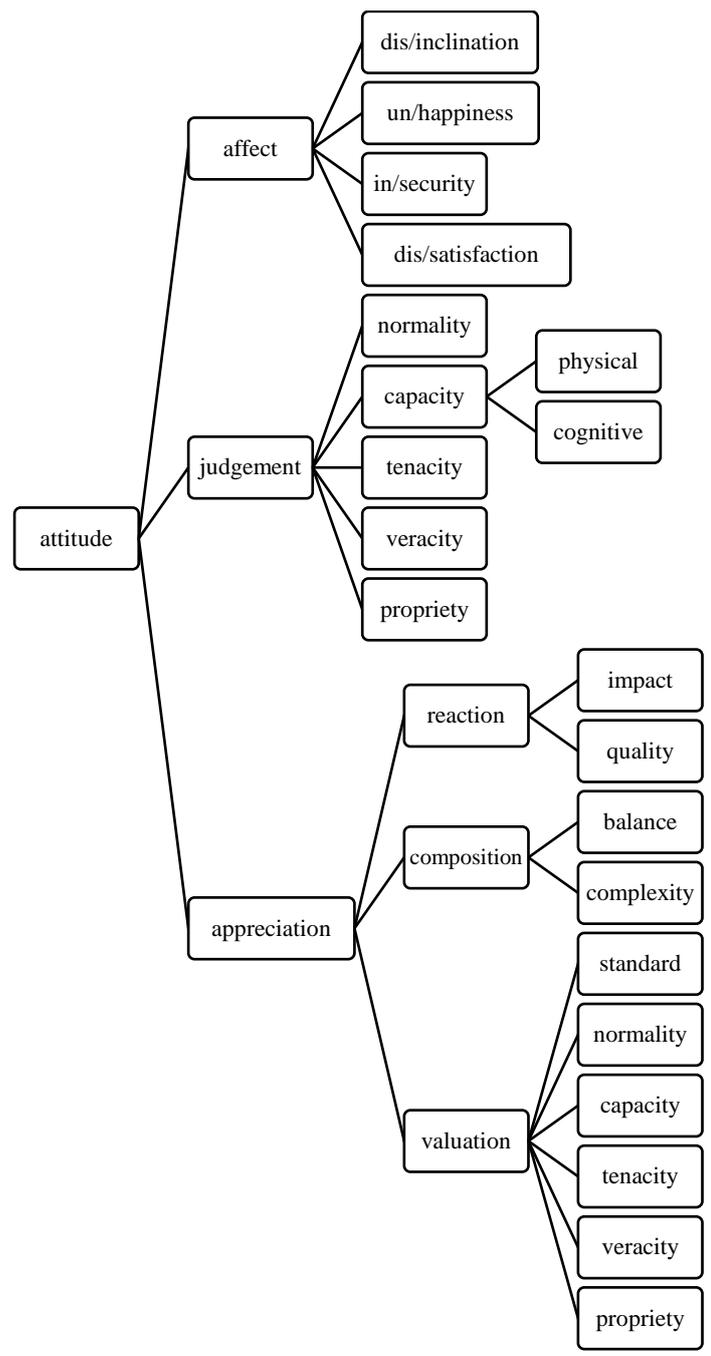


Figure 5. Categories of attitude (based on Martin & White 2005; Starfield et al., 2015)

The analysis of data involved different steps. First discipline wise sub-corpora of supervisory feedback comments on oral defences (n = 89) and qualitative comments on thesis drafts (n = 76) were created and imported to UAM Corpus Tool (3.3 version), a free software package for annotating corpora at multiple levels (O'Donnell, 2011). Then, the sub-corpora were coded manually employing appraisal theory (Martin & White, 2005) as the analytical framework. Following Starfield et al. (2015), a clause was taken as the highest grammatical unit of analysis because it is lexis and grammar that students “must negotiate in order to understand the implications at the semantic level” (p. 133). Unlike other discourse, by its very nature, supervisory feedback makes use of evaluative language. It is also important to note that the meaning of an individual attitudinal lexical item may vary across contextual and textual settings (White, 2015). Therefore, the feedback comments were coded carefully by paying close attention to “the context of use as well as the object of appraisal” (Hu and Choo, 2016, p. 338). About 12% of the drafts (i.e., 16 files) 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 .87 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 examine the overall distribution of attitudinal meaning. To examine disciplinary variations in the expression of supervisors' attitude, one-way between-subjects ANOVAs were run on the normalized frequencies per 1000 words. Following Hu and Choo (2016), for ensuring the reliability of the statistical analysis, ANOVA was run only when “at least one group mean exceeded 1.00” (p. 338). As a result, following categories in oral feedback were analyzed: a) negative tenacity, b) negative propriety, c) negative veracity, d) negative capacity-physical, d) negative capacity-cognitive, e) positive/negative quality, f)

negative composition-balance, g) negative composition-complexity, h) negative valuation standard, i) negative valuation-capacity, j) negative valuation-veracity, and k) negative valuation-propiety. In the written feedback, following categories met the requirement for statistical analysis: a) negative propriety, b) negative composition-balance, c) negative composition-complexity, d) negative valuation-standard, e) negative veracity, and f) negative propriety. IBM SPSS (version 18) was used for statistical analysis, and alpha was set at .05 for all analyses.

4.9.2.3 Analyses conducted to answer the third research question

In order to answer the third research question (i.e., supervisors' and students' perceptions of purposes, practices, quality, challenges, and student engagement with supervisory feedback), data from questionnaire surveys were analysed by using both descriptive and inferential statistics. While descriptive statistics (range, minimum, maximum, mean, standard deviation, and variance) were examined to identify the distributions of the data, independent samples *t*-tests were run to compare the supervisors' and the students' perceptions using the Bonferroni adjusted alpha level of 0.004 (0.05/13) (Field, 2009).

4.9.2.4 Analyses conducted to answer the fourth research question

To answer the fourth research question (i.e., supervisors' and students' motives), the interviews with supervisors and students were analysed thematically by employing Braun and Clarke's (2006) six-step framework. The coding started with the process of *familiarization with the data*. I became somewhat familiar with the data while interviewing the participants. Subsequently, transcribing interviews, listening to the audio-recordings repeatedly to verify the accuracy of transcription, sharing the transcripts with the participants, and correcting the inaccuracies in some cases led to a better understanding of the data. Second, the entire dataset was coded using NVivo (Pro 12) to *generate initial codes*. The codes were constantly

compared with other codes and categories to develop a coding scheme. Third, after all the interviews were coded, the codes were combined to form overarching themes based on the relationships between the codes and between different levels of themes. Fourth, all the data extracts coded under different themes were *reviewed* thoroughly, and those that did not fit well were un-coded and re-coded in suitable themes. Then the themes were examined in relation to the entire data set before the final list was established. Fifth, the themes and sub-themes within each theme were *defined* in terms of their essence. The final step involved the analysis and discussion of the themes to answer the research question.

4.9.2.5 Analyses conducted to answer the fifth research question

In order to answer the fifth research question (i.e., disciplinary variations) one-way and two-way ANOVAs were conducted. One-way between-subjects ANOVAs were run on the absolute frequencies of each category of foci and functions of feedback comments and on the normalized frequencies (per 1000 words) of each category of supervisors' attitudes conveyed in feedback comments to determine if there was a statistically significant main effect for disciplinary background. A Bonferroni post hoc test was used to locate specific differences. Two-way ANOVAs were used to examine the interaction between roles (i.e., supervisors and students) and disciplines (Education, English Studies, Physics and Engineering) regarding the supervisors' and the students' perceptions of supervisory feedback.

4.10 Summary

This chapter has delineated the research paradigm that informed this study, the specific research design adopted, and the different methods (i.e., corpus analysis, cases studies, and questionnaire surveys) used to collect the data. Measures taken to ensure the reliability and validity of the data collected, ethical considerations, and approaches used to analyse the data to answer the research questions raised in the study have also been described in detail.

CHAPTER 5

FOCI, FUNCTIONS, AND ATTITUDES OF SUPERVISORY FEEDBACK

5.1 Chapter overview

This chapter presents the results from the analyses of in-text feedback provided on thesis drafts and verbal feedback given during proposal and thesis defences. The chapter is organized around two of the research questions that guided this study.

RQ1: What areas do supervisors focus on in their feedback, and what functions do their feedback comments serve?

RQ 2: What attitudes do supervisors express in supervisory feedback?

5.2 Foci and functions of supervisory feedback

5.2.1 Foci of supervisory feedback

Table 26 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 26. Descriptive statistics for feedback comments by category and aggregated over disciplines

Category	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>
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

As can be seen in Table 27, 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. Comments on 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 (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. Sometimes, the supervisors supplied the required information. A tiny proportion of content-related comments (i.e., less than 3%) dealt with the originality 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.

5.2.2 Disciplinary variations in the foci of feedback

Table 27 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 Education, Engineering, and English Studies in that order. Disciplinary background accounted for 29% of the variance, which was a large effect. The post hoc Bonferroni test located significant differences between Physics and English Studies ($p = .001, d = 1.11$), Physics and Engineering ($p = .001, d = 1.13$), Education and English studies ($p = .01, d = 1.44$), and 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 the 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 significant difference

with a large effect ($p = .002$, $d = 0.94$) only between 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, the 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 Education and English Studies ($p = .001$, $d = 1.33$), 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 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 Education and Engineering ($p = .001$, $d = 1.53$).

The ANOVA run on mechanics-related 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 the Physics supervisors differed significantly from their counterparts in 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 ($p = 0.008$, $d = 0.85$).

Table 27. Descriptive statistics for foci of feedback by category and discipline

Category	English Studies (<i>n</i> =20)				Education (<i>n</i> =25)				Physics (<i>n</i> = 24)				Engineering (<i>n</i> = 28)			
	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>
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 thesis chapters; *AF* = absolute frequency; *RF* = relative frequency; *M* = mean for absolute frequency; *SD* = standard deviation for absolute frequency

5.2.3 Functions of supervisory feedback

Table 28 displays the distributions of feedback comments in terms of their pragmatic functions aggregated over the four disciplines, together with other relevant descriptive statistics. Across the disciplines, the supervisors made a total of 6340 comments on 97 drafts averaging 65.36 comments per draft. The large standard deviation of 81.79 indicated a considerable variation across the drafts.

Table 28. Descriptive statistics for pragmatic functions of feedback by category and aggregated over disciplines

Pragmatic function	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>
Directive	1488	23.47	15.34	14.24
Instruction	1018	16.06	10.49	11.25
Question	394	6.21	4.06	4.35
Suggestion	76	1.20	0.78	1.39
Expressive	2489	39.26	25.66	41.95
Positive response	1936	30.54	19.96	32.31
Negative response	553	8.72	5.70	18.06
Referential	2363	37.27	24.36	43.65
Content	251	3.96	2.59	6.65
Editorial	2107	33.23	21.72	38.49
Organizational	5	0.08	0.05	0.22
Total	6340	100	65.36	81.76

It can be seen from the data in Table 28 that expressive comments were the most frequent (39.26%), and most of such comments (77.78%) registered negative responses. It was worth noting that the vast majority of expressive comments were non-verbal (i.e., underlining, question marks, wavy lines in margins, and tick marks) and provided little support for students' disciplinary socialization. Except four, all verbal expressive comments were explicit criticisms (e.g., *Doesn't give any meaning; Your thesis is completely out of the track; Very random; You have written whatever you think and like*) with a considerable likelihood for damaging students' self-confidence. Referential comments constituted the second most

common type of comments (37.27%), focusing mostly on editorial aspects (89.17%), occasionally on content (10.62%), and rarely on organization (0.21%). Although least frequent in comparison to other types of comments, directive comments were also abundant. Such comments were mostly formulated as instructions (68.41%) and offered little opportunity for negotiation. Tellingly, there was an abundance of brief instructions (e.g., *Rewrite; Explain; Revise; Clarify*) that fell short of providing any guidance to students for improving their work.

5.2.4 Disciplinary variations in the functions of feedback comments

Table 29 shows substantive variations in the absolute and relative frequencies of pragmatic functions of feedback comments across the four disciplines. The relatively large standard deviations indicated sizable intra-disciplinary variations as well. However, some distinct patterns showed differences in disciplinary practices. One-way ANOVAs were run on the absolute frequencies to find out whether the observed differences were statistically significant.

A significant cross-disciplinary difference was observed in the frequency of expressive comments, $F(3, 93) = 12.76, p = .001, \eta^2_p = .29$, with the Physics supervisors providing the largest number of such comments followed by the Education, English Studies, and Engineering supervisors. With a large effect size, disciplinary background accounted for 29% of the variance. Bonferroni post hoc test revealed that the Physics supervisors differed significantly from their counterparts in Education ($p = .001, d = 0.89$), English Studies ($p = .002, d = 0.82$), and Engineering ($p = .001, d = 1.35$) in providing expressive comments.

There was a significant disciplinary variation in the use of referential comments, $F(3, 93) = 10.34, p = .001, \eta^2_p = 0.25$, with the Physics supervisors providing markedly more referential comments than the Education, English Studies, and Engineering supervisors in

that order. Disciplinary background accounted for 25% of the variance. As determined by the Bonferroni post hoc test, the number of referential comments in Physics differed significantly from those of Education ($p = .03$, $d = 0.59$), English Studies ($p = .001$, $d = 0.97$), and Engineering ($p = .001$, $d = 1.22$).

The ANOVA found a significant main effect of discipline on directive feedback, $F(3, 93) = 11.58$, $p = .001$, $\eta^2_p = .27$, with Education supervisors providing the highest number of directive comments than Physics, Engineering, and English Studies supervisors. Disciplinary background constituted a large effect as it accounted for 27% of the variance. The Bonferroni post hoc test identified that Education supervisors differed significantly from their counterparts in English Studies ($p = .01$, $d = 1.32$), Physics ($p = .01$, $d = 0.64$), and Engineering ($p = .001$, $d = 1.62$).

Table 29. Descriptive statistics for pragmatic functions of feedback by category and disciplines

Pragmatic function	Education (n = 25)				English Studies (n = 20)				Physics (n = 24)				Engineering (n = 28)			
	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>	<i>AF</i>	<i>RF</i>	<i>M</i>	<i>SD</i>
Directive	668	36.01	26.72	15.71	202	23.11	10.10	8.35	392	11.9	16.33	16.77	226	71.07	8.07	4.09
Expressive	516	27.82	20.64	18.76	428	48.97	21.40	31.55	1496	45.43	62.33	63.32	49	15.41	1.75	2.21
Referential	671	36.17	26.84	36.84	244	27.92	12.20	14.88	1405	42.67	58.54	65.77	43	13.52	1.54	5.69
Subtotal	1855	100	74.20	50.89	874	100	43.70	37.71	3293	100	137.21	120.54	318	100	11.36	7.40

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

5.2.5 Feedback foci by functions

As shown in Table 30, comments on cohesion/organization, content, and thesis sections were mostly formulated as directives, the majority of which were instructions directly telling students what to do. Most of the comments on linguistic forms were editorial, whereas comments on mechanics and in the miscellaneous category were expressive ones with 99.32 % of them being negative responses. The results indicated that supervisors had a strong tendency to tell what the students should do when their focus was on content, organization, and structural components of the thesis. While they were likely to correct linguistic problems, they expressed criticism when they came across mechanical issues in students' writing.

Table 30. Distribution of feedback foci by pragmatic function and aggregated over disciplines

	Directive		Expressive		Referential		Total
	<i>AF</i>	<i>RF</i>	<i>AF</i>	<i>RF</i>	<i>AF</i>	<i>RF</i>	
Content	603	47.71	430	34.02	232	18.35	1264
Coherence/organization	258	56.46	54	11.82	152	33.26	457
Expected components	193	91.04	17	8.02	6	2.83	212
Linguistic forms	101	6.07	262	15.75	1302	78.25	1664
Mechanics	527	24.88	881	41.60	688	32.48	2118
Miscellaneous	6	0.72	823	99.92	3	0.36	832

5.3 Supervisors' attitudes

5.3.1 Supervisors' attitudes manifested in feedback comments

Based on Martin and White (2005), the supervisors' attitudes conveyed in feedback comments were broadly categorized into three types: affect, judgement, and appreciation along with the polarity of comments (i.e., positive and negative). Table 31 presents the normalized frequencies of affect, judgement, and appreciation, along with their polarity and other relevant descriptive statistics.

Table 31. Descriptive statistics for attitude manifested in supervisory feedback by category and aggregated over disciplines

Features	Oral Feedback (<i>n</i> = 89; Words = 44034)					Written feedback (<i>n</i> = 76; words = 10271)				
	<i>P</i>	<i>N</i>	<i>T</i>	<i>M</i>	<i>SD</i>	<i>P</i>	<i>N</i>	<i>T</i>	<i>M</i>	<i>SD</i>
Affect	0.27	0.50	0.77	0.39	1.03	0.00	0.00	0.00	0.00	0.00
Dis/satisfaction	0.16	0.23	0.39	0.26	0.90	0.00	0.00	0.00	0.00	0.00
In/security	0.00	0.16	0.16	0.06	0.33	0.00	0.00	0.00	0.00	0.00
Dis/inclination	0.11	0.11	0.23	0.06	0.28	0.00	0.00	0.00	0.00	0.00
Judgement	0.86	39.40	40.26	33.32	13.32	0.00	83.63	83.63	65.80	62.26
Tenacity	0.16	1.43	1.59	1.51	2.99	0.00	0.10	0.10	0.01	0.08
Propriety	0.32	33.34	33.66	27.05	12.73	0.00	83.44	83.44	65.79	62.26
Veracity	0.00	0.82	0.82	0.80	2.26	0.00	0.10	0.10	0.01	0.08
Normality	0.11	0.36	0.48	0.36	1.36	0.00	0.00	0.00	0.00	0.00
Capacity	3.45	3.45	3.72	3.60	4.20	0.00	0.00	0.00	0.00	0.00
Capacity-physical	0.23	1.73	1.95	2.09	3.14	0.00	0.00	0.00	0.00	0.00
Capacity-cognitive	0.05	1.73	1.77	1.51	2.49	0.00	0.00	0.00	0.00	0.00
Appreciation	2.50	35.99	38.49	44.78	23.90	0.49	115.37	115.86	86.15	104.31
Reaction	2.23	0.20	2.43	1.20	2.19	0.49	0.39	0.88	0.23	1.13
Impact	0.55	0.02	0.57	0.44	1.24	0.10	0.00	0.10	0.01	0.08
Quality	1.68	0.18	1.86	0.76	1.74	0.39	0.39	0.78	0.22	1.12
Composition	0.00	2.86	2.86	3.57	6.97	0.00	33.01	33.01	16.23	20.21
Balance	0.00	2.02	2.02	2.76	6.84	0.00	31.35	31.35	15.41	20.05
Complexity	0.00	0.84	0.84	0.81	1.53	0.00	1.66	1.66	0.82	2.42
Social valuation	0.27	32.93	33.20	40.00	22.18	0.00	81.98	81.98	69.69	100.94
Valuation-standard	0.20	26.43	26.64	33.28	20.76	0.00	51.21	51.21	38.50	73.73
Valuation-capacity	0.05	1.52	1.57	1.46	2.76	0.00	0.00	0.00	0.00	0.00
Valuation-tenacity	0.00	0.16	0.16	0.10	0.41	0.00	0.29	0.29	0.10	0.51
Valuation-veracity	0.00	1.20	1.20	1.33	3.12	0.00	2.34	2.34	1.50	4.68
Valuation-propriety	0.02	3.61	3.63	3.84	5.57	0.00	28.14	28.14	29.59	51.82
Total	3.63	75.90	79.53	78.48	23.97	0.49	199.01	199.49	151.96	120

Note: *P* = Positive comments, *N* = negative comments, *T* = Total comments, *M* = Mean, *SD* = Standard deviation, *n* = sample; words = number of words in the corpus

A closer inspection of Table 31 shows that there were distinctly different patterns in the expression of supervisors' attitude in the oral and written feedback. First, the instances of attitude were more frequent in written feedback (151.96 instances per 1000 words) than in oral feedback (79.53 instances per 1000 words). Second, while the supervisors were more likely to express affect and pass their judgements in oral feedback, they tended to focus on the quality of work (i.e., appreciation) in providing written comments. As indicated by the average normalized frequency, the instances of appreciation were most frequent in both oral (44.78 per 1000 words) and written (86.15 per 1000 words) feedback followed by judgement.

It is worth noting that there were no instances of affect in written feedback. Different types of attitudes and frequently used terms to construe such meanings are presented in this section in the order of their prominence. It is worth noting that around 96% of the evaluative comments in oral feedback and more than 99% of evaluative comments in written were negative.

Appendix-VII presents the list of lexical terms used to construe different categories and sub-categories of attitude.

5.3.1.1 Appreciation

The data shows that the majority of instances of appreciation were used to construe valuation-standard in both oral ($M = 33.28$, $SD = 20.76$) and written ($M = 38.50$, $SD = 73.73$) supervisory feedback. Valuation-standard was concerned with (in)adequate information (3); data analysis, interpretation, and explanations (4); and material that was (in) appropriate, superficial, broad, or in-depth (5). The notations -ve and +ve refer to positive and negative comments, respectively.

(3) How aspect is *missing* in your analysis. (-ve APPRECIATION: valuation: standard)

(4) Too much data *without interpretation*. (-ve APPRECIATION: valuation: standard)

(5) It seems to be *superficial*. (-ve APPRECIATION: valuation: standard)

Most of evaluation on valuation-standard was formulated as questions targeting missing information, and unexplained or undeveloped arguments (Examples 6-10). Such questions belonged to negative polarity because they indicated problems in students writing or presentations (Starfield et al., 2015). The most frequent question words were *what* (476 times), *how* (223 times), *why* (104 times), *which* (54 times), and *where* (41 times).

(6) What is the new contribution of your study? (-ve APPRECIATION: valuation: standard)

- (7) How did you select six teachers out of 24? (-ve APPRECIATION: valuation: standard)
- (8) Why is there so much variation? (-ve APPRECIATION: valuation: standard)
- (9) Which analysis will you use for optimization? (-ve APPRECIATION: valuation: standard)
- (10) Where does the trauma theory come in your analysis? (-ve APPRECIATION: valuation: standard)

The second most request aspect of appreciation was concerned with the issues of academic ‘mis’conduct, that is, valuation-propriety in both oral ($M = 3.84$, $SD = 5.57$) and written ($M = 29.59$, $SD = 51.82$) supervisory feedback. According to Starfield et al. (2015), such issues “include, but are not limited to, the inclusion and exclusion of relevant and current references, claims that are (un)justified, (un)substantiated and (un)referenced, the appropriate number of quotes and amount of paraphrasing as well as proper formatting of in-text references, reference lists and bibliographies” (p. 136). In the present data set, the most common concern was about in-text citation (11-13) and plagiarism (14-15). The commonly used terms to express valuation-propriety included *reference* (200 times), *citation* (61 times), *source* (67 times), *plagiarized* (4 times), and *lifted* (3 times):

- (11) *Reference?* (-ve APPRECIATION: valuation: propriety)
- (12) Too old *resource*. (-ve APPRECIATION: valuation: propriety)
- (13) All *copied* without any sources. (-ve APPRECIATION: valuation: propriety)
- (14) This section is *plagiarized*. (-ve APPRECIATION: valuation: propriety)
- (15) Most of the things are *lifted*. (-ve APPRECIATION: valuation: propriety)

Supervisors also appreciated theses in terms of valuation-capacity (16), valuation-tenacity (17), and valuation-veracity (18). Notably, the instances of valuation-capacity were not found

in written comments.

(16) If you take companies from different sectors, it is *difficult* to set the parameters. (-ve

APPRECIATION: valuation: capacity)

(17) *Lack of reading* created a big problem. (-ve APPRECIATION: valuation: tenacity)

(18) Your analysis is totally *wrong*. (-ve APPRECIATION: valuation: veracity)

Appreciation-composition is concerned with *balance* (coherence and logical connection; structure of thesis at all levels; relationship between text and table/figure; formatting issues like font, spacing, labelling, and capitalization) (19-21) and *complexity* (clarity, and comprehensibility of presentation) (22-23) of a text. The instances of *composition-balance* were far more frequent in written feedback ($M = 15.41$, $SD = 20.05$) than those in oral feedback ($M = 2.76$, $SD = 6.84$). The three most frequently used terms to construe *appreciation-composition* were *not clear* (25 times), *problem with language* (33 times), *space* (24 times), *bold* (21 times), *font* (20 times), *italics* (20 times).

(19) Your work seems to be *random*. (-ve APPRECIATION: composition: balance)

(20) This goes into abstract *not here*. (-ve APPRECIATION: composition: balance)

(21) Your writing *needs thorough editing*. (-ve APPRECIATION: composition: balance)

(22) It is *difficult to know* whether the terms you have selected are cultural or not. (-ve

APPRECIATION: composition: complexity)

(23) Your methodology is *not clear*. (-ve APPRECIATION: composition: complexity)

Appreciation-reaction expresses the supervisors' personalized and subjectively determined positions regarding a thesis. The supervisors expressed reaction in terms of *impact* (24) and *quality* (25-26). Instances of reaction-impact and reaction-quality were notably more frequent in oral ($M = 0.44$, $SD = 1.24$; $M = 0.76$, $SD = 1.74$) than those in written feedback ($M = 0.01$,

$SD = 0.08$; $M = 0.22$, $SD = 1.12$). The frequently used terms to express reactions were *fine* (40 times), *good* (21 times), *interesting* (20 times), *nice* (8 times), and *poor* (8 times).

(24) I found your stories *interesting*. (+ve APPRECIATION: reaction: impact)

(25) The second paragraph is *fine*. (+ve APPRECIATION: reaction: quality)

(26) Literature is *good*. (+ve APPRECIATION: reaction: quality)

Unlike in other cases, positive comments were more frequent regarding *composition-impact* and *composition-quality*. Four of the five most frequently used words to construe reaction were positive polarity items. A closer examination of word *fine* indicated supervisors' agreement with students' ideas rather than positive appreciation of the text. *Good* and *interesting* mostly expressed true positive appreciation of students' work. In few cases, they were employed to preface critical comments (e.g., *Good argument but no research credibility. This is an interesting project; we are only worried about the direction it will take*).

5.3.1.2 Judgement

According to Starfield et al. (2015), judgement is an 'unofficial evaluation', because supervisors and examiners are supposed to evaluate theses but not pass direct judgements. However, in the present data set, judgement appeared to be highly prominent in oral ($M = 33.32$, $SD = 13.32$) and written ($M = 65.80$, $SD = 62.26$) feedback, with such instances being far more frequent in written comments. It is worth noting that unlike oral comments which contained instances of judgement regarding students' social esteem (normality, capacity, and tenacity) and social sanctions (propriety and veracity) with propriety being most frequent, written feedback virtually contained instances of propriety only. These attitudinal meanings made students aware of what they should and should not do about different components of a

thesis (e.g., research topic, abstract, introduction, literature, methodology, analysis and discussion, and conclusion), language, mechanics, and academic writing conventions (27-30). The commonly used terms were *do not* (271 times), *need to* (231 times), *have to* (197 times), and *should* (138 times).

(27) Now in qualitative data, you *do not* impose your themes in your writing. (-ve

JUDGEMENT: propriety)

(28) You *need to* rewrite to make it readable. (-ve JUDGEMENT: propriety)

(29) With the help of the indicators, you *have to* observe the class. (-ve JUDGEMENT: propriety)

(30) You *should* not start directly like this. (-ve JUDGEMENT: propriety)

Oral feedback also contained instances of *capacity-physical* (ability to do something) (31) and *capacity-cognitive* (e.g. knowledge and clarity of understanding) (32-34). The supervisors identified students' insufficient knowledge as one of the major problems in their research and directly pointed out to students' lack clarity of what they intended to achieve with their research. The five most frequent words were *can* (71 times), *know* (23 times), *clear* (16 times), *understand* (9), and *could* (7 times).

(31) Can you study 100 buildings? (-ve JUDGEMENT: capacity: physical)

(32) Do you *know* what is the literacy rate in Magar language? (-ve JUDGEMENT: capacity: cognitive)

(33) At least you have to *be clear* on what you are doing. (-ve JUDGEMENT: capacity: cognitive)

(34) It looks like you *do not understand* what you are trying to tell. (-ve JUDGEMENT: capacity: cognitive)

(35) Because of lack of reading you *could* not come up with the statement of the problem.

(-ve JUDGEMENT: capacity: cognitive)

The instances of *tenacity* (disposition to work) were concerned with whether the students were serious, dedicated, committed, meticulous, or patient (36-40). The frequently used terms to express tenacity were *have not* (47 times), *work hard* (11 times), *careful* (10 times), *serious* (7 times), and *whatever* (4 times).

(36) You have *not done* enough literature review. (-ve JUDGEMENT: tenacity)

(37) You have to *work hard*. (-ve JUDGEMENT: tenacity)

(38) You should *be careful* in maintaining links between paragraphs. (-ve JUDGEMENT: tenacity)

(39) If you are *not serious*, who will think about you? (-ve JUDGEMENT: tenacity)

(40) Can you write *whatever you like*? (-ve JUDGEMENT: tenacity)

There were some instances of *veracity* (that is truthfulness and honesty) in oral feedback (41-43). Two commonly used words to express veracity were *wrong* (7 times) and *trust* (5 times),

(41) You have provided the *wrong* information. (-ve JUDGEMENT: veracity)

(42) We do not have much *trust* in the survey questionnaire. (-ve JUDGEMENT: veracity)

(43) If you come with qualitative findings and say this and that, we will not *trust* you. (-ve JUDGEMENT: veracity)

Only few instances of normality in oral feedback were about students' level of performance (e.g., *good*, *topper*), or receptivity to feedback (e.g., *obsessed*, *adamant*, *open*) (44-46).

(44) You were a *good* student. (+ve JUDGEMENT: normality)

(45) Learning starts only when you are *open*. (-ve JUDGEMENT: normality)

(46) You are in your *own way*. (-ve JUDGEMENT: normality)

5.3.1.3 Affect

According to Starfield et al. (2015), expression of affect comes under ‘unofficial evaluation’. The data contained few instances of affect in oral feedback ($M = 0.39$, $SD = 1.03$). Most of such evaluation ($M = 0.26$, $SD = 0.90$) was used to construe dis/satisfaction, followed by insecurity and dis/inclination. The supervisors tended to take students’ success as a matter of their pride and expressed (dis)satisfaction (47) and concern (48-49) when their expectations were not met. The three most frequently used terms to express affect were *not satisfied/dissatisfied*, *not sure*, and *worried*:

(47) Today we are *not satisfied* with your work at all. (-ve AFFECT: dissatisfaction)

(48) I am *not sure* if you can do that. (-ve AFFECT: in/security)

(49) I am *worried* about you. (-ve AFFECT: in/security)

A close examination of the examples showed that supervisors were dissatisfied when they perceived that students lacked seriousness and dedication to the research they were undertaking. The second and third examples show supervisors' doubts regarding whether the students will be able to accomplish their work.

5.3.2 Disciplinary variations in the expression of attitudes

Table 32 shows that there were cross-disciplinary variations in the distribution of different types of comments as indicated by means and standard deviations based on normalized frequency per 1000 words. Large standard deviations showed much variation within disciplines as well. One-way ANOVAs were run on the normalized frequencies of different categories of oral and written comments in positive and negative polarity separately to ascertain if the differences were statistically significant. As specified in Section 4.9.2.2 only some categories in comments under judgement and appreciation met the requirement for analysis.

Table 32. Descriptive statistics for supervisors' attitudes by mode and discipline and normalized per 1000 words (shaded cell did not meet the requirement for analysis)

Sub-systems and categories	Education				English Studies				Physics				Engineering			
	Oral		Written		Oral		Written		Oral		Written		Oral		Written	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Affect+	0.49	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.68	0.00	0.00	0.00	0.00	0.00	0.00
Affect-	0.29	0.59	0.00	0.00	0.38	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.35	1.11	0.00	0.00
Satisfaction+	0.31	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.68	0.00	0.00	0.00	0.00	0.00	0.00
Dissatisfaction	0.02	0.08	0.00	0.00	0.24	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.02	0.00	0.00
Security+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Insecurity	0.00	0.00	0.00	0.00	0.10	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.43	0.00	0.00
Inclination	0.18	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Disinclination-	0.26	0.58	0.00	0.00	0.03	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Judgement+	0.99	1.55	0.00	0.00	0.90	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	1.66	0.00	0.00
Judgement-	35.71	8.75	57.71	41.79	29.70	16.66	51.24	52.35	22.49	12.05	83.68	92.85	36.06	10.98	62.05	42.27
Tenacity+	0.30	0.58	0.00	0.00	0.18	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tenacity-	0.31	0.47	0.04	0.15	1.93	3.55	0.00	0.00	0.00	0.00	0.00	0.00	1.89	3.33	0.00	0.00
Propriety+	0.39	1.05	0.00	0.00	0.30	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.68	0.00	0.00
Propriety-	32.08	9.33	57.64	41.76	24.06	16.10	51.24	52.35	18.38	12.22	83.68	92.85	29.26	10.59	62.05	42.27
Veracity+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Veracity-	0.67	1.53	0.04	0.15	0.90	3.19	0.00	0.00	0.36	1.31	0.00	0.00	0.91	2.19	0.00	0.00
Normality+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.86	0.00	0.00
Normality-	0.13	0.32	0.00	0.00	0.14	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.35	1.35	0.00	0.00
Capacity+	0.30	0.42	0.00	0.00	0.43	1.84	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.18	0.00	0.00
Capacity-	2.52	2.87	0.00	0.00	2.67	3.30	0.00	0.00	3.74	6.45	0.00	0.00	3.65	3.76	0.00	0.00
Capacity-physical+	0.30	0.42	0.00	0.00	0.41	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.30	1.17	0.00	0.00
Capacity-physical-	0.80	1.11	0.00	0.00	1.35	2.22	0.00	0.00	2.05	5.00	0.00	0.00	2.19	2.63	0.00	0.00
Capacity-cognitive+	0.00	0.00	0.00	0.00	0.02	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.15	0.00	0.00
Capacity-cognitive-	1.72	2.48	0.00	0.00	1.33	2.25	0.00	0.00	1.69	3.76	0.00	0.00	1.46	2.22	0.00	0.00
Appreciation+	3.88	3.11	0.14	0.47	1.00	2.86	0.28	0.89	0.82	2.34	0.00	0.00	0.87	1.78	0.00	0.00
Appreciation-	20.27	9.28	66.97	62.06	35.07	21.89	84.00	92.53	81.80	24.00	146.09	154.95	41.88	14.22	48.63	42.87
Reaction+	3.48	2.65	0.14	0.47	0.56	1.43	0.28	0.89	0.19	0.68	0.00	0.00	0.79	1.73	0.00	0.00
Reaction-	0.10	0.23	0.00	0.00	0.66	1.62	0.56	1.78	0.00	0.00	0.00	0.00	0.12	0.77	0.27	0.97
Impact+	0.92	1.55	0.04	0.15	0.07	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.61	1.52	0.00	0.00
Impact-	0.00	0.00	0.00	0.00	0.02	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality+	2.57	2.11	0.10	0.33	0.49	1.42	0.28	0.89	0.19	0.68	0.00	0.00	0.18	0.68	0.00	0.00
Quality-	0.10	0.23	0.00	0.00	0.64	1.62	0.56	1.78	0.00	0.00	0.00	0.00	0.12	0.77	0.27	0.97
Composition+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Composition-	3.22	2.85	17.08	18.22	2.47	4.10	18.38	23.99	11.12	15.06	22.90	25.35	1.96	2.50	8.85	12.25
Balance+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balance-	2.46	2.00	16.20	18.00	1.54	2.61	17.54	23.53	11.12	15.06	21.68	25.08	0.96	1.80	7.76	12.29
Complexity+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Complexity-	0.77	1.18	0.79	1.48	0.94	2.12	0.00	0.00	0.00	0.00	1.21	3.44	1.00	1.48	0.83	2.42
Social valuation+	0.40	0.77	0.00	0.00	0.44	1.98	0.00	0.00	0.64	2.29	0.00	0.00	0.08	0.55	0.00	0.00
Social valuation-	16.95	8.93	49.89	57.94	31.94	22.09	65.06	79.66	70.69	19.11	123.19	156.10	39.80	14.58	39.51	41.56
Valuation-standard+	0.32	0.76	0.00	0.00	0.30	1.32	0.00	0.00	0.64	2.29	0.00	0.00	0.00	0.00	0.00	0.00
Valuation-standard-	11.74	5.38	36.77	41.51	28.77	21.31	31.12	34.48	61.64	16.30	52.89	124.96	31.96	15.04	30.10	36.02
Valuation-capacity+	0.09	0.28	0.00	0.00	0.15	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Valuation-capacity-	0.26	0.59	0.00	0.00	0.83	1.91	0.00	0.00	0.00	0.00	0.00	0.00	2.37	3.40	0.00	0.00
Valuation-tenacity+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Valuation-tenacity-	0.00	0.00	0.26	0.80	0.02	0.08	0.28	0.89	0.00	0.00	0.00	0.00	0.18	0.57	0.00	0.00
Valuation-veracity+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Valuation-veracity-	1.41	1.42	0.61	1.10	0.51	1.22	0.62	1.97	3.63	6.63	2.67	7.32	1.02	2.09	1.50	4.14
Valuation-propriety+	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.55	0.00	0.00
Valuation-propriety-	3.54	3.70	12.24	21.33	1.82	3.54	33.03	53.93	5.42	11.10	67.64	73.75	4.27	4.19	7.91	11.87

5.3.2.1 Oral feedback

Judgement: ANOVAs located a significant main effect of discipline on supervisors' expression of negative propriety in oral feedback, $F(3, 85) = 3.73, p = .01, \eta^2_p = .12$, with Education supervisors doing so more frequently than Engineering, English Studies, and Physics supervisors. The obtained effect size indicated that disciplinary background accounted for 12% of the variance in the use of negative propriety. The Bonferroni post hoc test located significant differences between Education and Physics ($p = .04, d = 1.30$) and Engineering and Physics ($p = .03, d = 0.97$) with large effect sizes. No significant effect was observed in the instances of negative tenacity, $F(3, 85) = 1, p = .40, \eta^2_p = .04$; negative veracity, $F(3, 85) = 0.22, p = .89, \eta^2_p = .01$; and negative capacity, $F(3, 85) = 0.45, p = .72, \eta^2_p = .02$ in oral supervisory feedback.

Appreciation: ANOVA found a significant main effect of discipline in the expression of positive reaction-quality, $F(3, 85) = 13.72, p = .001, \eta^2_p = .33$. The disciplinary background could explain sizable 33% of the variance. The instances of positive reaction-quality were more frequent in Education, followed by English Studies, Physics, and Engineering. The Bonferroni post hoc test found differences between Education and English Studies ($p = .001, d = 1.16$), Education and Physics ($p = .001, d = 1.52$), and Education and Engineering ($p = .001, d = 1.52$), with large effect sizes in all the cases.

ANOVA also located a significant main effect of discipline in the use of attitudinal meanings used to construe negative composition-balance, $F(3, 85) = 10.13, p = .001, \eta^2_p = 0.26$, with such instances being more frequent in Physics followed by Education, English Studies, and Engineering. In this case, disciplinary background could explain 26% of the variance in the use of negative composition-balance. As the Bonferroni post hoc test revealed, the use of composition-balance in Physics differed significantly from that in

Education ($p = .004$, $d = 0.81$), English Studies ($p = .001$, $d = 0.89$), and Engineering ($p = .001$, $d = 0.95$), with large effect sizes. There was no significant main effect of discipline in the use of composition-complexity, $F(3, 85) = 1.52$, $p = .22$, $\eta^2_p = 0.05$.

There was a significant main effect of discipline in the use of negative valuation-standard, $F(3, 85) = 21.60$, $p = .001$, $\eta^2_p = 0.73$, with more frequent use of such instances in Physics followed by Engineering, English Studies, and Education. In this case, disciplinary background had huge effect as it could explain 73% of the variance. A Bonferroni post hoc test demonstrated that Physics significantly differed from Education ($p = .001$, $d = 4.11$), English Studies ($p = .001$, $d = 1.73$), and Engineering ($p = .001$, $d = 1.98$). Significant differences were also observed between English Studies and Education ($p = .04$, $d = 1.11$) and Engineering and Education ($p = .002$, $d = 1.89$), with large effect sizes.

A significant main effect of the discipline was also found in the use of negative valuation-capacity, $F(3, 85) = 4.33$, $p = .01$, $\eta^2_p = 0.13$, with such instances being more common in Engineering followed by English Studies and Education. Disciplinary background explained 13% of the variance in the use of negative valuation-capacity. A Bonferroni post hoc test revealed a significant difference only between Engineering and Physics ($p = .03$, $d = 0.98$), with a large effect.

ANOVA also showed a significant main effect of discipline in the use of negative valuation-veracity, $F(3, 85) = 3.20$, $p = .03$, $\eta^2_p = 0.10$, with such instances being more common in Physics followed by Education, Engineering and English Studies. The disciplinary background could explain 10% of the variance in the use of negative valuation-veracity. A Bonferroni post hoc test revealed that Physics significantly differed from English Studies ($p = .03$, $d = 0.65$) and Engineering ($p = .04$, $d = 0.53$). No significant main effect of discipline was observed in the instances of valuation-propriety, $F(3, 72) = 1.33$, $p = .27$, $\eta^2_p = .04$.

5.3.2.2. Written feedback

Judgement: There was a significant main effect of discipline in the expression of negative propriety, $F(3, 72) = 3.73, p = .01, \eta^2_p = .12$, with Education supervisors passing negative judgement on propriety more frequently than their counterparts in Engineering, English Studies, and Physics. The disciplinary background explained 12% of the variance. The Bonferroni post hoc test revealed a significant difference between Education and Physics ($p = .04, d = 0.36$) and Engineering and Physics ($p = .03, d = 0.30$), with a small effect size.

Appreciation: A significant main effect of discipline was found in the use of negative valuation-propriety, $F(3, 72) = 7.81, p = .001, \eta^2_p = 0.25$, with the most frequent use of such instances in Physics followed by English Studies, Education, and Engineering. Disciplinary background explained 25% of the variance in the use of negative valuation-propriety. The Bonferroni post hoc test indicated that Physics significantly differed from Education ($p = .002, d = 0.56$) and Engineering ($p = .001, d = 1.13$) with a medium and large effect, respectively. No significant main effect of discipline was observed in the instances of negative composition-balance, $F(3, 72) = 2.07, p = .11, \eta^2_p = .08$; negative composition-complexity, $F(3, 72) = 0.57, p = .64, \eta^2_p = .02$; negative valuation-standard, $F(3, 72) = 0.41, p = .74, \eta^2_p = .02$; and negative valuation-veracity, $F(3, 72) = 0.80, p = .50, \eta^2_p = .03$.

5.4 Summary

This chapter has presented the findings related to the aspects the supervisors focused on in their feedback comments, the pragmatic functions of comments, and the supervisors' attitudes conveyed therein. It has shown that the majority of the comments failed to provide much-support to students and cater to their emotive needs. The analysis also revealed significant disciplinary variations in the foci, functions, and supervisors' attitudes expressed in feedback comments.

CHAPTER 6

PERCEPTIONS OF SUPERVISORY FEEDBACK

6.1 Chapter overview

This chapter presents supervisors' and students' perceptions of supervisory feedback based on the questionnaire surveys. It addresses the third research question formulated for the present study:

RQ 3: What are supervisors' and students' perceptions of purposes, practices, quality, challenges, and student engagement with supervisory feedback?

The chapter is divided into two main sections. The first section reports on the participants' perceptions of supervisory feedback, and the second section presents disciplinary variations therein.

6.2 Supervisors' and students' perceptions of supervisory feedback

Table 33 presents the descriptive statistics for the different scales in the supervisors' and the students' questionnaires. As presented in 4.9.2.3, altogether, there were 14 scales; 13 scales common to both questionnaires and one scale (i.e., institutional culture) exclusive to the supervisors' questionnaire. Data obtained with each scale were analysed separately to answer the research question. Independent samples *t*-tests were used to compare supervisors' and students' perceptions using the Bonferroni adjusted alpha level of 0.004 (0.05/13) (Field, 2009). Effect sizes (Cohen's *d* values) were calculated to measure the magnitude of differences. The results for each scale are presented in this section. A higher mean score indicates greater agreement with the given statements.

Table 33. Descriptive statistics for different scales by feedback role and aggregated over disciplines

Scale	Supervisors ($n = 102$)		Students ($n = 434$)	
	M	SD	M	SD
Purposes of supervisory feedback	5.32	0.49	5.13	0.63
Feedback on core research aspects	5.13	0.61	4.58	0.84
Feedback on content	5.15	0.59	4.49	0.93
Feedback on language use and academic writing conventions	5.24	0.53	4.49	0.97
Students' expectations of feedback	5.01	0.65	5.00	0.68
Students' language constraints	4.57	0.79	3.60	1.10
Supervisors' time constraints	2.72	1.21	2.62	1.29
Resource constraints	4.37	0.97	3.93	1.10
Institutional culture	4.30	0.93		
Students' positive affect	4.78	0.63	5.35	0.55
Students' negative affect	4.35	0.81	3.87	1.12
Students' cognitive engagement	4.38	0.77	5.32	0.54
Students' behavioural engagement	4.40	0.69	5.00	0.63

Note: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree

6.2.1 Perceptions of purposes of supervisory feedback

Both the supervisors and the students expressed a clear awareness that supervisory feedback aimed at developing students' research skills and academic writing skills, helping them apply theoretical knowledge of research in practice, and guiding them in making informed decisions and following ethical procedures in conducting their research. As indicated by the standard deviations, the students' views were more dispersed than those of the supervisors. On average, the supervisors' views showed stronger agreement with the statements ($M = 5.32$) than those of the students ($M = 5.13$). An independent samples t -test showed that the difference was not statistically significant at the adjusted alpha level, $t(534) = 2.83$, $p = .005$ (two-tailed); however, it did represent a small size effect (Cohen's $d = .33$). The supervisors and the students did not comment on this aspect in their response to the open-ended questions.

However, in the interviews with the supervisors and the students, the purposes of supervisory feedback were discussed prominently. All the interviewed supervisors in Education, English Studies, Physics, and Engineering stated that developing their students' research skills and academic writing skills were the primary purposes of supervisory feedback. Besides, they intended to promote students' independent learning skills (HS1, PS1), technical skills (ME2, ME3, PS1, PS2, PS3, and PS4), and presentation skills (PS1, PS2, PS3, and PS4). Two supervisors (EduS3 and ME1) thought that supervisory feedback should enable students to apply theoretical knowledge gained from research methodology courses to practice. For one Physics supervisor, supervisory feedback was an opportunity to develop students' understanding of the mathematical language so that they could "see the picture in the equation" (PS2), whereas another supervisor (PS4) viewed the primary purpose of supervisory feedback as helping students complete their thesis.

The students commented on the purposes of supervisory feedback and thesis writing in terms of the skills they developed. They stressed that thesis writing was an opportunity to enhance their research skills (EduSt1, EduSt3, EduS4, HSt1, HSt2, PSt1, PSt2, PSt4), academic writing skills (EduSt1, EduSt3, EduS4, HSt1, HSt2, MEst2, MEst3, PSt1, PSt2, PSt3, PSt4), communication and presentation skills (EduSt1, EduSt3, EduS4, HSt1, MEst2, MEst3, PSt1, PSt2, PSt3, PSt4), and in-depth study skills (EduSt2, HSt1, HSt3, MEst3). They also reported that they learned computer/technical skills (EduSt3, HSt2, PSt1, PSt2, PSt3, PSt4) and became familiar with the process of publication (MESt2, MEst3). Moreover, they gained practical knowledge in the area of their research (MESt2, PSt3), developed independent learning skills (EduSt2, EduSt4, MEst3, MEst2, PSt1), and gained confidence (HSt1, HSt2, HSt3, EduSt4, MEst3, PSt1, PSt3). Three students (HS4, MEst1, and MEst4) viewed that the primary purpose of supervisory feedback was supporting students to complete their thesis so that they could graduate.

These results show that overall the supervisors and the students had similar views regarding the purposes of supervisory feedback.

6.2.2 Perceptions of foci of supervisory feedback

With respect to the perceived foci of supervisory feedback, the supervisors consistently agreed more about the relevant statements than the students did on all three scales (i.e., core research aspects, language use and academic writing conventions, and content), as described below.

Core research aspects. The supervisors showed stronger agreements than the students did regarding provision of feedback on core research aspects (e.g., selection of the research topic, identifying research gaps, designing methodology, analysing data, and discussing findings). An independent samples *t*-test found a significant difference between their perceptions, $t(200.40) = 7.51, p = .001$ (two-tailed), Cohen's $d = 0.75$. The effect size approached the criterion for a large effect (i.e., $d = 0.8$).

The challenges that the students faced in these areas seemed to explain the differences in perceptions. In their responses to the open-ended questions that asked the participants to share their unforgettable experiences, 14 students explicitly reported that they struggled to select a research topic. One student said he/she wasted a significant amount of precious time wandering “here and there for a research topic, without knowing what to do and how to do”. Timely guidance on topic selection would have saved the student's precious time, which could have been utilized for designing and executing a better research project. For another student, it was disappointing when a topic approved by one teacher was challenged by another during the proposal defence. Perhaps the student was unaware of different aspects (e.g., feasibility of the study, availability of data, originality of the proposed research, and research design adopted for achieving the objectives) that would need to be taken into

consideration while selecting a research topic. Differences in opinions are natural in academic discussion on research issues. However, novice researchers tended to find such divergent views difficult to deal with. One student suggested that “every subject teacher should work as a communicator for the students and take every students’ topic in the department and discuss so that students do not get a different response from another lecturer at the end like me”. Such situations might have arisen because of a lack of attention in the selection of a research topic. The whole process would go in vein if a student was told to change a research topic “after the final defence” as one student said he/she had to do.

Other aspects that students found difficult were reviewing the literature, designing a conceptual framework, choosing a theoretical framework, and collecting data. Thirteen students mentioned that they found doing a literature review “very hard” and “difficult”. For one student, literature review was “the hardest part of a thesis”. They did not elaborate on the reasons underpinning the perceived difficulty.

For some students, it was tough to design a conceptual framework and choose a theory to inform their research. They found it “very difficult to outline the conceptual framework”. One student confessed that he did not understand the theoretical framework that informed his/her research even after completing the thesis, as illustrated in the following quote:

I don’t have any idea about the theory to support a whole thesis. My supervisor suggested me to follow a typical theory or a specific school of thought for my work which I couldn’t get then and till now upon the completion of my research work. As my work was about multiculturalism, I was not allowed to express my ideas freely, rather I was suggested to follow a specific culturalist and his/her school of thought, like Homi K. Bhabha or Arjun Appadurai. (Response to an open-ended question)

This student seemed to be unaware of the role of a theoretical framework in informing research.

The process of data collection also posed problems to the students. They identified challenges in access to participants, availability of data, and the time intensive nature of data collection. Some students met with participants who were “hesitant to complete the survey”, “unable to provide the required and expected data on the related topic”, and reluctant to share relevant information because they did not have “such [a] habit of speaking with someone stranger”. In other cases, the students realized that the data were not available after starting the research, as attested to by the following excerpt:

Due to the lack of data, I faced several problems ... and later the results seemed to be less effective ... So, I used many raw data which made my thesis weak... Even if we got the data, it contained several missing data which had to be filled by missing values data interpolation. (Response to an open-ended question)

This excerpt shows that the student did not conduct a preliminary survey regarding the availability of the data. Such a survey could have avoided the problems that he/she faced at a later stage. Another student shared delay in data collection due administrative procedures in the field:

My thesis is industry based. I had to face many problems during the experimentation phase of my research work. My research work had to be stopped for fortnight due to paperwork and permission from managerial hierarchy in industry. (Response to an open-ended question)

Data collection is a time-intensive task and the challenges mentioned here are common to even experienced researchers. Perhaps the students who were engaged in such a task for the first time were not cautioned about the difficulties that are, to some extent, inherent in the process of data collection tasks.

The supervisors did not comment on these aspects in their responses to the open-ended questions. However, in interviews, they said that they supported their students in

selecting a research topic (PS1, PS2, PS3, and PS4), reviewing literature (PS1, PS2, PS3, PS4, HS3), and designing theoretical or conceptual frameworks (HS1, HS2, HS3, HS4). The supervisors heavily commented on research methodology during proposal defences, although in many cases they fell short of providing explicit guidance.

Feedback on language use and academic writing conventions. An independent samples *t*-test showed a significant difference between the supervisors' and the students' perceptions regarding feedback on language use and academic writing conventions, $t(280.25) = 10.69$, $p = .001$ (two-tailed), with a large-sized effect (Cohen's $d = 0.96$). The supervisors reported providing more feedback on language use and academic writing conventions than the students perceived.

In their responses to one of the open-ended questions, eight students confided their struggles to write accurately: one student's thesis had to be corrected "five times ... due to English language"; another student found it difficult to express ideas "in simple words that can be easily understood"; a third student received many criticisms "related to my language, format and ideas of thesis draft"; and still other students were scolded for not writing accurately.

Four students reported facing difficulties in formatting, citation, and referencing. One student shared that "[he/she] forgot to make a bibliography, due to which [he/she] had problems in in-text and end-of-text citations". The supervisors did not comment on such difficulties encountered by their students in their responses to the open-ended questions. The supervisors' and the students' views regarding language-related feedback are presented in Section 6.2.4.

Feedback on content. An independent samples *t*-test found a significant difference between the supervisors' and the students' perceptions regarding feedback on content, $t(232.46) =$

8.89, $p = .001$ (two-tailed), with a large effect size (Cohen's $d = 0.85$) with supervisors agreeing with the relevant statements more strongly than the students. The supervisors and the students did not explicitly comment on this aspect in their responses to the open-ended questions. All the interviewed supervisors mentioned content as one of their foci of feedback, although the examination of feedback comments in thesis drafts revealed relatively few comments focusing on content (see Section 5.2.1).

6.2.3 Perceptions of students' expectations of supervisory feedback

The supervisors and the students were on the same page regarding the students' expectations of feedback. They seemed to agree that students needed positive and constructive feedback provided through written as well as oral means. They also viewed that supervisors should read students' work thoroughly and carefully, respect students' ideas when giving feedback, and avoid brief comments with little communicative value. An independent samples t -test found no significant difference between their perceptions, $t(534) = 0.12$, $p = .90$ (two-tailed), Cohen's $d = 0.01$. However, it was interesting to note that in their responses to the open-ended questions, several participants, especially students, offered suggestions for enhancing the quality of feedback. These suggestions were related to a) supervisory input and guidance, b) adequate time, c) motivation, encouragement, and empowerment, d) good supervisor-student relationship, and e) support in finding reference materials.

Supervisory guidance: A large number of students (i.e., 242) emphasized the need for supervisory input and guidance to better support thesis writing students. One student viewed that "the concerned supervisor must be ready to teach and guide his/her students in each and every step of the work with a positive attitude". An English Studies student expressed such expectations in a more elaborate manner:

At first, the professors and lecturers of the Central Department of English should come out of their hypocrisy and ego that is the major threat students have been facing for many years. We pay extra fees for thesis writing, but supervisors are not even available at their given time. The constructive comments and positivity should be highlighted by lecturers. Many times, they act according to their mood that really bothers students. (Response to an open-ended question)

The students also expected supervisors' guidance in selecting a "practicable, achievable research problem" instead of "just letting students randomly select [a] topic...[and] guiding after the topic has been selected".

All the Education, English Studies, and Engineering students interviewed found that the supervisory feedback they received on the content and components of their theses was less directive and less 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 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 Education students wanted their supervisors to tell them what they should include under different thesis components. Three Engineering students wanted supervisors' guidance for selecting a researchable topic, creating a boundary for their work, and keeping them on track.

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. (MEST1: Interview)

Thesis writing is the first independent piece of work for many master's students, and it is expected to transform them from reactive students into proactive researchers. However, such transformation requires supervisors' support and scaffolding, which, in the due course, might empower them to exercise their agency. The students were desperate for their supervisors' support, as illustrated by the following quote:

The fourth semester is entirely allocated to thesis writing. Rather than training us in thesis writing, they leave us free and invite us only for presentation. Students tend to work under pressure. My nature as a teacher and as a student differs largely. This is natural. As a teacher, we have a responsibility and want to keep our students on track. The students want to escape. This is natural. The whole semester is about the thesis, and they leave us free. If there were a class at least once a week, the students would meet their supervisor on a regular basis. (MEST1: Interview)

As the quote shows, MEST1 found it natural for students to be dependent on their supervisors and expect to be told what to do. He also believed that it was the supervisors' responsibility to keep their students on track. In contrast, the supervisors wanted their students to take charge of their work:

Thesis writing is mostly an independent work. Students must be self-motivated and self-regulated to conduct research. This is a high-level need which can only be fulfilled through self-regulation. If they cannot self-regulate, our feedback does not help them much. (MES3: Interview)

Such divergent expectations could minimize the chances of shared understanding between the supervisors and the students. Although independence is a much-desired skill in thesis writing students, it does require supervisory support and scaffolding for it to develop.

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. (MEST4: Interview)

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. (PSt4: Interview)

This quote suggests that there were commendable practices, too. However, such practices were few and far between.

Adequate time. Fifty-eight students explicitly mentioned that supervisors should give enough time to their students. They expected their supervisors to provide “enough time and pay more attention”, set fixed time for consultation, and be punctual in keeping their appointment. Four supervisors also acknowledged that supervisors’ time was a crucial factor in supporting students. They acknowledged that “the supervisor should supervise their theses professionally by giving enough time” for “examining students’ writing”. One Physics supervisor believed that supervisors’ effective time management would “solve many problems” prevalent in master’s thesis supervision.

Motivation, encouragement, and empowerment. The students expected motivation, encouragement, and empowerment from their supervisors to keep their spirit up in the arduous task of thesis writing. Thirty-nine students commented on this aspect in their responses to the open-ended questions. The students opined that supervisors should arouse a

student's "interest in engaging in the research study" and "inspire him/her in every step" by providing "motivating", "encouraging", and "positive feedback." Students wanted their supervisors to "be positive", "supportive" and "inspiring". They would be motivated if they saw "genuine participation of the supervisor in [their] thesis". One student urged that the "[t]endency of disposing failure on student and taking credit of success should be given up".

The supervisors also emphasized the need for encouraging, motivating, and inspiring students. As one supervisor put it, "motivating the students is of paramount importance". In the same way, one supervisor viewed that it was vital to "focus on what can be done than [finding flaws in students' work without offering guidance for improvement]". As one English Studies supervisor noted, "Too much red-tapeism is also a big deterrent in their supervision".

While the students recognized the value of critical feedback, most of them who were interviewed longed for positive and constructive feedback. They 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. (MEST3: Interview)

An 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 the data set (see section 5.2.1). A large number of these comments were highly critical and expressed in direct and face-threatening ways 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.

Good supervisor-student relationship. Thirty students underscored the need for a friendly, supportive, and respectful supervisor-student relationship. They highlighted that the supervisor should be “supportive”, “cooperative”, “helpful” and “friendly”. The students suggested that supervisors “should listen to their students’ ideas properly before criticizing their writing” because “criticism [from] the supervisor can make the student feel that writing a thesis is a burden.” One student emphasized that supervisors should “take care of students and help them to ... complete their thesis without making them humiliated”. The following quote from an English Studies student was representative about supervisor-student relationship:

Both [the supervisor and the student] should maintain a healthy relationship.

Sometimes, supervisors react to the things which are not done by students; that's the main problem.... students and teachers should respect each other while doing the thesis because if you give respect, you will get respect. However, [some] teachers have arrogance ... this needs to be changed; otherwise, students' sufferings will not be less. (Response to an open-ended question)

Some supervisors also acknowledged that they “should not impose our ideas and expectations on them” but “appreciate the idea [the students] come up with.” They believed that it was necessary to notice students' expectations before providing feedback. One English Studies supervisor recalled that “one of the students, who was already teaching courses for TOEFL

and IELTS preparation did not like my correcting his English.”. Considering thesis writing as a collaborative project would strengthen the bond of relationship, as beautifully expressed by an English Studies supervisor:

Supervision would be an enthralling experience if we see it as a collaborative project between the student and the supervisor, and the teacher tried to see the whole thing for the student’s benefits. (Response to an open-ended question)

Highlighting the collaborative nature of the work, another supervisor also suggested:

I think the supervisor and the student should sit together and work on at least twenty percent of the work together. This is important for the supervisor as well as for the student to know each other and to know the skill of editing. (Response to an open-ended question)

Some students pointed out the need of regular communication between supervisors and students because each interaction with their supervisor would create learning affordances for students.

Support for access to reference materials. Thesis writing students in the present research context did not have much access to reference materials relevant to their study. Therefore, they expected support from their supervisors regarding this matter. Altogether 11 participants (8 students and 3 supervisors) explicitly mentioned that supervisors should either inform students of useful resources or provide such materials directly. Most of the Education, English Studies and Engineering students who were interviewed expected their supervisors to provide them with guidelines in finding useful references because they believed that their supervisors were more knowledgeable and had better access to resources. EDuSt6 and HS1 viewed that university should increase both supervisors’ and students’ access to resources. Students highly appreciated when their supervisors recommended or provided [them] with reference materials or useful links. One Education student proudly shared that a faculty

member (not his supervisor) “gave me 19 articles,” which immensely supported his research.

For Physics students “getting reading resources [was] not a challenge” because supervisors guided them to access free resources, provided them with relevant resource packs, and used international collaboration when necessary. Two English studies supervisors (HS2, HS4) also directed their students towards freely available resources. However, they noted that some students could not even utilize such resources because they did not have a computer.

6.2.4 Perceptions of challenges in supervisory feedback

The principal component analysis reported in 4.9.2.3 identified three types of challenges: students’ language constraints, supervisors’ time constraints, and resource constraints, as presented below.

Students’ language constraints. An independent samples *t*-test revealed a significant difference between the supervisors’ and the students’ perceptions regarding students’ language constraints, $t(204.20) = 10.24$, $p = .001$ (two-tailed), with a large effect (Cohen’s $d = 1.01$). The supervisors ($M = 4.57$) tended to believe that their students’ low English language proficiency had a negative impact on supervisory feedback, although the students appear to disagree ($M = 3.6$).

The open-ended responses from 19 participants (12 students and 7 supervisors) commented on this aspect. According to the supervisors, the students struggled to “to connect [their] ideas with previous research articles”, “understand and get a gist from others’ academic work”, “filter out useful information from lumps of data and findings”, and “create hook statements” in writing. Two students were “scolded” by their supervisors for poor language, whereas one student “worried about how to reach the targeted pages” because “no ideas were coming”.

All the English Studies and Education students interviewed expected corrective feedback on language because most of the time, they could not “correct [their] mistakes” and tended to “think that [their] work is good.” Despite their appreciation of feedback on language, most of the student interviewees from the Engineering, Education, and English Studies reported receiving little support and, as a result, felt that they were deprived of much-deserved language learning opportunities. One English Studies student well captured a widely held belief when he said:

The supervisors rarely help us with language. The students should do it themselves. My English language is poor. I wish my writing was better. 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 another, we get the opportunity to learn the word. Maybe they do not have time for that. (HES2: Interview)

Another English Studies student struggled to articulate his ideas in English:

I felt like I could not communicate well in writing. Paraphrasing was very challenging for me. Sometimes, it was difficult because of the limited knowledge of grammar, such as maintaining consistency in using tenses. When I wanted to express the ideas that I had read in my own way, I felt like I distorted them. (HES3: Interview)

These two quotes show that the students needed and expected linguistic feedback. An Education student appreciated her supervisor’s support in refining her writing, as illustrated in the following quote:

In the beginning, it was tough for me to start writing. Therefore, I wrote whatever I could think of. Therefore, some of my writing was not clear. My supervisor made many corrections there. He provided feedback on spelling and punctuation as well. (EduSt4: Interview)

The Physics and Engineering students appeared to have comparatively better proficiency in English than the English Studies and Education students did.

Some supervisors observed that, due to their low language proficiency, students might not “understand the given suggestions” and could not “express their ideas clearly” or “substantiate arguments”. As one supervisor opined, “Students’ low language proficiency leads them to plagiarism”.

During the interviews the supervisors told me that many of their students were not prepared for thesis writing, an academically demanding task. H4 provided a compelling account of students’ unpreparedness for thesis writing:

We have academically very poor students. We cannot make them understand the concept of research, like research gaps. The feedback bounces. They even have difficulty in reading a research paper written in very simple language. How can we expect them to read bulky novels of 400-500 pages and analyse them? (Interview)

Some supervisors argued that the undergraduate programs attended by the students failed to inculcate desirable attributes and skills in students. The following quote from EduS1 identified this problem:

The main purposes of thesis writing are developing research skills and writing skills. Our students do not have the opportunity to develop these skills, even to a small extent, at bachelor level... Our bachelor program has proven to be very weak in this respect as it has not been able to develop the required writing skills in students. Our master students find it challenging to write a well-formed paragraph integrating a topic sentence, supporting details, and their own ideas... As we do not have any mechanism to select students for enrolment, I think, we do have some students who are not able to write a thesis. (Interview)

As the problem discussed here demonstrates, neighbouring activity systems, such as undergraduate programs, could have an influence on graduate research and education. This case provides an example of tertiary contradiction in the activity system of graduate research and education.

Supervisors' time constraints. No significant difference was observed between the supervisors' and the students' perceptions regarding supervisors' time constraints, $t(534) = 0.76, p = .45$ (two-tailed), Cohen's $d = 0.07$. Neither the supervisors ($M = 2.72$) nor the students ($M = 2.62$) seemed to acknowledge this as a problem in their responses to the close-ended questions.

However, not surprisingly though, 72 students in their responses to the open-ended questions complained that their supervisor was “super busy” and “always... in a hurry”, “hardly get time to meet [them]”, “did not reply to [their] mail and was out of reach for more than twenty days”. Besides, they found it “very difficult ... to get an appointment”, had to wait “the whole day” or even “for days and weeks to get his time”. The students had to return without meeting after waiting for “6 hours” and go “to the university four times to submit the same draft since [the] supervisor was not available”. One student vividly described the experience of “chasing [her] supervisor all day, as a hungry child chases his/her mother”. In the context where this research was conducted, making appointments and not keeping them appeared to be common.

Some students felt being neglected and were disappointed when their supervisors did not read their work carefully and did not provide “constructive comments” or “clear ideas”. The following quote illustrate a students' frustration:

It was very frustrating (which is a common experience in the Department I belong to) to keep waiting for the supervisor. He was not available when I needed him. I had to wait for days and weeks to get his time. (Response to an open-ended question)

Echoing similar frustration, another student thought that he/she “spent more time in waiting rather than getting critical comments” and still other was discouraged when his/her “supervisor did not give enough time to [read the proposal] properly”.

The students raised the problems caused by lack of supervisors’ time during interview as well. Students had to “waste their time waiting for their supervisors” (EduSt4) for hours only to be told that “they cannot give [them] time on the day” (HS3). The quote from EduSt6 relates such an incident:

Once, I was waiting for my supervisors from 10 am. Around 4 pm, he came to the office with a group of students and said that he could not give me time because he had a class. I felt awful on that day. (Interview)

Some students said they would not mind waiting if they knew that their supervisors would give them feedback when they had time. Unfortunately for many, that time never came.

Many supervisors admitted that they did not have time to read students’ work thoroughly (MES3) or line by line (EduS1, HS3). Consequently, students’ learning needs were heavily compromised:

My supervisor did not read my work thoroughly, which created many problems for us. The system of supervision that we have now does not help us to develop professionalism in research. The students have very little knowledge of research... despite taking research courses. The research has great practical value; however, the way we are mentored for conducting research is not satisfactory. As students, we cannot find our own problems despite our rigorous attention because we have very little knowledge of research. (EduSt4: Interview)

This quote challenges the very foundation of supervisory feedback, that is, scaffolding students’ learning. The supervisors’ lack or management of time for providing feedback also resulted in superficial feedback that rarely helped students:

If the teachers identified our mistakes and provided explicit comments for improving the work, it would be highly effective. Otherwise, it is not clear. We write whatever we can by using the materials that are available and try our best. If they underline a section and do not tell us what we should do, we do not know what we must do. I can see the teacher has underlined many sentences here. However, there are no guidelines for improvement. They tell us orally, but it would be helpful if they wrote the comments. (HSt2: Interview)

Although the supervisors rarely commented on this issue in responding to the open-ended questions, it was prominent the interviews. Six supervisors (i.e., EduSt3, HS1, HS2, HS3, MES1, MESt4) confided that they were unable to manage time because of their full teaching schedule, whereas three others (EduS2, HS2, HS3, HS4) attributed their tight time frame to their heavy supervisory load.

Supervisors' time constraints were real. However, the availability of time is also an attitudinal issue. As PS2 rightly said, "Do not take students if you cannot train them." However, in social sciences with many students, supervisors did not have even this choice. It is worth noting that the supervisors who were serious and dedicated tended to manage time well even if they were busy.

Resource constraints. An independent samples *t*-test located a significant difference between the supervisors' and the students' perceptions regarding resource constraints, $t(534) = 3.70$, $p = .001$ (two-tailed), with a small effect size (Cohen's $d = 0.42$). The supervisors as a group perceived more resource-related challenges than the students did.

Twenty-four participants (20 students and 4 supervisors) explicitly mentioned resource constraints in their responses to the open-ended questions. The participants frequently commented on shortages of reading resources, lab resources, and financial support. Lack of access to reading resources was the most prominent issue in this regard. The students

reported that they “wandered here and there” in search of materials, found it difficult to “interpret and analyse the data properly” due to a lack of reference materials, and even “started with one topic and completed [the] research on another topic because of resource unavailability.”

The supervisors and the students mentioned three types of resource constraint during the interviews: reading resources, laboratory facilities, and research funds. The shortages appeared to be particularly acute in social sciences. All the interviewees in Education and five interviewees in English Studies (HS1, HS2, HS4, HSt1, HSt3) explicitly mentioned this problem. Unavailability of resources even caused misunderstandings because “for many of our students, review of research meant the review of previous theses” (EduS1).

An Education student was “tired of searching for materials” (EduSt3: Interview) and so was the case for an English Studies student as could not “find anything in the area of [his/her] interest” (HSt3). Although Engineering students had some access to Science Direct within the campus premises, they, too, found it tough 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 resources matters a lot. We cannot purchase papers to read and do not get free access to relevant resources. (MESt1: Interview)

However, some supervisors complained that the students did not even utilized the freely available resources. As one supervisor reasoned this was perhaps, they had “no idea about how they can [do so]” (EduS3).

Unlike in Education and English Studies, research in in Physics and Engineering incurred higher costs and was therefore, compromised due to the lack of state-of-art lab-facilities and research funds. Three interviewees in Engineering (i.e., MES3, MESt1, and

MES2) and four in Physics (i.e., PS4, PSt1, PSt2, and PSt3) commented on the problem. The following quote from MES2 illustrates the case in point:

The most pressing challenge for quality thesis research is the lack of funds. Our master's degree program is self-financed ... We do not have a laboratory for research... Therefore, it is very difficult to conduct lab-based research. This has diverted many students' attention to survey research. Because we are a technical institute, we discourage survey research. (Interview)

The quote highlights how the research priorities of Engineering had to be compromised because of the lack of resources. MES3 hypothesized that “we could produce research output of international level if we had enough resources”. An Engineering student echoed the same problem when he said:

We are not allowed to conduct quantitative research such as a survey, and not many resources are available for experimental work. I wanted to do an experiment on steam generation but was not certain about the output/results. There is not much lab set-up for performance analysis. (MES1: Interview)

MES2 also stressed the scarcity of lab resources and its negative impact on research:

If some students want to go for experimental research, they face problems of lab set-up. We do not have the precise instruments to conduct empirical research. Neither can students produce such materials themselves, nor are they available in the market.

Even if they come up with something, it is difficult to verify their results. (Interview)

The impediments created by resource shortages was also evident in Physics. As PSt1 noted, they had to wait for a month to get their turn to work in the lab. To make things worse, once the supercomputer they used for simulation “did not work for ten days, and some of [them] even lost their data” (PSt1). They also had to face difficulty because of “a power cut, Wi-Fi disconnection, and malfunction of the computer” (PSt3).

Institutional culture. The supervisors indicated that institutional culture was not supportive for graduate research and supervision. They complained that their students ignored feedback, were less committed to research, and tended to plagiarize. One of the reasons they identified was the students' inability to manage time because of multiple factors (e.g., a full-time job and family responsibilities). Some students tended to wait until the end of the maximum study period to get through the process, as illustrated by the quote from EduS4:

Some students do not work on time and leave the thesis work until the end of the fifth year. When their time is due to expire, they come to us and tell us that they must complete their thesis soon. How can we help them to produce good work in such circumstances? We tend to feel that we should help them to get their degree even if they do not meet the standard. (Interview)

As pointed out by supervisors, one terrible consequence of students' inability to manage time because of the full-time job was having a thesis written by others because they tended to think that "if I spend salary for a month, I can get it done" (HS4).

Besides, the prominence of exchange value of a thesis (i.e., a requirement for graduation) over its use values (i.e., learning from the process) seemed to have contributed to plagiarism. Students who did not see the relevance of research in their future career tended to focus mostly on completion, even by resorting to illegal means:

There is also a problem of having a thesis written ... Some teachers in the Departments are also involved in this wrongdoing. The main reason behind this malpractice is that the research skills that students develop from writing a thesis in our Department are not much useful in future research that students might involve in. (HS4: Interview)

This indicates that until and unless students understood the underlying values of being engaged in research, they would not put their heart to the work and the primacy of exchange value over use value (i.e., a primary contradiction) would continue.

There also appeared to be a lack of mechanisms to promote sound and rigorous research practices. The analysis revealed that the failure of the concerned authorities to act against plagiarism seemed to condone it implicitly:

We have not been able to give a message that students have to bear the cost if they do not work themselves. In the last viva, one student could not speak anything.... Then she admitted that she had her thesis written...[and] disclosed the name of the person, an M.Phil. Graduate of the same Department! ... This is a legal case and no action was taken from the Department ... I once asked the controller of the examination, “Why don’t you take initiation to check such malpractices? Why cannot you bring the culprits into jurisdiction?” No one is paying attention. (HS4: Interview)

The above quote indicates a very complex situation regarding the community’s stance on plagiarism, which would certainly impact on the students’ understanding of the issue.

Furthermore, it revealed the futility of efforts made by some concerned members when those in a position of power turned a deaf ear and blind eye to the grave situation. Because of lax institutional mechanism, some students searched for ways to circumvent the rules, as illustrated by the following quote:

Only making rules is not enough. Ten meetings between supervisors and students are mandatory. However, there is misconduct of getting all the signatures at the same time. (MES1: Interview)

Also contributing to poor graduate research culture was low remuneration for supervisors. In their response to the open-ended questions, 14 supervisors (Education = 8, English Studies = 5, Engineering = 1) indicated that increasing remuneration would encourage them to

undertake “the serious task of making students research”. One Education supervisor confided that lack of incentives discouraged him from supervision:

On our campus, the remuneration to the supervisor is very low. The supervisor’s remuneration is divided into the non-related staff like Campus Chief, Assistant Campus Chief, Administration Officer, etc. This discourages me from spending much time on such work. So, I usually request the HOD not to assign me the task.

(Response to an open-ended question)

Apart from the supervisor and the student concerned, thesis writing involves the division of labour among research committee members and external examiners, each entrusted with certain roles and responsibilities. However, the analysis revealed that some members failed to understand the gravity and seriousness of the academic responsibilities entrusted upon them, as can be seen in the following quote:

It is a bitter reality that senior supervisors are careless. One supervisor during a viva said, “I have not read this student’s thesis because I could not manage time. I just asked him to submit the thesis for viva. I do not know how the work is”. (EduS4: Interview)

A supervisor daring to admit such negligence during a viva shined light on the problem and raised questions about the fundamental purpose of supervision. HS3 shared similar cases of negligence that he experienced as an external examiner:

Some supervisors are not accountable to their supervisory work. Sometimes I request the Head of the Department not to appoint me as an external examiner for theses supervised by certain supervisors because they do not even read a single sentence in their students’ thesis. They directly send the draft for viva. Many students are not getting proper guidance. (HS3: Interview)

Such cases of negligence shook the very foundation for the division of labour and just funnel the division of labour into a ritual process. The following quote from HS4, as a member of a research committee that recommended theses for viva, illustrates the critical conflict in the division of labour:

I rejected three theses [supervised by] a supervisor and now I am having a hard time to make these students work; that is his work. What can we do? Supervisors overlook many things. If supervisors were serious, 80% of misconducts could be controlled. Even people in the research committee are not serious. They just ask students to submit their thesis even if the theses are not ready for viva. (Interview)

For many students, the intended outcome of thesis writing could not materialize in the absence of collaboration between the supervisor and the student. However, what supervisors and students do is just the tip of an iceberg. What lies beneath is the institutional culture.

6.2.5 Perceptions of students' engagement with supervisory feedback

Students' engagement with supervisory feedback was measured by four different scales: students' positive affect, students' negative affect, students' cognitive engagement, and students' behavioural engagement. The supervisors and the students held significantly different views in all these aspects. The students seemed to believe that they were emotionally, cognitively, and behaviourally engaged with feedback more than their supervisors thought they did. The supervisors appeared to believe that their students showed little commitment to research, tended to ignore the feedback they provided, and easily resorted to plagiarism.

Students' positive affect. The supervisors and the students held significantly different views with respect to students' positive affect, $t(534) = -9.16$, $p = .001$ (two-tailed), with the students believing that they more positively engaged with feedback than their supervisors

perceived. The difference had a large effect size (Cohen's $d = 0.96$).

Ninety-seven participants (87 students and 7 supervisors) who commented on students' positive affect associated it with supervisors' behaviours. The students reported feeling good when their supervisors "became interested in [their] topic," "encouraged [them]", and "helped [them] to find reference materials in the library." They appreciated it when their supervisors "strongly supported [them] to write a thesis," "was really kind and cooperative," and "motivated [them] for better improvement rather than criticizing [them] although there [were] many errors and deficiencies." Some students acknowledged that their supervisors "downloaded paper for [them]", and openly praised and appreciated their writing as a "well written" piece of work. The students were highly grateful when their supervisors made positive and motivational comments, and "treated [them] as a friend". In the same way, the students' enjoyed their work when they received "proper guidelines and full support" from their supervisors.

Six students who recognized the learning affordances created by research were "excited" and found thesis writing a "joyful experience." Thesis writing offered them a chance to "experience cutting edge knowledge" by going "beyond my subjects" to "develop research skills". Other self-regulated students fared well because they were "very energetic to perform [their] work", and "strictly followed the [prescribed] thesis format".

It is important to note that the students with a growth mindset evinced positive attitudes irrespective of supervisory support, as illustrated in the following quote from an Education student:

In an initial phase of my research, I faced many challenges regarding my research title. When I went to my supervisor with one research topic which was related to English as a medium of instruction... my supervisor said, "in this area there is a lot of research...come up with another topic". I tried to convince him, but he replied, "it's

not a market where you can do bargaining”. Then, I asked some teachers for research topics, some of them suggested some areas and topics but some of them made fun of me. I remember there was one program for our juniors about how to write research and in front of the mass one of the teachers said, “Jerry [pseudonym]! Did you get a topic?... don’t ask for a topic like Jerry”. At that moment the hall was full of laughter; I felt humiliated in front of that mass...[Finally], I selected a topic in the area of CDA [Critical Discourse Analysis] ... In my viva all teachers, internal supervisor, and external supervisor praised my work. So, I am grateful to the teacher who made me feel humiliated because of that I was able to complete my research work in more systematic way. (Response to an open-ended question)

The supervisors who commented on students’ positive affect shared that students expressed “gratefulness for the comments” or radiated “joy in the faces... once the ideas [the supervisor] present begin working in [students’] research paper.” One supervisor in response to the open-ended question proudly stated how one of his students who was nervous in the beginning realized the value of the learning process through a series of feedback sessions:

One of my students came to me with a draft proposal and I provided her feedback along with the reading materials ... She reluctantly agreed to do what I suggested... After realizing her anxiety, I gave her feedback step-by-step... She tended to think that once she accommodated my feedback, there would not be much to do... [at times] she thought that I was giving her too much work...After completing her thesis, she told me that she understood the research process as she went through the series of feedback sessions ...she was so pleased that she worked with me on the thesis.

(Response to an open-ended question)

Overall, the analysis shows that supervisors’ help support, and care contributed to their positive engagement with supervisory feedback.

Students' negative affect. An independent samples *t*-test found a significant difference between the supervisors' and the students' perceptions regarding students' negative affect, $t(203.86) = 5, p = .001$ (two-tailed), with the supervisors expressing stronger agreement with the given statements than the students did. The difference had a medium effect size (Cohen's $d = 0.49$). However, the larger standard deviation in the case of students indicated considerable intragroup variation.

Students' negative affect was one of the themes that frequently came up in the participants' responses to the open-ended questions, with 69 participants (64 students and 5 supervisors) sharing it as their unforgettable experience. Four supervisors who mentioned this aspect said that their students would, "often cry in front if [they] become too critical on their work", "tend to think that the supervisor is intentionally giving them a burden" and "carry emotional dispositions rather than reading and reviewing literature".

Noticeably though, most of the students identified their supervisors as the source of their negative emotions. Expressions like *disappointed, frustrated, bitter experience, insulted, worried, scolded, hard times, too much stress, feel panic, bored, felt like torture, rebuked, terrible, horrible, literally wept*, and *awful* were commonly used by students to describe their negative feelings. They were disappointed when their supervisors "shouted at [them] when [asking for clarification]" or "guided [them] to a different path". They felt upset when their supervisors added "new and difficult [requirements]," "asked very irrelevant questions," "gave negative comments in an impolite way," "screamed at [them] using bitter words," and "embarrassed [them]".

If feedback is to work, it should respect students' identity and promote their self-confidence, without which they can neither appreciate nor engage with the feedback they receive. However, the scathing effect of feedback can be profound when it attacks students' already fragile being, as can be seen in the following quote:

My viva was another horrible thing that could merely happen to students. I faced my teacher, who was more sarcastically hitting my personal life than [talking about] the issues I [had] raised. Every student has a different life. How can a teacher be so judgemental about someone's personal life?

This student's criticism raised a question about the fundamental purpose of supervisory feedback, which is to facilitate students' learning. The practice of commenting on student's personal life is simply unacceptable and unethical. It also indicates the supervisor's lack of feedback literacy, that is, keeping students' learning at the centre while providing feedback.

The students also felt frustrated because of "the lack of proper knowledge of citation and referencing" and the need for "revising [their] work again and again." For one student, "brainstorming and research felt like a torture," while another "got fed up with frequent re-editing of [the] thesis". The conflicting perspectives held by research committee members bothered a student because although the student had followed his/her internal supervisor's suggestions, "the external supervisor suggested [him/her] to rework for the same topic". The following response from a student illustrates the multiple factors contributing to his/her negative emotions:

There are so many frustrating experiences I have had so far. It is because I was personally very scared of this thesis writing as I had seen my elder sister facing so many problems in completing it. And I had no experience of writing and zero idea on choosing a topic and doing research. As a result, my proposal was rejected, later my thesis was rejected, and I started doing another research. One of the unforgettable experiences was being rejected after completing analysis and interpretation of the collected data. As I started late, I got a new supervisor. He is a nice person and a great educationist but when he said whatever you did is not right because you did wrong in checking answer sheets of the respondents, that made me depressed for more than a

month and I had a very negative attitude towards thesis writing. (Response to an open-ended question)

The student's pre-existing negative attitude, lack of knowledge, and lack of proper and timely guidance made her start the journey with the feeling of being scared and end it feeling depressed. One student, in responding to one of the open-ended questions, equated thesis writing with a terrible choking experience:

Yes, it is true that dealing with research is not easy work but sometimes, it becomes like a stone which is stuck in your throat. Neither one can swallow it nor throw it out. I have felt the same emotional tragedy while completing my thesis because my thesis is completely different from my proposed thesis. (Response to an open-ended question)

The analysis showed that the students had negative emotions associated with thesis writing. However, contrary to some supervisors' perceptions, these did not arise from students' negative disposition but seemed to have resulted from insufficient guidance and support.

Students' cognitive engagement. An independent samples *t*-test revealed a significant difference between the supervisors' and students' perceptions of students' cognitive engagement with supervisory feedback, $t(125.6) = -7.94, p = .001$ (two-tailed), with a large effect size (Cohen's $d = 1.41$). The students perceived a higher level of cognitive engagement than their supervisors did. Only 5 participants (3 students and 2 supervisors) commented on students' cognitive engagement in their responses to the open-ended questions. Two students considered it an excellent learning opportunity while other revised his/her writing carefully before submitting it the supervisor. The students who took thesis writing and supervisory feedback as learning opportunities evinced better cognitive engagement with supervisory feedback (Section 7.2.3).

Students' behavioural engagement. An independent samples *t*-test identified a significant difference between the supervisors' and the students' perceptions of students' behavioural engagement with supervisory feedback, $t(142.4) = -9.16, p = .001$ (two-tailed), with a large effect size (Cohen's $d = 0.90$). The students again perceived a higher level of behavioural engagement than their supervisors did. Twenty-eight participants (8 students and 20 supervisors) explicitly mentioned students' behavioural engagement in their responses to the open-ended questions. Interestingly, all the students who commented on this aspect were from Physics and Engineering, whereas all the supervisors except three were from Education and English Studies. The students were proud to share that they spent "much time at a laboratory up to 10:00 pm", "12 hours per day for ten days", and "worked hard day and night". Some students even stayed "continuously awake for 36 hrs just to get the result", "stay whole night to revise all the graphs as instructed by my supervisor," and made "more than twenty attempts to reach near to my expected results." A student provided an excellent example of collaborative work, as illustrated in the following response to one of the open-ended questions:

We carried out thesis with our joint effort. We were only five students to carry out dissertation in air pollution and climate change. In order to complete our task, we need[ed] to [have] knowledge on various software including fortran, matlab, GIS and so on. We took each software for discussion and to teach each other. One friend chose to study GIS, other matlab, and so on. We used to self-study the process first and next day we [taught] each other so that we get knowledge on whole software. Without our unity, we [would not have] finished our thesis in time. So, I always remember my friend and their support. (Response to an open-ended question)

Unlike students who chose to focus on their positive aspects of behavioural engagement, the supervisors commenting on students' behavioural engagement mostly highlighted students'

lack of engagement. They complained that their students did not make “any correction after receiving feedback,” “neither [listened] to feedback nor [paid] attention to it,” and “disappear[ed] after getting feedback to improve their work.” Some of their students tended to “wait until the last hour to submit their thesis,” and “hardly follow[ed] the schedule...or [met] deadlines.” In their views, some students were “good at making excuses,” “submitted the same draft carelessly without inserting any suggestion,” did not take revision “as a chance to improve themselves” and tended to “take the supervisor as a person to do everything”. One supervisor complained that his student ignored “the suggestions for six times”. The following response well captures the supervisors’ frustration caused by students’ negligence:

There was a student who did not bring the corrections I made in her writing though I had corrected the chapters repeatedly. This was very frustrating. I had to threaten her to say that I would quit supervising her. Until I did that, she hadn’t made any corrections. (Response to an open-ended question)

However, three supervisors Physics appreciated their students’ dedication to their work. One supervisor was proud that his/her student had a “paper published in a peer review journal prior to his thesis defence”. Another supervisor appreciated his/her student’s perseverance, as illustrated in the following quote:

One of my students failed in his first three attempts to get the desired product during his experiments. But he did not give up. He carried out the experiments repeatedly taking all precautions and ultimately became successful in preparing the desired compound. (Response to an open-ended question)

Notwithstanding three Physics supervisors’ positive perceptions of students’ behavioural engagement, in general, the supervisors held the view that the students’ behavioural engagement with supervisory feedback was not optimal. The supervisors’ responses to the open-ended questions corroborated their views expressed through the closed-ended items.

6.3 Disciplinary variations in the perceptions of supervisory feedback

Two-way ANOVAs were conducted to examine disciplinary variations in the perceptions of feedback and to find out if there was an interaction effect between roles (supervisor vs. student) and disciplines (Education vs. English Studies vs. Physics vs. Engineering) on perceptions of different aspects of supervisory feedback. The numbers in the Figure represent the questionnaire scale (1 = strongly disagree, 2 = disagree, 3 somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree).

6.3.1 Disciplinary variations in perceptions of the purposes of supervisory feedback

There was a significant main effect of feedback role on the perceptions of purposes of supervisory feedback, $F(1, 528) = 6.92, p = .009, \eta^2_p = .01$, indicating that the supervisors agreed more with the stated purposes ($M = 5.32, SD = 0.49, 95\%$ bias corrected CI [5.32, 5.41]), than the students did ($M = 5.13, SD = 0.63, 95\%$ bias corrected CI [5.08, 5.19]). The main effect of discipline on the perceptions of purposes was non-significant, indicating that perceptions of purposes of supervisory feedback were similar in Education ($M = 4.80, SD = 0.72, 95\%$ bias corrected CI [4.68, 4.76]), English Studies ($M = 4.62, SD = 0.81, 95\%$ bias corrected CI [4.47, 4.76]), Physics ($M = 4.91, SD = 0.72, 95\%$ bias corrected CI [4.76, 5.06]), and Engineering ($M = 4.48, SD = 0.91, 95\%$ bias corrected CI [4.36, 4.61]). There was no significant role/discipline interaction, $F(3, 528) = 0.59, p = .62, \eta^2_p = .003$, indicating that the significant between-role differences remained consistent across the disciplines.

Figure 6 shows that, on average, the supervisors across disciplines agreed more with the stated purposes of supervisory feedback than the students did. However, there was no interaction between feedback role and discipline.

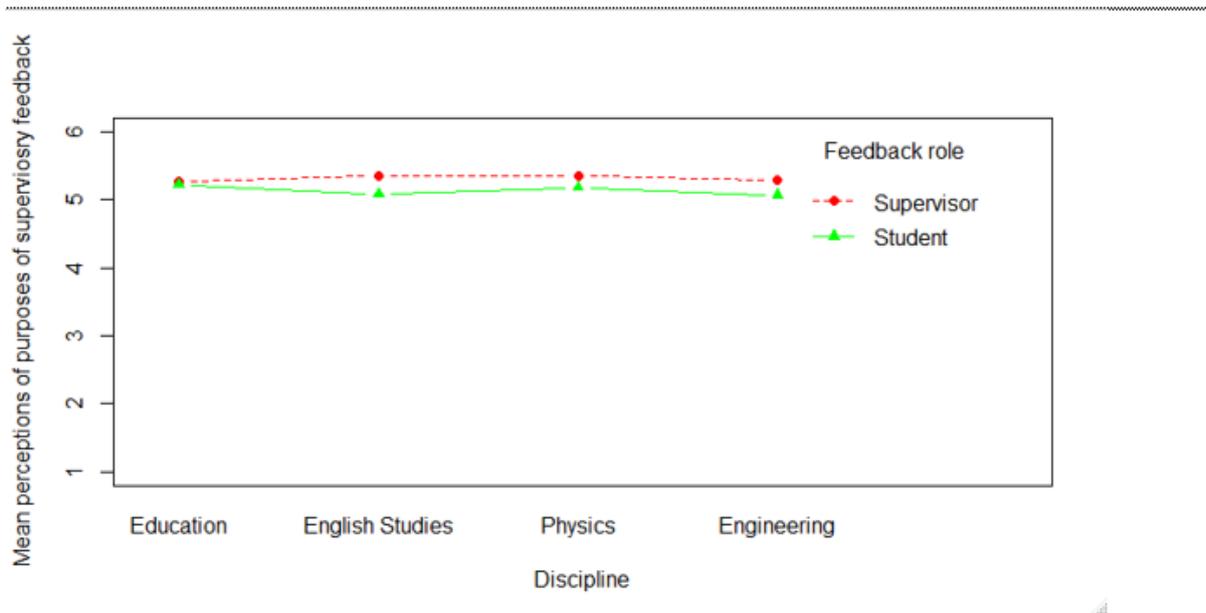


Figure 6. Interaction between feedback role and discipline on the perceptions of purposes

6.3.2 Disciplinary variations in perceptions of the foci of supervisory feedback

Core research aspects. There was a significant main effect of feedback role on the perceptions of supervisory feedback on core research aspects, $F(1, 528) = 34.42, p = .001, \eta^2_p = .06$, demonstrating that the supervisors thought they provided more feedback on core research aspects ($M = 5.13, SD = 0.61, 95\% \text{ bias-corrected CI } [5.00, 5.24]$) than the students thought they received ($M = 4.58, SD = 0.83, 95\% \text{ bias-corrected CI } [4.50, 4.65]$). The main effect of discipline on the perceptions of feedback on core research aspects was also significant, $F(3, 528) = 3.56, p = .01, \eta^2_p = .01$, although the effect size was very small. The post hoc test showed that the perceptions of Physics participants differed from those in Education ($p = .04, d = 0.17, \text{ mean difference} = 0.19, 95\% \text{ bias-corrected CI } [-0.01, 0.37]$), English Studies ($p = .001, d = 0.39, \text{ mean difference} = 0.32, 95\% \text{ bias-corrected CI } [0.14, 0.50]$), and Engineering ($p = .001, d = 0.53, \text{ mean difference} = 0.38, 95\% \text{ bias-corrected CI } [0.16, 0.60]$). As indicated by Cohen's d , the difference between Physics and English Studies

was small, whereas the difference between Physics and Engineering was medium. However, although the difference between Physics and Education was significant with a small effect size, the confidence interval included a zero, suggesting a less than robust difference. There was no significant role/discipline interaction, $F(3, 528) = 0.67, p = .57, \eta^2_p = .004$ indicating that the significant between-role differences remained consistent across the disciplines.

Figure 7 displays that, on average, the supervisors across the disciplines believed that they provided more feedback on core research aspects than the students thought they received. As can be seen in Figure 7, the Physics participants provided and received more feedback on core research aspects than their counterparts in the other disciplines. No interaction between feedback role and discipline can be observed.

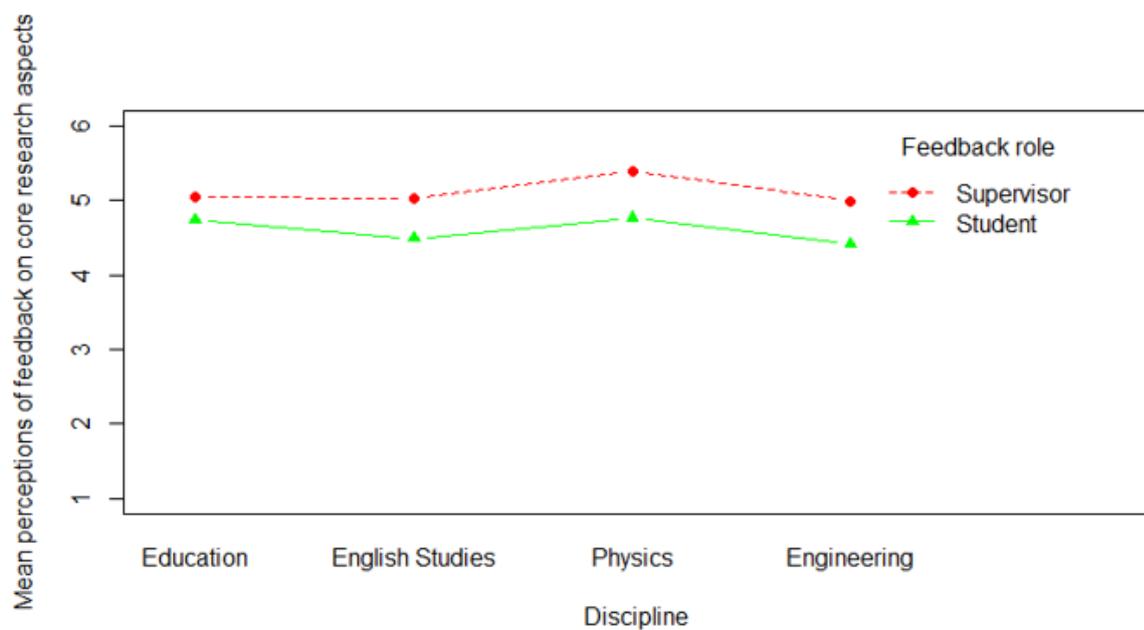


Figure 7. Interaction between feedback role and discipline on the perceptions of feedback on core research aspects

Content. There was a significant main effect of feedback role on the perceptions of feedback on content, $F(1, 528) = 41.77, p = .001, \eta^2_p = .07$, indicating that the supervisors thought they provided more feedback on content ($M = 5.15, SD = 0.59, 95\% \text{ bias corrected CI } [5.02, 5.27]$)

than the students thought they received ($M = 4.93$, $SD = 0.93$, 95% bias corrected CI [4.41, 4.58]). The obtained effect size showed that feedback role accounted for 7% of variance. The main effect of discipline on the perceptions of feedback on content was also significant, $F(3, 528) = 3.21$, $p = .02$, $\eta^2_p = .02$. The post hoc test showed significant differences between Education and Engineering, ($p = .02$, $d = 0.53$, mean difference = 0.28, 95% bias corrected CI [0.05, 0.51]), Physics and English Studies ($p = .007$, $d = 0.31$, mean difference = 0.28, 95% bias corrected CI [0.08, 0.49]), Physics and Engineering ($p = .001$, $d = 0.57$, mean difference = 0.39, 95% bias corrected CI [0.17, 0.63]). There was no significant role/discipline interaction, $F(3, 528) = 0.95$, $p = .42$, $\eta^2_p = .005$.

Figure 8 presents the interaction between feedback role and discipline on the perceptions of feedback on content. As shown in the figure, on average, the supervisors across the disciplines believed that they provided more feedback on content than the students thought they received. The gap in perceptions appears to be narrower in Education and wider in Engineering. No intersection between lines suggests that discipline and feedback role did not have a combined effect on the supervisors' and the students' perceptions of feedback on content.

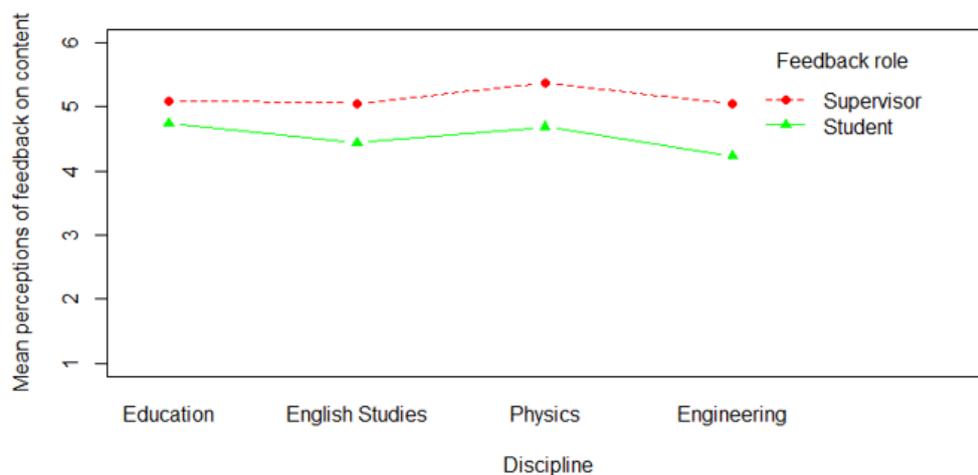


Figure 8. Interaction between feedback role and discipline on perceptions of feedback on content

Language use and academic writing conventions. There was a significant main effect of feedback role on the perceptions of feedback on language use and academic writing conventions, $F(1, 528) = 47.65, p = .001, \eta^2_p = .08$, indicating that the supervisors thought they provided more feedback on language use and academic writing conventions ($M = 5.24, SD = 0.53, 95\% \text{ bias corrected CI } [5.13, 5.34]$) than the students thought they received ($M = 4.5, SD = 0.97, 95\% \text{ bias corrected CI } [4.40, 4.59]$). Feedback role accounted for 8% of the variance. The main effect of discipline on the feedback on language use and academic writing conventions was also significant, $F(3, 535) = 10.83, p = .001, \eta^2_p = .06$. The variable explained 6% of the variance. The post hoc test located significant differences between Education and Engineering, ($p = .001, d = 0.77, \text{ mean difference} = 0.62, 95\% \text{ bias corrected CI } [0.41, 0.81]$), English Studies and Engineering ($p = .001, d = 0.59, \text{ mean difference} = 0.49, 95\% \text{ bias corrected CI } [0.28, 0.69]$), Physics and English Studies ($p = .001, d = 0.33, \text{ mean difference} = 0.27, 95\% \text{ bias corrected CI } [0.12, 0.42]$), and Physics and Engineering ($p = .001, d = 0.90, \text{ mean difference} = 0.76, 95\% \text{ bias corrected CI } [0.55, 0.97]$). There was no significant role/discipline interaction, $F(3, 528) = 0.36, p = .78, \eta^2_p = .002$.

Figure 9 illustrates the interaction between feedback role and discipline on the perceptions of feedback on language use and academic writing conventions. As can be seen in the figure, on average, the students across the disciplines viewed that they received less feedback on language use and academic writing conventions than the supervisors thought they provided. Supervisory feedback on language use and writing conventions appeared to be higher in Physics than in other disciplines. The figure does not show any combined effect of feedback role and the discipline on the participants' perceptions.

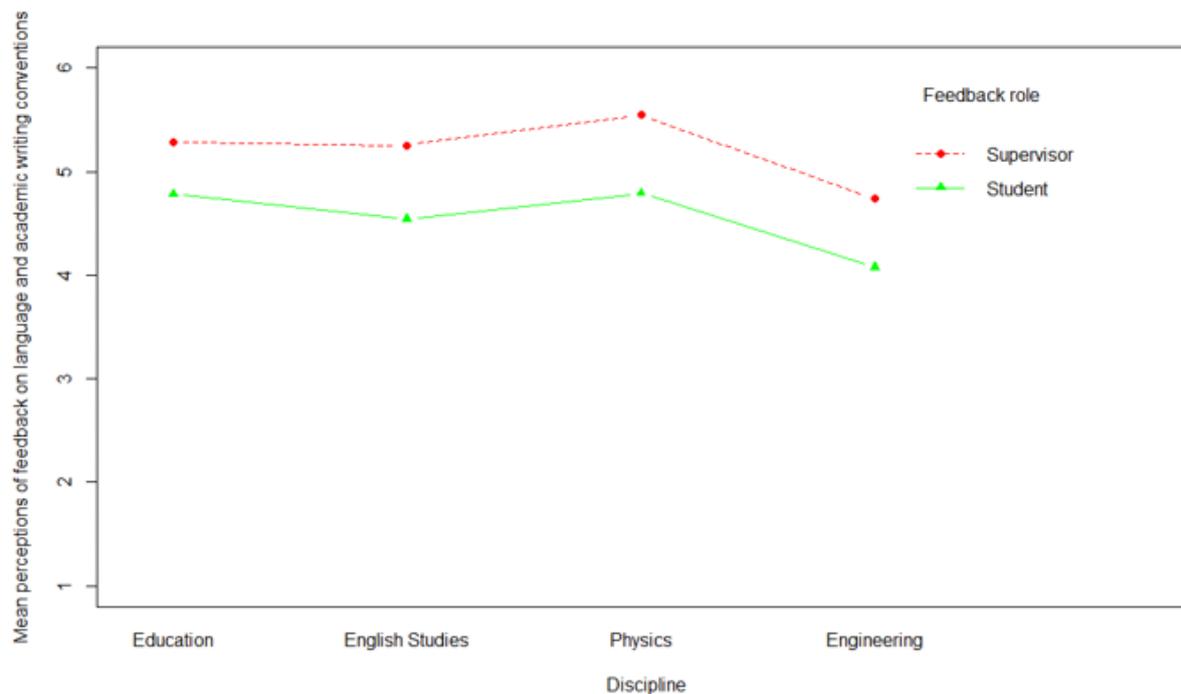


Figure 9. Interaction between feedback role and discipline on the perceptions of feedback on language use and academic writing conventions

6.3.3 Disciplinary variations in perceptions of students' expectations of feedback

The main effect of feedback role on the perceptions of feedback on students' expectations of feedback was not significant, $F(1, 528) = 0.003, p = .95, \eta^2_p = .001$, indicating the supervisors ($M = 5.01, SD = 0.65, 95\%$ bias corrected CI [4.88, 5.16]) and the students ($M = 5, SD = 0.68, 95\%$ bias corrected CI [4.93, 5.07]) had similar perceptions. The main effect of discipline on the perceptions of feedback on students' expectations of feedback was also not significant, $F(3, 528) = 1.67, p = .76, \eta^2_p = .009$, showing that there was no significant variation in the perceptions of participants in Education ($M = 5.07, SD = 0.70, 95\%$ bias corrected CI [4.96, 5.19]), English Studies ($M = 5.10, SD = 0.63, 95\%$ bias corrected CI [4.99, 5.22]), Physics ($M = 4.89, SD = 0.71, 95\%$ bias corrected CI [4.76, 5.02]), and Engineering ($M = 4.96, SD = 0.64, 95\%$ bias corrected CI [4.86, 5.06]). The interaction between feedback role and discipline was nonsignificant, $F(3, 528) = 1.97, p = .12, \eta^2_p = .01$.

Figure 10 plots the interaction between feedback role and discipline on the perceptions of students' expectations of feedback. As the intersected lines in the figure show, although not significant, there was an interaction between feedback role and discipline. The English Studies and Engineering students agreed more with the statements than the respective supervisors, whereas the scenario appeared to be opposite in Education and Physics.

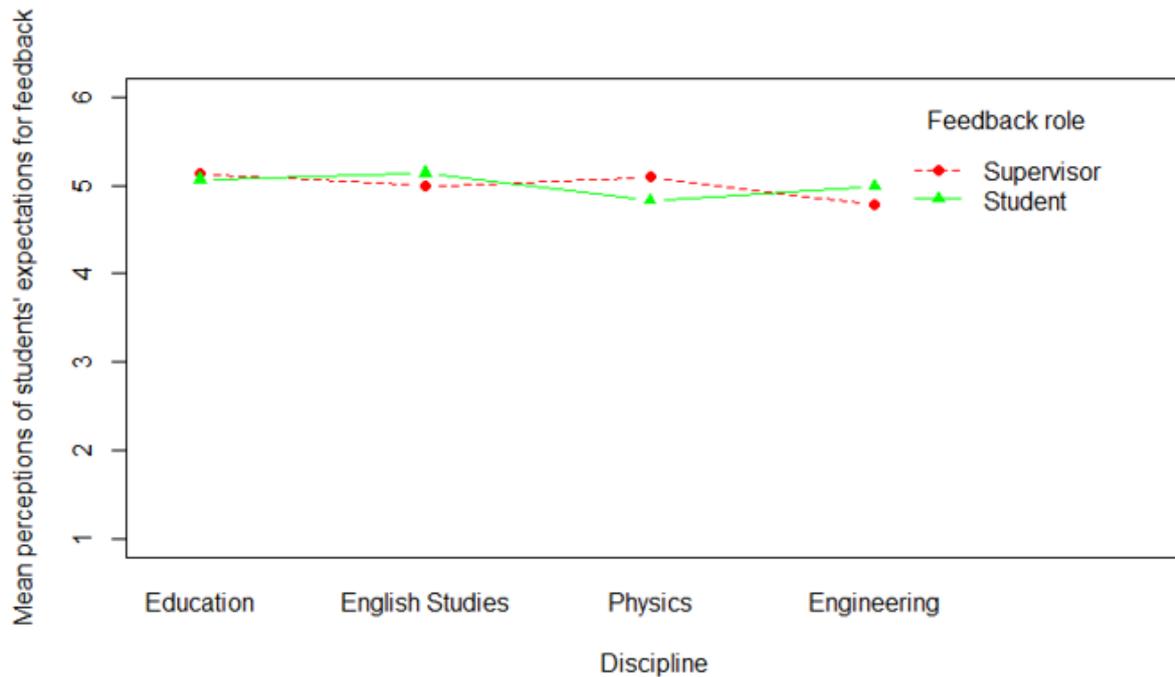


Figure 10. Interaction between feedback role and discipline on the perceptions of students' expectations for feedback

6.3.4 Disciplinary variations in perceptions of challenges in supervisory feedback

Students' language constraints. There was a significant main effect of feedback role on the perceptions of students' language constraints, $F(1, 528) = 63.60, p = .001, \eta^2_p = .11$, indicating that the supervisors perceived students' language constraints to be more severe ($M = 4.57, SD = 0.79, 95\% \text{ bias corrected CI } [4.40, 4.73]$) than the students did ($M = 3.60, SD = 1.10, 95\% \text{ bias corrected CI } [3.49, 3.69]$). The obtained effect size showed that 11% of the variance was explained by feedback role. The main effect of discipline on the perceptions of students' language constraints was also significant, $F(3, 528) = 4.73, p = .003, \eta^2_p = .03$,

though the effect size was small, and the variance explained was 3%. The post hoc test identified significant differences between Education and Physics ($p = .001$, $d = 0.35$, mean difference = 0.42, 95% bias corrected CI [0.15, 0.69]), Education and Engineering ($p = .001$, $d = 0.46$, mean difference = 0.55, 95% bias corrected CI [0.32, 0.79]), English Studies and Physics ($p = .02$, $d = 0.20$, mean difference = 0.31, 95% bias corrected CI [0.06, 0.57]), and English Studies and Engineering ($p = .002$, $d = 0.30$, mean difference = 0.44, 95% bias corrected CI [0.19, 0.68]). The interaction between feedback role and discipline on the perceptions of students' language constraints was not significant, $F(3, 528) = 1.28$, $p = .28$, $\eta^2_p = .007$.

The interaction between feedback role and discipline on the perceptions of students' language constraints is presented in Figure 11. As shown in the figure, supervisors across the disciplines perceived that students' language constraints were posing more challenges to supervisory feedback than the students appeared to believe. The gap in perceptions appeared to be wider in Education and English Studies than in Physics and Engineering. However, no intersection between the lines suggests that there was no combined effect of feedback role and disciplines on the participants' perceptions of students' language constraints.

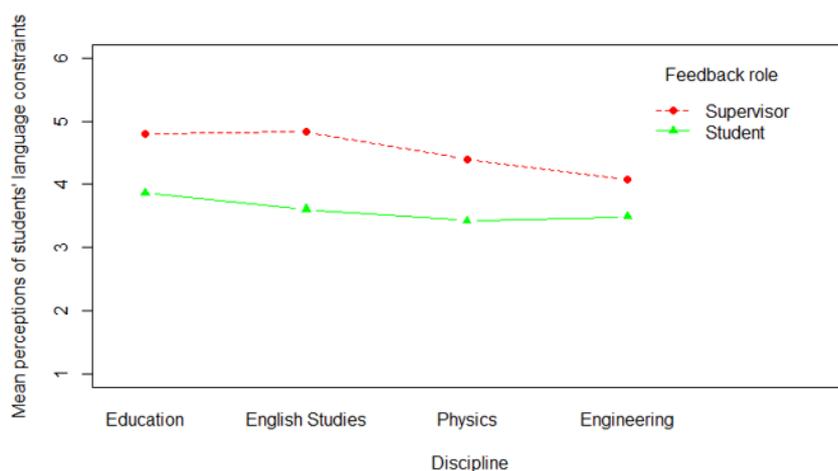


Figure 11. Interaction between feedback role and disciplines on the perceptions of students' language constraints

Supervisors' time constraints. There was no significant main effect of feedback role on the perceptions of supervisors' time constraints, $F(1, 528) = 1.21, p = .27, \eta^2_p = .002$, indicating that the supervisors ($M = 2.72, SD = 1.21, 95\%$ bias corrected CI [2.48, 2.96]) and the students ($M = 2.62, SD = 1.29, 95\%$ bias corrected CI [2.50, 2.73]) had similar perceptions. However, the large standard deviations showed considerable intragroup variations. There was a significant main effect of discipline on the perceptions of supervisors' time constraints, $F(3, 528) = 5.72, p = .001, \eta^2_p = .03$, though the effect was small and explained only 3% of the variance. The post hoc test showed significant differences between Education and Physics ($p = .001, d = 0.5$, mean difference = 0.69, 95% bias corrected CI [0.35, 1]), English Studies and Physics ($p = .001, d = 0.59$, mean difference = 0.64, 95% bias corrected CI [0.32, 0.94]), Engineering and Physics ($p = .001, d = 0.69$, mean difference = 0.61, 95% bias corrected CI [0.26, 0.97]). The interaction between feedback role and discipline on the perceptions of supervisors' time constraints was not significant, $F(3, 535) = 2.42, p = .07, \eta^2_p = .01$.

Figure 12 presents the effects of role and discipline on the supervisors' and the students' perceptions of supervisors' time constraints. The Physics participants viewed supervisors' time constraints as less challenging than the Education, English Studies, and Engineering participants did. Although the combined effect of feedback role and discipline was not significant, the Education and Physics supervisors and the Engineering students perceived supervisors' lack of time to be more problematic than the Education and Physics students and Engineering supervisors did.

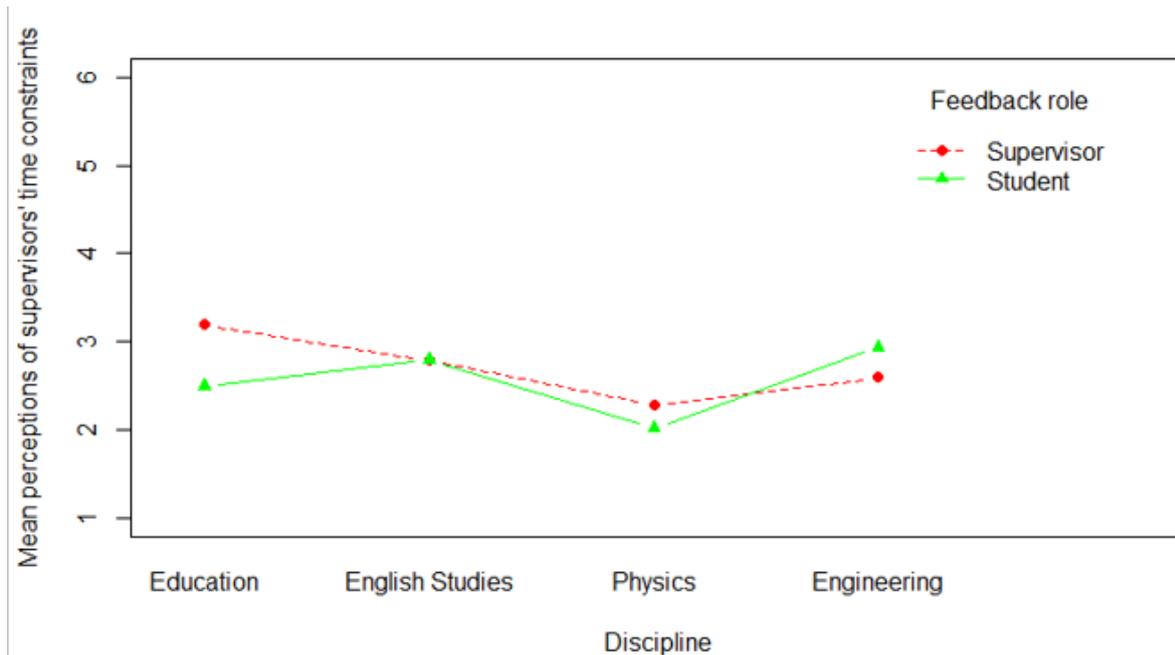


Figure 12. Interaction between feedback role and disciplines on the perceptions of supervisors' time constraints

Resource constraints. There was a significant main effect of feedback role on the perceptions of resource constraints, $F(1, 528) = 14.98, p = .001, \eta^2_p = .02$, indicating that the supervisors ($M = 4.37, SD = 0.97, 95\%$ bias corrected CI [0.4.16, 4.57]) felt the problem more acutely than the students did ($M = 3.93, SD = 1.1, 95\%$ bias corrected CI [3.84, 4.03]). However, the comparatively large standard deviation in the case of students showed considerable intragroup variation. There was no significant main effect of discipline on the perceptions of resource constraints, $F(3, 528) = 0.60, p = .61, \eta^2_p = .004$, indicating that challenges caused by limited access to resources were felt similarly in Education ($M = 3.84, SD = 1.10, 95\%$ bias corrected CI [3.65, 4.05]), English Studies ($M = 3.84, SD = 1.19, 95\%$ bias corrected CI [3.63, 4.04]), Physics ($M = 4.12, SD = 0.95, 95\%$ bias corrected CI [3.95, 4.31]), and Engineering ($M = 4.22, SD = 1.06, 95\%$ bias corrected CI [4.06, 4.38]). The interaction between feedback role and discipline on the perceptions of resource constraints was not significant, $F(3, 528) = 2.34, p = .07, \eta^2_p = .01$.

Figure 13 plots the variables of feedback role and discipline with respect to perceptions of resource constraints. As a group, the supervisors agreed more with the statements regarding resource constraints than the students did. Although the main effect of discipline was not significant, there were wider gaps between the supervisors' and the students' perceptions in Education and English Studies than in Physics and Engineering.

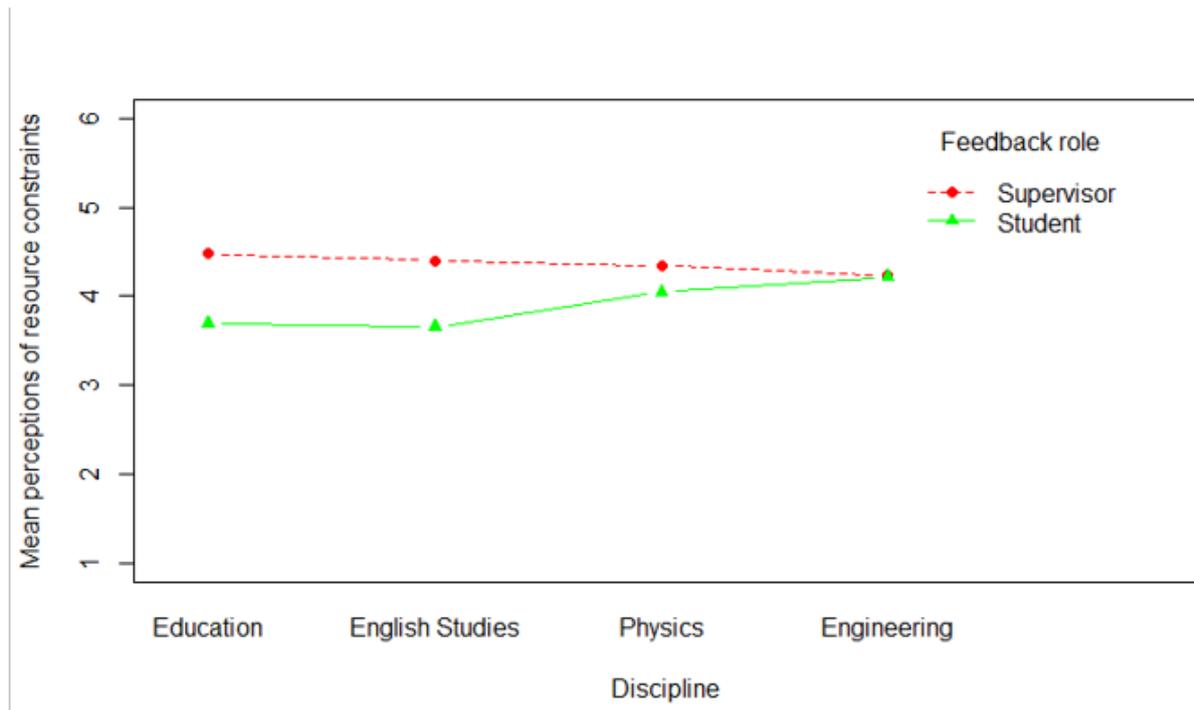


Figure 13. Interaction between feedback role and discipline on the perceptions of resource constraints

6.3.5 Disciplinary variations in perceptions of students' engagement with supervisory feedback

Students' positive affect. Feedback role had a significant main effect on the perceptions of students' positive affect, $F(1, 528) = 80.03, p = .001, \eta^2_p = .13$, with the students rating their positive emotional engagement ($M = 5.35, SD = 0.55, 95\%$ bias corrected CI [5.29, 5.40]) higher than the supervisors did ($M = 4.78, SD = .63, 95\%$ bias corrected CI [4.67, 4.89]).

Feedback role explained 13% percent of the variance. The main effect of discipline on the

perceptions of students' positive affect was not significant, $F(3, 528) = 0.22, p = .88, \eta^2_p = .001$, showing similar perceptions in Education ($M = 5.28, SD = 0.59$, 95% bias corrected CI [5.18, 5.39]), English Studies ($M = 5.25, SD = 0.64$, 95% bias corrected CI [5.14, 5.35]), Physics ($M = 5.18, SD = 0.62$, 95% bias corrected CI [5.06, 5.30]), and Engineering ($M = 5.25, SD = 0.58$, 95% bias corrected CI [5.16, 5.33]).

The interaction between feedback role and discipline on the perceptions of students' positive emotional engagement was significant, $F(3, 528) = 3.53, p = .02, \eta^2_p = .02$, though the variable explained just 1% of the variance. Significant differences between the supervisors' and the students' perceptions were found in each discipline: Education ($p = .001, d = 1.55$, mean difference = 0.78, 95% bias corrected CI [0.55, 1.02]), English Studies ($p = .001, d = 1.25$, mean difference = 0.74, 95% bias corrected CI [0.50, 1.01]), Physics ($p = .01, d = 0.57$, mean difference = 0.35, 95% bias corrected CI [0.08, 0.65]), and Engineering ($p = .02, d = 0.60$, mean difference = 0.36, 95% bias corrected CI [0.05, 0.64]). When feedback role was the conditioning factor, no significant differences were observed in the perceptions of supervisors across the disciplines. However, significant differences were found in the students' perceptions between Education and Physics ($p = .03, d = 0.31$, mean difference = 0.17, 95% bias corrected CI [0.01, 0.31]), Education and Engineering ($p = .03, d = 0.28$, mean difference = 0.15, 95% bias corrected CI [0.01, 0.28]), and English Studies and Engineering ($p = .04, d = 0.26$, mean difference = 0.14, 95% bias corrected CI [0.02, 0.26]). As indicated by Cohen's d values and confidence intervals, the effects were small.

Figure 14 shows the interaction between feedback role and discipline on the perceptions of students' positive affect. Non-parallel lines in the figure indicate that the students reported greater positive emotional engagement with supervisory feedback than their supervisors did. The discrepancies in the perceptions were greater in Education and English

Studies than in Physics and Engineering, with the former groups of students believing that they engaged with feedback more positively than their counterparts in the latter groups did.

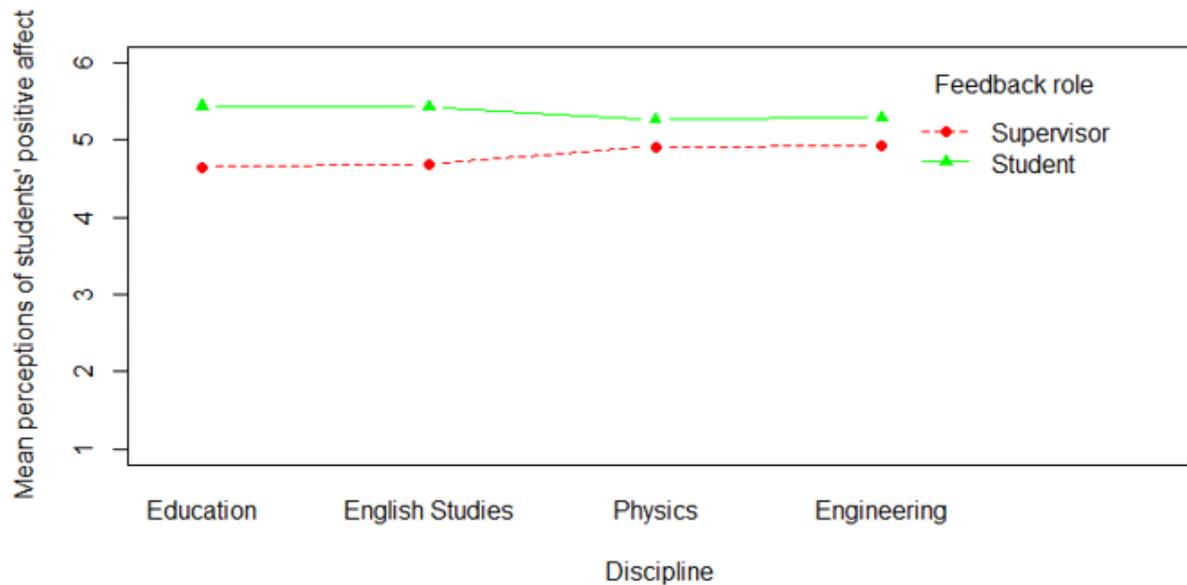


Figure 14. Interaction between feedback role and discipline on the perceptions of students' positive affect

Students' negative affect. There was a significant main effect of feedback role on the perceptions of students' negative affect, $F(1, 528) = 17.01, p = .001, \eta^2_p = .03$, indicating that the supervisors perceived more negative engagement ($M = 4.35, SD = 0.81, 95\%$ bias-corrected CI [4.17, 4.50]) than the students did ($M = 3.87, SD = 1.12, 95\%$ bias-corrected CI [3.75, 3.97]). However, the large standard deviation for the students' perceptions showed considerable intragroup variations. The main effect of feedback role explained only 3% of the variance. The main effect of discipline on the perceptions of students' negative affect was also significant, $F(3, 528) = 6.27, p = .001, \eta^2_p = .03$. Discipline explained only 3% of the variance. The post hoc Bonferroni test revealed significant differences between Education and Physics ($p = .001, d = 0.54, \text{mean difference} = 0.59, 95\%$ bias corrected CI [0.33, 0.88]), Education and Engineering ($p = .001, d = 0.17, \text{mean difference} = 0.38, 95\%$ bias corrected

CI [0.16, 0.59]), English Studies and Physics ($p = .001$, $d = 0.61$, mean difference = 0.56, 95% bias corrected CI [0.29, 0.85]), and English Studies and Engineering ($p = .01$, $d = 0.26$, mean difference = 0.61, 95% bias corrected CI [0.10, 0.57]). The interaction between feedback role and discipline was not significant, $F(3, 528) = 2.41$, $p = .06$, $\eta^2_p = .01$.

Figure 15 visually presents the effects of feedback role and discipline on the perceptions of students' negative affect. It demonstrates that the supervisors in Education, English Studies and Physics believed that the students had more negative emotions with supervisory feedback than the students believed. As can be seen in the figure, the Physics students seemed to have the lowest level of negative engagement with supervisory feedback.

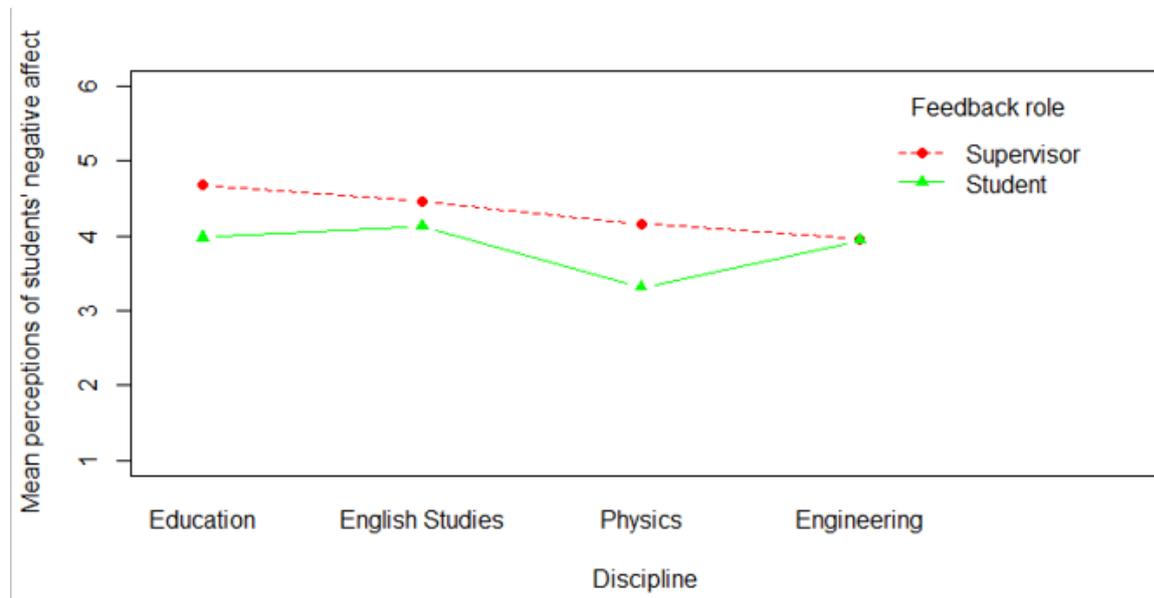


Figure 15. Interaction between feedback role and discipline on the perceptions of students' negative affect

Students' cognitive engagement. There was a significant main effect of feedback role on the supervisors' and the students' perceptions of students' cognitive engagement, $F(3, 528) = 205.54$, $p = .001$, $\eta^2_p = .28$, indicating that the students rated their cognitive engagement ($M = 5.32$, $SD = 0.54$, 95% bias corrected CI [5.27, 5.37]) higher than the supervisors did ($M = 4.38$, $SD = 0.77$, 95% bias corrected CI [4.23, 4.52]). Feedback role explained 28% of the variance in the perceptions, which was a large effect. There was a significant main effect of

discipline on the perceptions of students' cognitive engagement $F(3, 528) = 7.52, p = .001, \eta^2_p = .04$, with disciplinary background explaining 4% of the variance.

The interaction between feedback role and discipline on the perceptions of students' cognitive engagement was significant, $F(3, 528) = 6.14, p = .001, \eta^2_p = .03$. When discipline was the conditioning factor, there were differences between the supervisors' and the students' perceptions in all the disciplines: Education ($p = .001, d = 2.34$, mean difference = 1.36, 95% bias corrected CI [1.1, 1.61]), English Studies ($p = .001, d = 1.27$, mean difference = 1.01, 95% bias corrected CI [0.63, 1.41]), Physics ($p = .001, d = 1.40$, mean difference = 0.71, 95% bias corrected CI [0.47, 0.97]), and Engineering ($p = .001, d = 1.01$, mean difference = 0.65, 95% bias corrected CI [0.45, 1.01]) with a large effect in all the cases. When feedback role was the conditioning factor, there were significant differences between the supervisors' perceptions of students' cognitive engagement in Physics and Education ($p = .001, d = 1.2$, mean difference = 0.71, 95% bias corrected CI [0.41, 1.01]), Physics and English Studies ($p = .03, d = 0.58$, mean difference = 0.45, 95% bias corrected CI [0.07, 0.88]), and Engineering and Education ($p = .003, d = 0.94$, mean difference = 0.62, 95% bias corrected CI [0.23, 0.99]). However, the students' perceptions of their cognitive engagement were found to be significantly different only between Physics and English Studies ($p = .003, d = 0.31$, mean difference = 0.16, 95% bias corrected CI [0.01, 0.31]), and between Physics and Engineering ($p = .003, d = 0.31$, mean difference = 0.15, 95% bias corrected CI [0.03, 0.29]).

Figure 16 shows the interaction between feedback role and discipline on the perceptions of students' cognitive engagement. The supervisors in all the disciplines perceived a lower level of cognitive engagement than the students did. The gaps between the supervisors' and the students' perceptions are much wider in Education and English studies in comparison to Physics and Engineering.

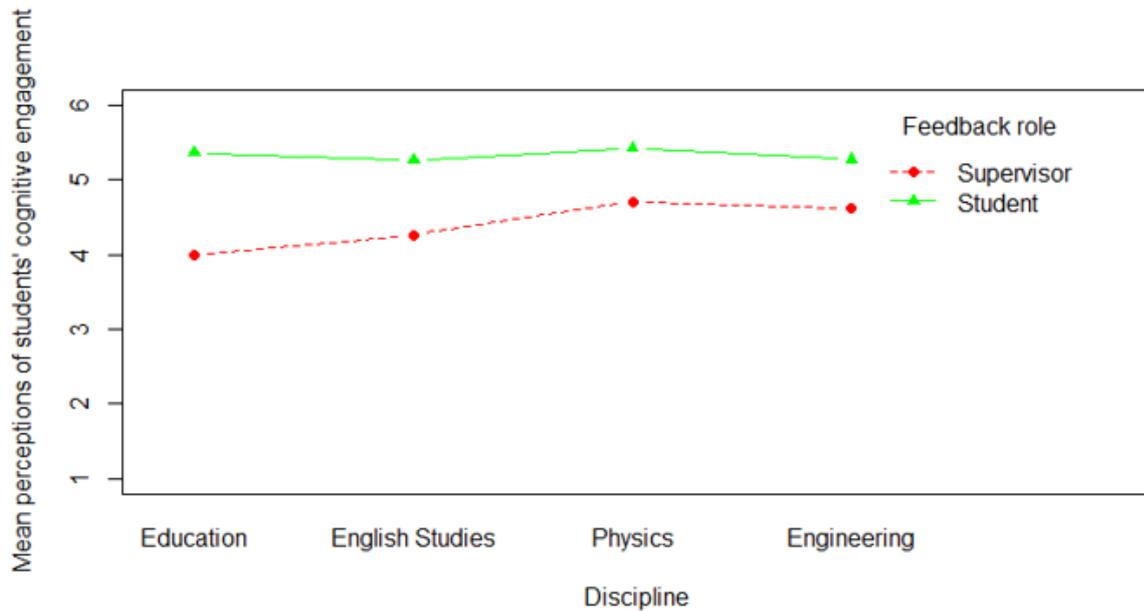


Figure 16. Interaction between feedback role and discipline on the perceptions of students' cognitive engagement

Students' behavioural engagement. There was a significant main effect of feedback role on the supervisors' and the students' perceptions of students' behavioural engagement, $F(3, 528) = 69.77, p = .001, \eta^2_p = 0.12$, with the students rating their behavioural engagement ($M = 5, SD = 0.63, 95\% \text{ bias corrected CI } [4.93, 5.06]$) higher than the supervisors did ($M = 4.40, SD = 0.69, 95\% \text{ bias corrected CI } [4.27, 4.53]$). Feedback role explained 12% of the variance.

There was a significant main effect of discipline on the perceptions of students' behavioural engagement, $F(3, 535) = 6.39, p = .001, \eta^2_p = .04$, indicating that disciplinary background accounted for 4% of the variance.

The interaction between feedback role and discipline on the perceptions of students' behavioural engagement was significant, $F(3, 528) = 5.03, p = .002, \eta^2_p = .03$. When discipline was the conditioning factor, there were significant differences between the supervisors' and the students' perceptions in all the disciplines: Education ($p = .001, d = 1.59$, mean difference = 1.03, 95% bias corrected CI [0.75, 1.32]), English Studies ($p = .001, d =$

0.64, mean difference = 0.49, 95% bias corrected CI [0.16, 0.78]), Physics ($p = .01$, $d = 0.57$, mean difference = 0.30, 95% bias corrected CI [0.08, 0.54]), and Engineering ($p = .001$, $d = 0.88$, mean difference = 0.54, 95% bias corrected CI [0.25, 0.83]) with large effect sizes in all the contrasts. When feedback role was the conditioning factor, there were significant differences in the perceptions of students' behavioural engagement between the supervisors from the different disciplines. The differences were observed between English Studies and Education ($p = .001$, $d = 0.56$, mean difference = 0.39, 95% bias corrected CI [0.03, 0.75]), Physics and Education ($p = .001$, $d = 0.128$, mean difference = 0.77, 95% bias corrected CI [0.45, 1.09]), Physics and English Studies ($p = .01$, $d = 0.61$, mean difference = 0.38, 95% bias corrected CI [0.05, 0.70]), and Engineering and Education ($p = .01$, $d = 0.76$, mean difference = 0.5, 95% bias corrected CI [0.10, 0.90]). No such differences were found among the students from the different disciplines.

The visual representation of the interaction between feedback role and discipline on the perceptions of students' behavioural engagement is displayed in Figure 17. The supervisors in all the disciplines perceived a lower level of cognitive engagement than the students did. The gap between the supervisors' and students' perceptions was much narrower in Physics in comparison to those of Education, English studies and Engineering.

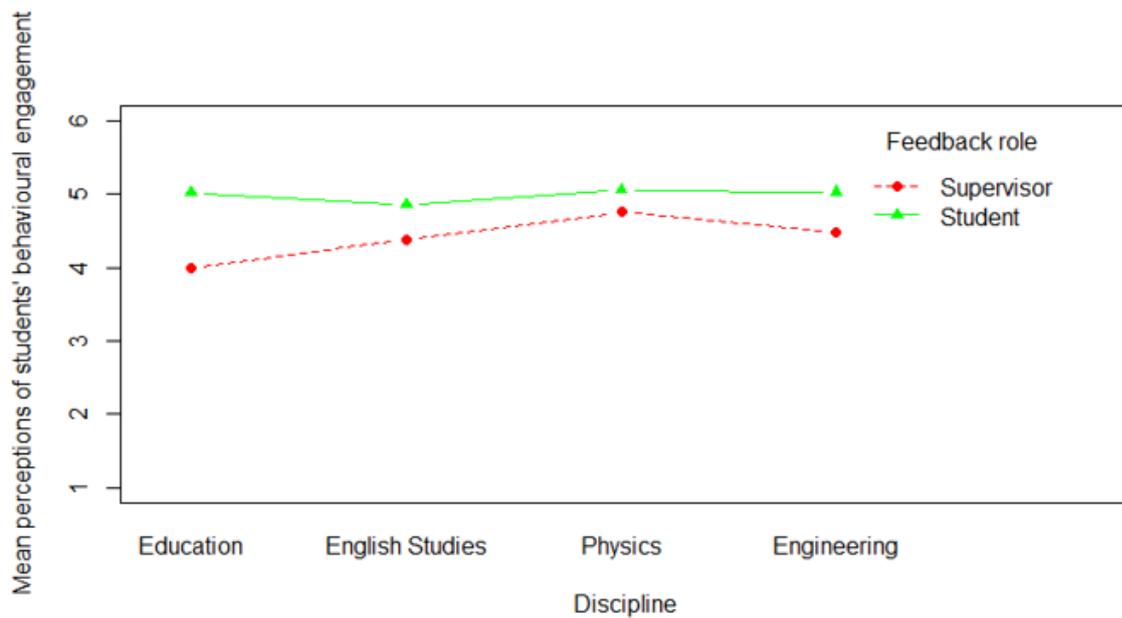


Figure 17. Interaction between feedback role and discipline on the perceptions of students' behavioural engagement

6.4 Summary

This chapter has reported the supervisors' and the students' perceptions regarding the foci, students' expectations of quality feedback, challenges faced by the supervisors and the students, and student engagement with supervisory feedback. The supervisors and the students had significantly different perceptions of these aspects. In general, the supervisors thought they were providing more feedback than the students thought they received, whereas the students believed they engaged with supervisory feedback more than the supervisors perceived. Also presented in the chapter are cross-disciplinary variations in the supervisors' and the students' perceptions of supervisory feedback.

CHAPTER 7

MOTIVES IN SUPERVISORY FEEDBACK

7.1 Chapter overview

This chapter reports the results related to research question 4: What are supervisors' and students' motives, how do their motives influence their supervisory practices, and what factors shape their motives? First, the supervisors' and the students' motives and practices, as well as the factors that shaped their motives, are described. Then, four case studies are presented to illustrate the influence of the supervisors' motives on the students' activities and agency in learning.

7.2 Supervisors' motives

A qualitative analysis of the interviews revealed that master's thesis supervisors had four different motives: supervision as encouraging and inspiring, supervision as learning, supervision as supporting, and supervision as evaluation. This is not to suggest that the motives were mutually exclusive but seem to form an inclusive hierarchy and capture the primary focus of their supervision. The acronyms EduS, HS, PS, and MS indicate Education, English Studies, Physics and Engineering supervisors, respectively, with number used to identify them.

7.2.1 Supervision as encouraging and inspiring

The supervisors with this motive encouraged their students to be self-regulated and independent in addition to supporting them, as illustrated in the following quote from PS1:

In the beginning, I give some hints about problems in their writing so that they can figure out the things on their own. I expect from the beginning that the students do

most of the things on their own. I mark the main points only. When students bring a modified version, I discuss with them their work line by line. (Interview)

However, to engage in self-regulated learning, students need to have access to resources, which is rather limited in the participating university. Therefore, PS1 exploited multiple avenues to cater to his students' needs:

First, I explore all possible ways to get references and discuss them with my students from the beginning. If the students do not find the references by any means... I use my access to find the required references...I have taught students the techniques to explore. (Interview)

Furthermore, they involved students in collaborative learning “between the outgoing and incoming thesis students and asked them to discuss and share their experiences” (PS3), because “[s]haring is crucial for learning” (PS3) and “better understanding” (PS4). PS1 was proud of his students' proactive attitude:

If I tell one student in detail regarding the ways to describe and discuss a figure, they discuss that among themselves and learn from each other and develop their own ability. I have enjoyed my students' independence most in my life. (Interview)

This shows that students can take agency in their learning if supervisors create conducive environment to foster their independent learning skills.

7.2.2 Supervision as learning

Sharing ideas, teaching, and supervision also offer prospects for learning. Three supervisors (i.e., EduS2, PS2, and PS3) underscored supervision as a learning opportunity for themselves. They tended to identify very closely with their students' success and failure and had a growth mindset. The following excerpt from EduS2 illustrates this motive:

The first thesis that I supervised taught me many things about thesis supervision. I took it as a challenge and learning opportunity. When students produce good work, I

feel proud and feel bad when students do not work seriously. I feel very bad when students get many negative comments in their viva. I feel like how I could ignore so many things. I tend to take my responsibility if a student's work gets many comments in viva...experience taught me a lot. (EduS2: Interview)

Despite his heavy load, PS3 prioritized thesis supervision “for career development, for the enhancement of the Department as well as for developing a research culture.” In a similar spirit, PS1 shared that he sought critical feedback from his students. Although students could provide positive or negative feedback, he appreciated critical feedback so that he could improve his practice. The following excerpt shows that he valued students' feedback immensely:

When students under my supervision defend their thesis, I ask them to provide feedback for me because we understand each other very well during the process of supervision. I ask them to write one thing that I must improve. I tell them that I feel appreciated if they identify my weaknesses. They become restless, not knowing what to write. I do not sign on their thesis until they provide some negative comments about me on a piece of paper. It might be about their bad feeling when they had to wait for me for a long time, or they had to follow my suggestions even if they did not want to do so. Some students have provided such genuine comments that I feel very close to them. Some of them are doing further study in the US. I feel very happy when my students provide me with critical feedback. Such feedback is not anonymous. The students themselves must give it to me. (PS2: Interview)

Feedback and reflection are effective ways for professional development. If supervisors try to see themselves from the perspectives of students as PS2 did, students would benefit from thesis writing and their supervisors' feedback.

7.2.3 Supervision as supporting

The supervisors holding this motive (i.e., supervision as supporting) focused on showing students the way forward, anticipated the problems that students might encounter, and strived to create a conducive learning environment. Four supervisors (i.e., EduS2, EduS3, PS1, and PS3) said that they supported their students in various ways. For example, they provided their students with general guidelines about thesis writing in group orientation before they started their research. In such a group orientation, they would “tell them about each component of proposal starting from issue exploration” (EduS2) and “motivated them to read in their area of research” (EduS3). This process of prewriting feedback is particularly evident in the interview extract with PS1:

I first provide 1-2 hours lecture focusing on writing a thesis. I tell them where to start. Our students feel easy in writing methodology because they study a lot in that area. We discuss with examples of writing methodology. We teach them how to write results and discussion and how to compare the findings with previous studies, how to discuss figures, how to tackle new things that come up with experiments, and how we give birth to new things. We tell these things in a class that is a group of 8-10 students. (Interview)

Once the students began their research, the supervisors provided targeted feedback on the selection of researchable topics, appropriateness of methodology, formulation of research questions and objectives, preparation of research tools, analysis and discussion of data, and drawing of conclusions. Supervisors acknowledged that students found it very difficult to select a researchable topic and appreciated their supervisors’ support in this regard. Four supervisors (i.e., PS1, PS2, PS3, and PS4) supported students in selecting a researchable topic by offering them critical readings in the area of their interest and by directing them to “identify areas for further work outlined there” (PS4). PS3 noted:

We already prepare our mindset and prepare a plan for the number of students that we can take and the area they will be working on. They are free to choose a topic within the framework according to their interests. If a student wants to work beyond our framework, we appreciate that...Our aim is to accommodate their interests as well as to ensure the required depth of their work. (Interview)

EduS3, for example, suggested three steps to help students in writing results and discussion: “a) what you found, b) what meaning it gives, c) and connect it with the previous literature.” The following quote from PS3 shows his support for his students in writing up their analysis and discussion:

If there are differences in the results compared to the previous works they have used as a reference, we help them to find the underlying causes contributing to such differences. We also consider the depth of subject matter and analysis required for a master’s thesis. (Interview)

Similarly, HS3 told me that “while reviewing the literature, I ask them to read a section that is relevant to their research question or title and locate evidence to support their argument.” The supervisors guided by this motive of supporting students through supervision placed a premium on clarity and precision in writing and made concerted efforts to enhance students’ writing skills. One of their primary concerns was to help students avoid plagiarism and develop academically valued writing practices.

PS2 noticed that students’ language was often “distorted when they tried to write the sentences in their own language” and felt a strong need to support them. Therefore, he adopted a number of strategies to help them:

I read the thesis thoroughly and take note of mistakes in a notepad. Five years ago, I decided to allocate much time to thesis work to bring an improvement in quality. I thought if I read each thesis thoroughly in a year, and if the message goes to the

students that their thesis gets to me, they will be serious in their work. To improve their quality of writing, I provided them ideas and showed them how it could be improved. I also suggested they use the English writing software and referred them to language learning websites. I encouraged them to persist by saying that learning to form one or two good sentences in a day is an achievement. (Interview)

The supervisors with a “supporting” motive also recognized that some of their students needed assistance in writing accurately. They considered themselves responsible for helping their students develop their writing skills. For example, in the interview, EduS2 stressed the benefits of providing corrective feedback:

If I find a mistake in students’ writing, I do not leave it only by marking it. If I draw a line, it only creates a problem for students. Students know that there is something wrong with the sentence, but they do not understand how they can improve it. Therefore, I provide corrective feedback to students. If there are many similar mistakes, I provide corrections and ask students to follow the suggestions accordingly. (Interview)

This excerpt shows that the supervisor was taking his students’ perspectives into consideration while providing feedback because he was keen to ensure that they understood the comments. An examination of his student’s thesis drafts corroborated his claim. PS1 also showed a strong motive to support his students, as can be seen in the following interview excerpt:

I read their thesis twice along with them, check every reference and help them to discuss new figures in their own language. Therefore, there is a rare chance of plagiarism that is around 10%. I do not bother much about that. (Interview)

In reading students’ proposals, if the methodology they suggested was not appropriate, HS1 suggested “the pertinent theory/methodology and encouraged him/her to study that before

starting to write”. Overall, the supervisors with a “supporting” motive kept their students’ learning at the centre and took their students’ perspectives into consideration when providing supervisory feedback.

7.2.4 Supervision as evaluating

The supervisors possessing this motive mostly considered themselves as gatekeepers to maintaining the standard of students’ work. They expected their students to work on their own such as in selecting a research topic and designing research methodology. Later on, the supervisory input would be about determining whether the selected topic was “feasible” (HS1), “researchable” or “already been researched” (HS2) and if the methodology was appropriate (EduS1). Although they acknowledged the importance of accurate and coherent writing, they did not consider themselves responsible for helping students refine their language rather asked them to seek help from their friends or “pay for having their work edited” (EduS1, HS4). Some would “point out sample errors” (HS1) and provide corrections on “the first two-three pages” (HS2) and expect students to work on their language in the rest of their drafts. HS3 was strongly against reading students’ work and providing corrections and said that, “We do not waste our time checking the accuracy of our students’ language.” Rather he would focus on “argumentative skills, critical thinking skills, and analytical skills.” The following quote from EduS2 presents the case in point:

I skim their thesis. If I notice some linguistic inaccuracies, I correct them and provide feedback there. My focus would be on methodology. I think that it is not possible for supervisors to correct spelling and grammar in students’ writing. I suggest my students seek help from their friends to check the accuracy of their language and tell them that I would not check their grammar. (EduS2: Interview)

Involving students in peer-editing is a commendable practice. However, support from friends cannot replace the input from the supervisors. This might lead to a situation where the student produces multiple drafts without making much progress, as illustrated in the following quote:

I use symbols in [my feedback on] students' writing. A single underline indicates a grammatical problem, whereas a double underline means the sentence is meaningless. If I find that the students have taken ideas from other theses, I write 'copied', which they have to replace. I tell them that if they do not read the content, I would not be responsible in case their thesis is rejected. I remember one student producing 12 to 13 drafts. If students cannot improve even after that, I ask them to submit their theses. They get comments in the viva. I suggest my students to have the language of their thesis checked from others, such as friends or relatives. They may as well have to pay for having their work edited. I emphasize that their language should be accurate, and I cannot tolerate their writing full of errors. I ask them to bring me the corrected version in a hard copy...Once a student was frustrated and reported to the Head of the Department. I said, "See the language, if you can accept the thesis, I have no objection". He went through the thesis, which he did not find satisfactory, and asked the students to revise it. (EduS4: Interview)

This supervisor believed that his role was to evaluate if the students' work met the standards required for submission but did not consider himself/herself responsible for developing their skills in doing so. Expecting students to produce an acceptable thesis without supporting them in doing so led to their frustration and failure as discussed in the previous chapter (Section 6.2.5).

7.3 Factors shaping supervisors' motives

The previous section presented the supervisor's motives associated with supervisory feedback. This section identifies the factors that shaped their motives. The supervisors' motives were influenced by a multitude of factors, including previous learning experience and academic exposure, personal belief systems, institutional cultures, and students' language proficiency and academic competence.

7.3.1 Previous learning experience and academic exposure

Supervisors' previous learning experience and academic exposure could account for their motives and feedback practices. For example, PS1 with the primary motive of encouraging and inspiring students noted:

During the process of my study in prestigious foreign universities, I learned how the interaction between supervisors and students takes place, what the level of professors is, what our professional ethics are, and how we should follow them. The challenging thing for me is to implement the things that I learned in those top universities.

(Interview)

PS1 also highlighted that his supervisory practices were heavily influenced by his own experience of being supervised. The following quote well captures his view regarding this aspect:

My students need to print their thesis three to four times. I printed my MSc thesis at least four times. My supervisor was very rigorous. He used to give considerable time to his students. I used to go to his house. Sometimes I would work until 2 am in the morning and would start again at 8 am. I did the same while doing my PhD... We usually teach the way we learned.

Clearly, PS1's practice as a supervisor was directly related to his own experience of being

supervised, the rigor that was expected of his work, the time he spent working on his thesis, and the time he received from his supervisor. His supervisor had set him the best example, which he wanted to live by. He further stressed:

I know that students' engagement depends on the supervisor's engagement with students' work as well. My supervisor was highly motivating. He used to give full time to me. I learned that from my supervisor and have tried my best to apply the same with my students.

In the same way, PS3, who strived to support his students, stated that learning experience with his own supervisor mostly shaped his supervisory practices:

I take major suggestions from [my supervisor] while giving feedback to students. We keep our students together in group discussions. I am still under his umbrella.

This shows that supervisors' motives of supporting and inspiring students were largely shaped by their experience.

7.3.2 Individual beliefs

Supervisors' motives were also influenced by their individual beliefs. For instance, some supervisors believed that "master level students should check their language accuracy, punctuation, and grammar themselves" (EduS3). In their opinion, "It is practically impossible for a supervisor to correct linguistic and grammatical slips, MLA issues, format issues, and all such auxiliary issues" (HS1). Furthermore, as one supervisor noted, "correcting everything for them does not give them time to think about and learn from their mistakes" (HS2). Consequently, they refrained from providing linguistic feedback. In contrast, the supervisors who did not consider research and writing to be distinctly different things but closely intertwined provided feedback on writing to promote their students' academic literacy. In the same way, those with the belief that student engagement with feedback would depend on the

supervisor's interest in their work were careful in providing feedback, as the following quote illustrate:

I have seen that when I explicitly correct their first draft, I do not have to ask them to produce more than two drafts. Their second draft comes in far better shape in 70 percent of the cases. If we do not do so, they cannot improve even after they have produced six-seven drafts. If we are sincere, students engage well with our feedback. If we are superficial and provide comments in 15-20 minutes, students do not take their work seriously. (EduS2: Interview)

One of the recurrent issues raised by the supervisors was plagiarism in students' writing. Some supervisors tended to blame students for such misconduct, while others considered themselves duly responsible for helping their students develop originality in writing. For example, PS1 said,

We help in the area they have a problem with. In the writing process as well, in the beginning, I help my students to come up with some writing and provide some hints in the first draft, I read their thesis twice along with them, check every reference and help them to discuss new figures in their language. (Interview)

According to PS2, in the beginning when the plagiarism checking software was first introduced in his department, plagiarism was rampant, and he had to send students' work back repeatedly. Therefore, he dedicated his time to enhancing his students' academic writing skills:

I provided them ideas and showed them how they could improve their writing. I also suggested they use the English writing software and referred them to language learning websites. I encouraged them to persist by saying that learning to form one or two good sentences in a day is an achievement. (Interview)

The foregoing discussion shows that supervisors' personal beliefs heavily influenced their

motives and supervisory feedback practices.

7.3.3 Institutional culture

Institutional culture had a considerable impact on supervisors' motives for feedback practices. For instance, Engineering supervisors (MES1, MES2, MES3, and MES4) reported that they predominantly provided oral feedback, as it was a common institutional culture. As MES1 noted, "In different presentations, committee members and other faculties mostly provide oral comments...individual supervisors provide written comments as well".

However, even individual supervisors appeared to give priority to oral feedback, as can be seen in the following quote from MES2:

Most of our students want their work to be commented on in soft copy and bring their work on their laptops. Generally, they do not submit a hard copy to their supervisor.

Therefore, commenting on hard copy is not very common. (Interview)

Although written comments could be provided on soft copies of students' work, that did not appear to a common practice:

We mainly provide oral feedback. The students show us whatever work they have completed. It is not necessary for students to come with a complete draft. If they have done some experiments, they come with the results for feedback, if they have collected data, they ask for the procedures for analysis. (MES4: Interview)

Although plagiarism was apparently a serious problem in English Studies, there was virtually no institutional mechanism to deal with such problems. Therefore, even the supervisors who were dedicated to promoting ethical and rigorous research felt unsupported and unappreciated because the Department was not "able to give a message that students have to bear the cost if they do not work themselves" (HS4: Interview). Although HS4 raised the issue of plagiarism with the Controller of the Examination because, no initiatives were taken. In contrast, as

sound and rigorous research was strongly emphasized in Physics, all the interviewed supervisors said that they took research rigor and originality in writing very seriously.

7.3.4 Students' academic competence and language proficiency

Student's language proficiency and academic competence had an impact on their supervisors' motives and supervisory practices. For example, PS1's perception of his students as competent and capable contributed to his motive of promoting their independence and self-regulation in learning:

Most of my students can work based on the hints that I provide. They students are intelligent as they are top students in the Department. If I tell one student in detail regarding the ways to describe and discuss a figure, they discuss that among themselves and learn from each other and develop their abilities. I have enjoyed my students' independence most in my life. (Interview)

Unlike PS1, PS4 believed that his students were of average ability. Therefore, he did not have high expectations regarding students' agency in learning. Commenting on students' academic competence, HS4 confided that his students were academically so poor that it was difficult to "make them understand the concept of research like research gaps" and improve their writing from feedback. Consequently, he could not provide them with much meaningful support for developing academic literacy. EduS1 stopped providing detailed feedback on language because he found them overwhelmed by such feedback. He noted:

In the past, I mostly used to focus on language and provide detailed feedback reading students' work line by line. I mostly used to provide feedback electronically using track changes. However, ... I sensed that my students felt overwhelmed by my feedback. (Interview)

The analysis shows that various supervisor-, institution- and student-related factors shaped supervisors' motives and their feedback practices.

7.4 Students' motives

A qualitative analysis of the interviews with the students identified two broad motives for them to write a thesis: learning-oriented motives and completion-oriented motives. These motives and their influence on the students' thesis writing practices are presented in this section.

7.4.1 Learning-oriented motive

Students with learning-oriented motives endeavoured to undertake thesis writing as a learning opportunity rather than only a requirement for graduation. Therefore, they took various steps to overcome the challenges they faced, kept an optimistic attitude, and tended to have a growth mindset. For example, when EduSt2 could not find resources related to his study, he approached senior professors. He held the view that “if students are interested, they can manage the resources” (EduSt2). EduSt3 was also “well prepared on things that [she] could do [herself]”, would also pay attention to feedback that her supervisors provided to her fellow students, was not worried about receiving critical feedback, took it positively even when she had to wait for many days to receive feedback. The following quote illustrates her positive attitude:

I went [to the Department] continuously for three days waiting for my turn for feedback. My turn came only on the fourth day. However, I took it positively because I was spending time on myself. I never thought that my supervisor was not giving time to me. I could see that he could not manage time because of his work. (EduSt3: Interview)

Similarly, EduSt4 was also keen on developing her research and writing skills, worked hard and believed that, “the more dependent we are, the more trouble we face.” MEST2, also a student with learning-oriented motive, was committed to learning and believed that it was “students’ responsibility to be resourceful in their area of research” and was proactive in seeking feedback from his supervisor, as can be seen in the following quote:

The requirement is that there should be at least ten meetings between supervisors and students. I had more meetings than that. I met him 16-17 times. (MEST2: Interview)

Unlike in Education and Engineering, where thesis writing was compulsory, it was optional in Physics, and only about 50% of the students could get a chance to write a thesis based on their merit. Therefore, they valued the opportunity to write a thesis from the outset and tried their best, as reflected in the following quote:

I wanted to impress my supervisor, so I worked very hard. My supervisor highly appreciated if we could come up with something new that he had not suggested.

Therefore, we tried our best to be self-regulated and independent. (PSt1: Interview)

Another Physics student, PSt2, took thesis writing as an opportunity to develop his research career and believed that he “would be someone one day”.

These students were self-motivated, took initiative in learning, and “tried [their] best to sort out the problems [themselves] and went to [their] supervisors only when their support was inevitable” (Pst3). In this regard, EduSt4 took multiple revisions as a learning opportunity and “used to record [consultation meetings] and used to listen to it repeatedly ()” so that she could attend to her supervisors’ comments. Besides, these students seemed to show a genuine appreciation for research and wanted to contribute to the field, as illustrated by the following quote:

There should be more focus on research rather than on theoretical knowledge. The research helped us to identify our track in physics. We became familiar with how we

can conduct research, how we can publish papers and how we can contribute to the world. We had knowledge but we did not know what our actual interest was. Thesis writing helped us to identify our research interest. We found the track at the end of master level. I think it is very late. If we were exposed to research at the bachelor level, we would have published many papers in international journals and made our contribution known to the world. We would have been able to give the impression that there is quality research in physics in Nepal. (PSt3: Interview)

This quote shows the intended purpose of thesis writing materialized in the case of this student as he found himself ready to begin a new career in research.

Thesis writing also helped students develop their sense of confidence, resilience, and ability to tolerate ambiguity, as illustrated by the following quote:

When I was able to create the system that worked well, I felt like we can do whatever we want if we are persistent, dedicated, and do not give up. I realized that we could find a way out through hard work.... At one point in time, I even thought that I would not be able to complete my thesis and was anxious when I could not make any visible progress despite my rigorous work. ... Today, I have completed my thesis. Since I worked very hard, I now feel confident in my area of research. I feel like I can answer questions confidently. I even repeated the same process twice to verify the results.

Most students do it once only. Repeating the process gave me further confidence.

(PSt1: Interview)

Overall, the students with learning motives evinced motivation, dedication, perseverance, independence, self-regulation, and better ability to tolerate ambiguity. They felt a “sense of great achievement” (PSt1, PSt3) because thesis writing helped them to develop their research, academic literacy, independent study, technical, and presentation skills as well as abilities in “writing academic papers” (PSt3). PSt1 had already prepared a manuscript for publication

and MEst2 had already published a paper. MEst2 was motivated to write another article because he had “already broken the ice”.

7.4.2 Completion-oriented motive

Students with completion-oriented motives would not write a thesis if it were not compulsory. Consequently, these students considered thesis writing insurmountably complicated. For example, MEst1 admitted that many students, including himself, “feel that they are doing thesis to take a degree” and MEst3 was in a great pressure because it was her last chance “to complete [her thesis]”. The completion motive was so powerful that MEst3 was less concerned with what she could learn from the process. Another student highlighted the intensity of difficulty when he said:

At the last stage, I am feeling like I would choose to take five courses rather than writing this thesis. It is a hefty load. I studied for three semesters, and I do not remember what classes I took. For this thesis, I have changed my topic twice. I remember every paper that I have downloaded. (MEST4: Interview)

What was common to these students was that, in the first place, they were unprepared for the dedication, seriousness, and self-reliance that the thesis writing demanded of them. They tended to think thesis writing in terms of coursework, where course instructors and textbooks led them through the process smoothly. As thesis writing required them to be proactive rather than reactive, they found themselves at loss, still expecting their supervisors to tell them what to do. MEst3 opined that certain “mandatory requirement for meeting or attendance or like... would have better anchored [the students] and increased the pass rate”. MEst4 also attributed students’ lack of progress to a lack of structured guidance from the Department and the supervisors:

The fourth semester is only for thesis writing. Since we do not have to go to college,

we tend to procrastinate and hurry when the next presentation nears. The same has happened to me as well. In the beginning, I was doing well. When there was a gap for some time, I could not take the pace. Then came the date for presentation before I had done any work. I was not satisfied with my work but had present it. (MEST4: Interview)

Rather than taking initiative and being proactive, MEST4 expected to be led and seemed to deny any responsibility for his agency, although he himself was a teacher. He further added:

My nature as a teacher and as a student differs largely. This is natural. As a teacher, we have a responsibility and want to keep our students on track. The students want to escape. This is natural. The whole semester is about the thesis, and they leave us free. If there were a class at least once a week, the students would meet their supervisor regularly. (MEST1: Interview)

This quote reflects his reactive nature, tendency to procrastinate, and dependency on his supervisor. On top of that, he considered these things to be ‘natural’ student behaviour. Therefore, he felt left behind and deemed it unfair for supervisors to expect students to “learn [research] skills without their support.” Instead, he thought it was the supervisor’s responsibility to provide them with a research problem, check in regularly on thesis writing students, and standardize ways of providing feedback. In his view, “If there were no exams, students would not study”. From what he said, it appeared to be clear that the chances for him to develop his research and writing skills were very slim.

Like MEST1, MEST4 revealed an apparent lack of proactiveness. Talking about his proposal defence, he said that he did not know what he “was actually going to do”. He was desperately expecting his supervisor’s help with interpreting his results, as can be seen in the following quote:

They can see the connections more than we can. I have analysed the data, but I cannot think more than one line about that result. I have written that in the result section.

What should I write in the conclusion? I have not been able to broaden the results. I sent him an email asking for suggestions. He did not reply to my email. He could have helped me to elaborate on the results. (Interview)

This quote clearly suggests that the student was not getting enough support from his supervisor. However, even more striking is the fact that he did not take any initiative to explore the ways (e.g., reading articles related to his research) that might have helped him.

Even with meticulous planning, the actual process of research and writing may change directions as a research student develops and gets insights during the process. However, students with completion-oriented motives failed to appreciate the learning opportunities associated with such ‘unproductive’ tasks, as the following quote shows:

It took me four days to develop an Excel sheet and about 15 days to learn the software. I was doing unnecessary work. I would have described the procedures and specified that in the limitations of my work. (MEST4: Interview)

MEST4 also found it difficult to select relevant material from reading because he felt like “whatever [he] read is relevant and could not decide whether [he] should include something or not”. Facing difficulty, lack of clarity, and uncertainty are natural ingredients of thesis writing. However, MEST4’s account highlighted his expectation for clear guidelines from his supervisor and minimal self-efforts to deal with problems. Therefore, he considered negative comments as ‘attacks’:

In the beginning, we all copy from others. We present some books and references in our bibliography. Then they ask questions like, “Go to bla bla reference. What is there? What does it say?” These questions demotivate students. I call them attacks rather than comments. How can a student remember everything? They are doing the

thesis for the first time and have prepared a proposal in format with great difficulty by copying from others. Then when they ask us questions about a reference, we get demotivated. (MEst4: Interview).

In general, the students considering thesis writing as a requirement tended to be reactive, more dependent, and less resourceful. They appeared to take thesis writing as a burden and consequently could reap little benefit from the process.

7.5 Factors shaping students' motives

The students' motives for taking thesis writing as a learning opportunity and requirement for graduation were found to be influenced by their language proficiency and academic competence; help, support, and inspiration from their supervisors; personal beliefs; and their job or family-related responsibilities. The students with a positive attitude towards learning, good academic track records, and willingness to pursue further study seemed to take thesis writing as a learning opportunity.

7.5.1 Students' perceptions of research

Students' perceptions of research influenced their motive for writing their thesis. The students who could see the value of research for their learning and career appeared to have learning-oriented motives. For example, MEST2 had a highly positive attitude towards research and stressed that "whatever we learn we learn from writing a thesis". He opined:

Only those students writing a thesis have a real master's degree. In some Departments, thesis writing is optional. In my opinion, a student who has written a thesis knows many things more than the student who has not done so. (Interview)

Those students who held the view that "research has a great practical value" (EduSt4), valued the process of research more than the product itself, as can be seen in the following quote:

I feel like I would be happy if I completed that task in the process of doing something.

I think of the final product and have patience even if I had to struggle. Successful people enjoy their work. I also enjoy working. (PSt1: Interview)

This shows that students' views of research and thesis writing had an impact on their motives.

7.5.2 Academic background, career plan, and determination

Students' motives for thesis writing also appeared to be influenced by their academic background and career plan. For example, PSt2 had a good track record of academic performance, and was motivated to study science ever since he saw the prestige associated with teaching science in his school days in a remote village of Nepal. Although his parents had wanted him to attend an overseas engineering program, he chose to study science.

However, he proudly shared that he never disappointed his parents because he always did well in his study. He was grateful to his supervisor for encouraging him "to go for PhD and get involved in research".

PSt1 also completed his SLC [School Leaving Certificate] in the first division from a rural district of Nepal, studied science following the commonly held belief that "those who secure good marks in SLC should study science", and did very well. Although he aspired to study MBBS (Bachelor of Medicine and Bachelor of Surgery), he "could not succeed despite [his] best efforts". However, he did not lose his vigor and enthusiasm for the failure and joined bachelor's degree in science with the same passion for doing well. PSt1 recounted:

I was and still am passionate about my study. I continued BSc with great dedication and got the distinction. I can focus on one thing for a long time... The most important thing is our interest. We can succeed well in the area of our interest. With full dedication, we can get where we want. (PSt1: Interview)

Thesis writing strengthened his love for knowledge and desire for learning. He described himself thus: “when one thing is over, I start thinking of another thing almost immediately”. Clearly, he recognized learning as a continuous and lifelong process. His strong academic background contributed to his outlook.

EduSt3, a student from a rural part of Nepal, had a great determination to pursue her master’s degree, for which she had to come to the capital city, Kathmandu. As she was keen on enhancing her skills, she appreciated the learning affordances associated with thesis writing, was dedicated to the process, and was proud that her efforts were rewarded:

I already have a reward for my research. I got master research support (Rs 30,000) for my study from University Grants Commission. (EduSt3: Interview)

EduSt4 also had a similar determination to continue her study despite people in her area thinking that “it is not necessary to provide education to girls”. She recalled that “many people had their negative say when I came to Butwal for higher studies”. Because of her resolve, she was highly dedicated to her thesis writing and benefitted from the process. What transpires from the analysis is that the students’ academic competence, career plan, and personal resolve had huge impact on their motives.

7.5.3 Supervisors’ support and inspiration, and student collaboration

Supervisors’ support and inspiration played a significant role in shaping students’ motives for writing their master’s thesis. Students with a learning-oriented motive reported receiving support and inspiration from their supervisors. For example, PSt1 was highly grateful to his supervisor because he always had high expectations for his students:

Our supervisor always encouraged us to do more. He inspired us to exceed our expectations. ... He always wanted to add pressure on students rather than reducing it. He made us believe that we can do more ... He always motivated us and inspired us to

be entirely dedicated to whatever we do. He encouraged us to read more books and understand subject matters in depth. (PSt1: Interview)

PSt2 was also highly inspired by his supervisor to be meticulous and have a deeper understanding of subject matter, as reflected in the following quote:

Tangible/physical aspects mostly convince my supervisor. He relates to everything that we see in nature. He always encouraged us to connect our understanding of the nature to reality. He taught us to be meticulous and pay attention to minute details. Small things might have a significant impact on our work. (Pst2: Interview)

Some students were motivated to learn because their supervisors boosted their strength when they felt drained by the demanding task:

At one point, I thought, maybe, I would not be able to complete my thesis successfully. However, our supervisor continuously inspired us. I got results of an experiment and got a different result from the paper that I was using as a reference. I was feeling very difficult to interpret the results. At the same time, my supervisor asked me to present my work ...During my presentation ...my figures were not precise, and I was not much confident. I just showed the figures, and my supervisor explained them ...I was at the front and blushed. When he explained the graphs, I got insights for the interpretation of the results. (PSt3: Interview)

Producing academic discourse is a tough and demanding task for graduate students with little research background. Therefore, they valued thesis writing when their supervisors carefully scaffolded their writing:

My supervisor heavily corrected my first draft ... He asked me to remove about 25% of what I had written because that was not relevant. That helped me to narrow down the focus of my study...In the second draft, he helped me to have a clear

understanding of the theory... He asked me to design tools according to the theory I was using. (EduSt3: Interview)

EduSt3 acknowledged that producing multiple drafts helped her to refine her writing. She was glad that her supervisor “appreciated that [her] writing was improving”.

In contrast, students who took thesis writing as a requirement (i.e., a completion motive) complained about the lack of enough supervisory support. MEst1, for example, felt that he was left alone:

I do not have much interaction with my supervisor who is a retired professor. Taking his time is tough. It would have been easier if the supervisors created some boundaries for our work, instead they leave us free. When we do something on our own, they say what is wrong with our work. That makes us frustrated. They do not provide any way out. Even in the presentation, we get comments but not guidelines to improve our work. That makes us feel very low and lose our confidence. If our work is not right, they need to tell us what to do to improve it. There is a lack of specific guidelines. (MESt1: Interview)

MESt4 also suffered due to minimal supervisory support. On top of that, he was caught between differing views of his two supervisors with diverse backgrounds:

My proposal was about measuring the thermal conductivity of cement stabilized earth blocks (CSEB) ... Maybe my proposal was passed because most of the teachers present in my proposal defense did not have knowledge in the area. When I talked to one of my supervisors later, he said that CSEB would not be sustainable and ... asked me to work on Inco-panel ... I changed my topic ... When I changed the topic, another supervisor said, “He suggested you do so to promote his software. It would be best if you thought about your research. You cannot do whatever others suggest”.

Such is the complication of having two supervisors. I wanted to utilize my knowledge

in civil engineering and energy ... Therefore, the department allocated two supervisors to me. (Interview)

Because of divergent suggestions from his supervisors, he did not receive enough support and could not complete his thesis on time.

In conclusion, students' views show that motivation, encouragement, inspiration, and support from supervisors had a profound impact on their motives. Students who had supportive and encouraging supervisors found thesis writing an opportunity to enhance their skills and abilities, whereas for those lacking such support, thesis writing was a burden.

7.5.4 Job and family responsibilities

Students' job- and family-related responsibilities also had an impact on their motives. Most students who viewed thesis writing as a requirement were full-time jobholders, had family responsibilities, and did not think of a career in the academic field. The following quote shows the challenge that MEST3 was facing:

I have not been able to meet my supervisor frequently because I am busy, and there is a lot of pressure at work as well ... I have not been able to work at a fast pace. I am married and unable to follow my timetable. I must work according to other family members' timeline as well. I am staying with my family. My family is supportive, yet it is still difficult. (Interview)

Another student (MEST1) revealed his completion-oriented motive when he said that he was "doing the course to take a degree". In his view, the root cause of the problem, was that "students are not full time". MEST4 also "could not give enough time to thesis writing because of [his] job". It should be noted that thesis writing was a compulsory requirement for all these students. Therefore, despite challenges, they had to continue with the process.

7.6 Influence of supervisors' motives on students' agency: Illustrative cases

The section presents four case studies of supervisor-student pairs (Paul-Bill, Joseph-Mary, Andrew-Sarah, and Henry-Eva). These cases illustrate how supervisors' various motives (i.e., inspiring, supporting, learning, and evaluating) shape students' motives, agency, and learning affordances leading to distinctly different outcomes.

7.6.1 Paul

Paul's overarching motive was encouraging and inspiring his students to conduct scientific research and promoting their self-regulated learning. His motive shaped his feedback stances. In the interview, Paul stressed the importance of supporting students, research rigor, and students' independence. The data from the interview with his student corroborated his motives. His motives were shaped by his experience of being supervised, his passion for scientific research and its potentialities in Nepal.

Besides, Paul had positive perceptions of his students' capabilities and potentialities, which contributed to his motive for making them independent. He described his students as "intelligent", "motivated", "dedicated to their work" and capable of working "based on the hints". Therefore, he expected them to "do most of the things on their own". Paul stressed that requiring students to take agency in their learning was the most effective feedback strategy:

The most effective way of giving feedback ... is to provide hints. I may increase the suggestions if required without, at first, clearly telling them what to do. My students might say I provide them less help. I don't mind that. I aim to develop their skills and make them independent. (Interview)

Despite having a tight time frame because of multiple responsibilities, Paul did not compromise in supporting his students because he believed that his students' engagement

with the thesis depended on his time and interest in their work. In this regard as well, he cited the influence of his supervisor:

I know that student's engagement depends on the supervisor's engagement with students' work as well. My supervisor was highly motivating. He used to give full time to me. I learnt that from my supervisor and tried my best to apply the same with my students. (Interview)

Paul's motive for empowering his students to take agency in their learning led him to offer pre-writing feedback, entrust students with greater responsibility, encourage them to engage in collaborative learning, create a conducive environment, and set high expectations so that they could excel. He also utilized prewriting feedback to raise their awareness of ethical research and writing practices:

I provide a two to three-hour lecture on plagiarism, falsification, and fabrication of data...every year in the beginning regarding the need to avoid them. I also tell them that when scientists do not do these things, they become great scientists. I provide examples of such scientists to my students. I tell them how the life of a scientist is destroyed due to the fabrication and falsification of data. (Interview)

As can be seen in the quote above, Paul's stance on ethical research practice was not limited to fulfilling academic requirements; it went far beyond. Paul's student Bill found prewriting feedback on avoiding plagiarism highly beneficial:

Regarding writing, Paul said to us, "First read the literature related to your research, understand that, close the reading materials, and write it in your own words. If you do so, there would be very little chance of plagiarism". I did the same and found it to be beneficial. (Interview)

Clearly, Bill's writing practice was influenced by his supervisor's advice. In addition to pre-writing feedback, Paul provided focused and tailored feedback during the process of writing.

However, when providing feedback on the students' first draft, he only provided 'hints' to encourage them to invest more time and effort:

In the beginning, I give some hints about problems in their writing so that they can figure out the things on their own. I expect from the beginning that the students do most of the things on their own. I mark the main points only. When students bring a modified version, I discuss with them their work line by line. (Interview)

This excerpt showcased Paul's practice of entrusting his students with responsibility. Bill's first draft had only 54 comments, and his second draft was approved for submission. Bill appeared well prepared and confidently answered all the questions raised by his supervisor's and colleague during his mock viva.

Paul also created a collaborative learning environment for his current and outgoing students to promote their independent learning and was proud of their proactive attitude to learning from each other. In the following segment, Bill describes his self-regulated collaborative learning efforts:

For learning [technical things such as latex and MATLAB], we collaborated among ourselves. I shared the skills that I knew and learned something from my friends. We did not have to go to our supervisors for these aspects. Sometimes, we consulted our seniors and browsed the Internet to solve specific problems. (Interview)

Thus, the collaboration among friends extended their channels of support and, at the same time, reduced their dependence on their supervisor. It is worth noting that Paul's students felt deeply cared for even when they were working on their own or collaborating with their friends. According to Bill, Paul was "always there whenever I needed his help" and "highly appreciated if we could come up with something new that he has not suggested". However, to engage in self-regulated learning, the students needed access to resources, which were rather limited in the participating university. Therefore, Paul provided necessary support to

his students to locate resources by showing them techniques of exploring online resources, providing links of freely available resources, and using his own access if necessary.

Paul had a reputation as an encouraging and empowering supervisor, and students felt privileged if Paul agreed to supervise them. Usually, the top-ranking students gained such an opportunity. Once accepted, they were prepared to work hard. Paul was glad that “all [his] students work as much as [he] expected”. The following quote from Bill confirms Paul’s self-report:

[Paul] always encouraged us to do more. He inspired us to exceed our expectations. He made us believe that we can do more. He always motivated us and inspired us to be entirely dedicated to whatever we do. He encouraged us to read more books and understand subject matters in depth. (Interview)

This shows that Paul was able to inspire, motivate, and empower his students to take agency in their research work. Overall, Paul’s motive for supporting students, training them in scientific research, and making them independent appeared to meet with a high level of success. In the following segment, Bill describes his great victorious feeling:

I have a great sense of achievement from thesis writing.... First, the level of plagiarism in my thesis was minimal (11%). It made me feel that I did my work myself. It gave me confidence that my writing style was good... Second, my supervisor had very few comments, even on my first draft. Therefore, I believed that I had followed my supervisor’s suggestions. Third, I have developed my presentation skills and the confidence to write academic papers... Research is an essential skill... The process of research is more important than the outcome. In the process, we might face many challenges and should pay attention to minute details. Coming up with something new is not easy. However, this is something we can do. (Interview)

Bill's comments indicated that he not only understood but also fulfilled the fundamental aim of writing a thesis, that is, being a proactive researcher. Paul succeeded in instilling genuine research interest in his student.

7.6.2 Joseph

Joseph's main motive was to support his students "to complete their thesis" because they did not have genuine interest in research. His motive for supporting his students "to complete their thesis" had much to do with his perception that his students had no genuine motivation for research; therefore, they had to be directed, regulated, and told what to do. The following interview segment describes his view:

They are motivated to get a master's degree but not to research in real sense...
Because of the lack of motivation, their efforts to produce a thesis are
compromised.... I do accept that I have not been able to motivate all the students...
Only a few students are motivated when we tell them about the importance of
research. We use other means to motivate such students to complete their thesis.
(Interview)

Unlike Paul, who was passionate about research, Joseph admitted a lack of time to engage in research:

We are not getting time to write proposals for grants because we have multiple
responsibilities. We must mostly focus on teaching and must prepare for it from
morning to evening. Therefore, we do not have much time for proposal writing as
well. Despite difficulties, we have given a continuation of our research. (Interview)

It would seem that his desire for 'giving continuation to research' contributed to his motive for helping students 'to complete their thesis'. In both cases, research seemed to have been taken as an end rather than as a means.

Joseph's motive for supporting his students to complete their thesis was reflected in his supervision practice. His belief about his students' low research interest led him to hold their hands firmly throughout the process rather than empowering them to take agency. Unlike Paul, who first provided hints so that the students could invest time to solve their problems, Joseph thoroughly corrected their work:

I take a lot of time correcting students' work. First, I read their draft from beginning to end and get an idea of what the student is focusing on and trying to convey. Only after reading the draft thoroughly, I start providing in-text feedback. For example, to cross something out, I need to know whether the thing is relevant in the research or not. (Interview)

Joseph focused on "content, language, organization, and relevance of ideas included in the thesis." However, which aspects of writing deserved more attention depended on "the impression we get from students' writing." His student, Mary, confirmed that Joseph focused on various aspects of her writing:

My supervisor focused on many things, from small things to big things. It is essential to make sure that there are not even small mistakes. If we see small errors in a book, it gives a bad impression of the writer. The same thing applies to the thesis as well. He also focused even on small errors and asked me to correct my mistakes and improve my writing, and he corrected himself as well. He also paid attention to whether the research has addressed something new. He also focused on results and discussion. (Interview)

A closer examination of Mary's first and the second drafts showed that Joseph had meticulously corrected her work. There were 327 and 122 feedback points in the first and the second draft, respectively. Most comments (66.59%) were in the form of corrections or addition of content. Unlike Paul's student Bill, who wanted to impress his supervisor by

coming up with something new, Mary did not seem to go beyond what was suggested; instead, she did not enact the feedback that she thought was ‘not serious’:

Sometimes I might not have noticed some problems, but whenever he asked to correct something, and if they were serious, I accommodated them. However, if a suggestion was about modifying the style of writing, I would let it go. (Interview)

Joseph’s belief that his students needed extensive support and assistance prompted him to recruit his interested PhD and outgoing master’s students to “become co-supervisors of master’s students”. Unlike Paul, who encouraged students to initiate collaborative learning between outgoing and current students, Joseph arranged such a support network as a formal process. In this regard, involving outgoing students as co-supervisors facilitated his practice of providing directive feedback to his students rather than requiring them to take agency in learning.

Joseph’s tried to motivate his students extrinsically by watching movies and going for trekking with students. Besides, he allowed them access his office room and use “all the facilities [workspace, books, computers, and printing] available” there. However, sustaining their efforts was still challenging. Therefore, he implemented some ground rules:

We provide the students with a calendar and deadline for their work. We send them an email to remind and take their attendance as well. We keep register like this (showing a log). We update their progress and maintain transparency. I take note of the date when students submitted their work to me so that I can return their work in the same order. (Interview)

Despite his busy schedule, Joseph did not compromise on time for his students. Mary was satisfied as she received “enough time” from her supervisor. However, she seemed to have developed little agency in her work, as was reflected in her mock viva. She could not answer many of Joseph’s questions, which prompted him to caution her:

You must be able to answer all the questions ... You must face everything. Be serious and careful ... Prepare all the questions that you don't understand, and we can discuss them ... Don't blame anyone even for a technical problem. It would be best if you prepared again. Even if your slides are suitable, if the presentation is poor, it gives a bad impression. (Interview)

These comments indicate Mary's lack of command over her work and Joseph's concern about whether she would be able to defend her work. Therefore, he invited her for another mock viva so that she could be better prepared.

7.6.3 Andrew

Andrew invested new meaning and interest in supervision because, in addition to helping his students develop research skills and writing skills, he viewed supervision as a learning opportunity. He recalled that he was somehow anxious when he was assigned supervision responsibility for the first time. Adding to his anxiety, as one of academically competent students under his supervision had doubt on his ability to guide her, she indicated her desire to change her supervisor although she continued to work with him. He took the incident as a serious challenge and tried his best to by provide her with excellent supervision, as illustrated by the following quote:

Her thesis was on SLA [Second Language Acquisition] ... I discussed her proposal with the teacher delivering the SLA course and asked for her suggestions regarding the theories and tools ... I helped my students rigorously. She produced 5-6 drafts. During her viva, the external supervisor highly appreciated her work and my supervision. That encouraged and motivated me a lot [...] The first thesis that I supervised taught me many things about thesis supervision. I took it as a challenge and learning opportunity.

This excerpt shows that his learning attitude led to positive outcome and satisfaction for both of them. He noted that when his students chose areas new to him, he read literature in their fields to get better prepared to provide useful feedback. He stated:

Because we have supervised many students doing surveys and experimental studies, we feel comfortable with these designs. When they go for new designs, it becomes challenging for us. Three of my students recently conducted their research on the linguistic landscape. I did not have much knowledge of the linguistic landscape. When I had to supervise these students, I started reading in that area to know more about the linguistic landscape and research in that area.

His students highly appreciated his positive outlook. The crisis of trust in the beginning gave way to his popularity as a supportive and rigorous supervisor. He helped his students not only with expected components of a thesis (e.g., objective, research questions, literature review, designing tools, and conceptual framework) but also language and mechanics. He firmly believed that academic literacy support was crucial for students:

I also tell them to maintain accuracy in their writing and use connectors properly. I encourage them to share their work with their colleagues for peer feedback. If I find mistakes in students' writing, I do not leave it only by marking it. If I draw a line, it only creates a problem for students. Students know that there is something wrong with the sentence, but they do not understand how they can improve it. Therefore, I provide corrective feedback to students. If there are many similar mistakes, I correct and ask students to follow the suggestions accordingly.

Andrew's student Sarah appreciated his support with language and content:

My supervisors heavily corrected my first draft and provided detailed feedback. I had written many things related to the English language. He asked me to remove about 25% of what I had written because that was not relevant. That helped me to narrow

down the focus of my study ... He helped me to have a clear understanding of theory ... and design tools accordingly ... He also suggested me to maintain cohesion and coherence in writing and heavily corrected my writing... Later on, he appreciated that my writing was improving.

A closer examination of Sarah's thesis drafts showed that Andrew had provided detailed feedback on different aspects. The first and second draft contained 149 and 29 feedback points, respectively. Sarah had accommodated the comments very carefully.

Andrew's motive for supporting students and learning from the process was based on his belief that students' engagement was reciprocal to the supervisors' involvement and interest in their work:

I have seen that when I explicitly correct their first draft, I do not have to ask them to produce more than two drafts. Their second draft comes in far better shape in 70 percent of the cases. If we do not do so, they cannot improve even after they have produced six-seven drafts. If we are sincere, students engage well with our feedback. If we are superficial and provide comments in 15-20 minutes, students do not take their work seriously.

Because of learning attitude, Andrew identified with his students' successes and failures as his own, as illustrated by the following excerpt:

When students produce good work, I feel proud and feel bad when they do not work seriously. I feel terrible when my students receive many negative comments in the viva. I feel like why I could ignore so many things. I tend to take my responsibility if students receive many comments in the viva. Once, an external examiner... provided many in-depth comments. One that day, I felt like I had not supervised the student well. That experience taught me a lot. In the next case, I had given detailed comments on the student's draft. He assured me that he had accommodated the feedback. I

trusted him and suggested him to submit three copies for viva ... However, before the scheduled viva, the Chairperson of the research committee and the head of the Department told me that the thesis was not ready for viva ... On that day, I felt terrible because the thesis I supervised was rejected for the first time.

The excerpt shows that rather than blaming students, Andrew accepted his share of responsibility for his students' failures. He viewed that his agency and dedication greatly impacted their agency in thesis writing. He noted that "if we are interested and dedicated, students can work except one or two cases." Andrew's dedication to and interest in Sarah's work had a noticeable positive impact on her engagement. She recorded conversations during their consultation meetings, listened to them repeatedly to ensure that she acted on the comments, tried her best to solve problems herself, paid attention to Andrew's advice to her colleagues, and was not afraid of receiving critical comments.

She recalled that her thesis defence went very well and was profoundly grateful to her supervisor. She had a sense of great accomplishment because she enhanced her academic reading and writing, research, word processing, communication, and presentation skills. She was proud to share that her work was already rewarded because she received "master research support (Rs. 30,000) for [her] research from University Grants Commission".

The case shows that supervisors' learning attitude can provide meaningful experience to both supervisor and student. Besides, it can have a lasting impact on students' agency and learning.

7.6.4 Henry

Although Henry emphasized that the main purposes of supervisory feedback were developing students' research and academic literacy skills, he believed that primary responsibility lied on the students themselves. His evaluation-oriented motive and limited scaffolding to students

achieve the stipulated purposes transpired when he talked about other aspects during the interview. He presented himself as a strict supervisor available for consultation only during time specified in advance:

I have allocated two weekdays for meeting with students. I do not meet them on other days...If students can reach us anytime, they like, they do not become accountable.

However, although the days were specified, he did not provide students with specific appointment for meeting. Therefore, they came to the Department and waited for his time. His student Eva shared her bitter experience of waiting for him the whole day in a vein:

Once I was waiting for my supervisors from 10 am. Around 4 pm, he came to the office with a group of students and said that he could not give me time because he had a class. I felt horrible on that day.

He complained that his students were not much dedicated:

Students do not want to buy books. I visited many bookstalls, libraries, and research centres while doing my master theses. However, at present, students do not work in that way.

He held the view that "the master level students who are majoring in English should be able to write accurately". Therefore, he did not correct their language, instead indicated problems in using symbols: single underline for grammatical issues, double underline for meaningless sentences, and "copied" for plagiarized section. He did not "tolerate their writing full of errors ... [therefore] ask[ed] them to bring the corrected version in a hard copy". Students either were expected to seek help from their friends or pay to have their work edited.

Henry mostly tended to see things from his perspectives and appeared to fail to acknowledge challenges his students might be facing. He admitted that his students sometimes had a negative feeling when he indicated meaningless sentences in the presence of their colleagues because he believed that doing so was an effective strategy to make them

responsible. However, the students were not satisfied with the approach, as reflected by the following quote from Eva:

We can realize that our teachers are busy and do not have time to read our work thoroughly. However, if our supervisors read our work carefully, indicate problematic areas, and suggest ways to improve them, the feedback would be useful. They should provide written or oral comments regarding how we can improve our work... My supervisor read the first chapter in the first draft and the second chapter in the second draft. However, we needed to print the whole thesis every time.

It is apparent from the excerpt that Eva was not satisfied with the supervisory support she received. A close examination of Eva's thesis drafts showed that she had made little progress in writing, with similar errors in consecutive drafts. The first and second draft contained 32 and 17 feedback points, respectively. However, most of the comments in the first draft were not incorporated in the second draft. Perhaps the comments (e.g., *Rewrite/paraphrase the analysis section; Rearrange the theory well; Relate and expand your background; So what?*) were not specific enough for her to act on them. Even the final approved for submission for viva contained a profusion of linguistic and content-related issues.

He emphasized that the students should be well versed in the area of their research. Therefore, he warned his students that he "would not be responsible in case their thesis was rejected" because of their weak defence. The following quote shows that he maintained a gatekeeping role:

I remember one student producing 12 to 13 drafts. If students cannot improve even after that, I ask them to submit their theses. They get comments in the viva.

The whole endeavour seemed to be requiring the students to maintain the standard of the work. However, enough support appeared to be lacking. Henry's evaluation-oriented motive

allowed him to distance himself from his students' suboptimal work, as can be seen in the following quote:

Once one of my students was frustrated and reported to the Department. I said to the Head of the Department, "See the language if you can accept the thesis, I have no objection." He went through the thesis, which he did not find satisfactory, and asked the students to revise it.

However, in the absence of enough support and guidance, students could not make the required progress. In Eva's view, the supervision she received was unsatisfactory and unprofessional. Eva could not defend her thesis well. External examiners were disappointed with her work, as reflected in the following viva comments:

You have just counted errors ... Your analysis is wrong. Error analysis has its procedures. Follow the same processes in your analysis ... There should be real examples of errors committed by learners. I could not find them in your thesis ... You have not followed the new format prescribed by the Department.

The analysis shows that students can neither take responsibility nor make progress without sufficient supervisory scaffolding and support.

These four cases demonstrate that supervisors' motives have a significant impact on students' agency and learning. The most prominent finding to emerge from the analysis is that what matters is not the amount of feedback, but the ability to provide the students with a sense of love, care, understanding, and expectations. Therefore, in Paul and Bill's case, less supervisory support contributed to students' self-regulation and agency. In contrast, in the case of Henry and Eva, less support meant a lack of required scaffolding. Therefore, less may be more (Yeo, 2018) only when the motive is to promote students' agency by creating a conducive condition for self-regulation. However, less support with the focus on evaluation might lead to frustration and sub-optimal outcome. Both Joseph and Andrew massively

supported their students Mary and Sarah, respectively. However, Mary seemed to have made little progress, perhaps because Joseph's expectation of her was mostly focused on her graduation. However, Andrew's help, coupled with his learning-oriented motive, could lead to Sarah's qualitative transformation. To conclude, supervisors' different motives led to distinctly different outcomes.

7.7 Summary

This chapter has presented the findings related to the supervisors' and the students' motives for supervisory feedback and thesis writing respectively. It has shown that supervisors' and students' motives, which were shaped by various historical, social, and personal factors, significantly influenced their practices. Four case studies revealed that supervisors' motives have huge impact on students' agency and learning.

CHAPTER 8

DISCUSSION

8.1 Chapter overview

This chapter discusses the major findings of the present study. It interprets the findings in relation to the relevant literature and cultural-historical activity theory. The discussion is organized based on the research questions that guided the study.

8.2 Foci and functions of supervisory feedback

The first research question was answered by examining the foci and functions of supervisors' feedback comments provided on 97 thesis drafts across the four disciplines. The results on the foci and the functions are discussed separately.

8.2.1 Foci of supervisory feedback

As reported in the previous chapter, editorial comments (i.e., those on linguistic form and mechanics) were more frequent than in-depth comments (i.e., those on coherence/organization, content, and expected components of a thesis). These results are in line with the findings of previous research (Basturkmen et al., 2014; Bitchener et al., 2010; East et al., 2012). The extant literature explains extensive editorial feedback in terms of the less demanding nature of editorial markings and supervisors' focus on making the text readable (East et al., 2012). In contrast, "the difficulty of diagnosing and commenting on problems in the coherence of writing" (Basturkmen et al., 2014, p. 442) and the careful reading of texts, deep consideration and cautious phrasing required for commenting on content (East et al., 2012) could have contributed to the scantiness of coherence- and content-related comments. Some additional factors may also have contributed to the higher frequencies of editorial markings in this study. One of these factors was that some supervisors did not

read the thesis drafts carefully and could only make some superficial editorial markings. As one Education student complained, “Supervisors provide superficial comments such as about font, spacing and sources and less feedback on content and depth of writing.” A third factor was that some supervisors did not seem to be well prepared to provide carefully crafted, in-depth feedback. One student said, “I do not want to blame my supervisor. I found as if he himself was not clear in many aspects and could not give a clear idea”. This seems to be consistent with Starfield’s (2019) observation that “supervisors, however, may lack the explicit knowledge necessary to provide feedback on students’ writing that goes beyond grammar correction” (p. 208). Finally, some supervisors in the present study made fewer substantive comments possibly because they might not have been able to articulate their specialized knowledge to make it accessible to their students (Paltridge & Starfield, 2019; Paré, 2011).

The present data set contained a significant number of tick marks, underlines, and question marks without any additional explanations. Tick marks indicated overall approval and did not create any confusion to students because they did not require any further changes. However, underlines and question marks, which expressed disapproval, made students feel confused and anxious because the markings did not “provide a clear sense of direction forward for growth” (Kumar & Stracke, 2018, p. 17). Such superficial markings may “imply 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. 162). Alternatively, they might suggest that the supervisors recognized problems but could not provide suggestions to address them (Paré, 2011). For example, ‘rewrite statement of the problem’ was a comment commonly used by Education supervisors. However, they were unable to provide concrete guidelines on how the statement of the problem could be rewritten. It was also possible that

the use of such comments was meant to encourage the students to think hard and address the problems independently, as a strategy for fostering autonomy and avoiding spoon-feeding.

8.2.2 Functions of supervisory feedback

As regards the functions of supervisory feedback, expressive comments were most frequent, followed by referential and directive comments. These results contrast with the findings of previous studies (Basturkmen et al., 2014; Kumar & Stracke 2007; Stracke & Kumar 2010; Xu 2017), which reported the prevalence of referential comments followed by expressive (Stracke & Kumar 2010; Xu 2017) or directive (Basturkmen et al., 2014; Kumar & Stracke 2007) comments. The profusion of expressive comments can be attributed to factors related to students (e.g., language proficiency and self-regulation), supervisors (e.g., time and sense of responsibility), and institutional research culture. First, the close examination of thesis drafts showed that the drafts that elicited negative non-verbal comments were poorly written owing to the students' limited academic language proficiency and self-regulation. Some student interviewees admitted difficulty in composing academic texts, and the supervisors pointed to students' minimal academic writing proficiency, also observed in a previous study (K. Hyland, 2013). In some cases, the prevalence of global errors less amenable to quick fixes elicited considerable negative supervisory responses, whereas in other cases (such as formatting), students' lack of seriousness was the trigger.

Second, many expressive comments could be attributed to the supervisors' time constraints. In line with previous research (K. Hyland, 2013), some supervisors confided that they did not have time to read students' work carefully and provide constructive feedback due to their heavy teaching and supervisory responsibilities. For the students, such superficial negative comments were unhelpful, highly discouraging, and self-esteem busting; they also communicated the supervisors' lack of interest. Not surprisingly, this finding is in contrast

with the literature in which students found negative expressive comments beneficial in promoting their self-regulation because the negative comments in those studies were constructive (Kumar & Stracke 2007; Stracke & Kumar, 2010; Xu, 2017). From an institutional perspective, the lack of in-depth feedback indicated limited attention paid to graduate research because there was little institutional monitoring about its effectiveness and the supervisors were rarely provided any training about effective feedback practices.

Given that most of the referential comments pertained to editorial aspects, comparatively fewer referential comments in this study seemed to have resulted from supervisors' lack of concern with developing students' academic literacy (K. Hyland, 2013). Contrary to supervisors' expressed priority and in line with the literature (e.g., K. Hyland, 2013; Xu, 2017), most of the interviewed students expected and appreciated linguistic feedback simply because they were unable to deal with such issues on their own. Unlike the findings from previous research (e.g., Basturkmen et al., 2014; Xu, 2017), most of the directive feedback (68.41%) was formulated as instructions with the rare use of mitigation strategies. Such an approach seemed to present supervisors as incontestable authority figures and offered little agency and intellectual autonomy to students (Hyatt, 2005; Winstone & Carless, 2020).

From the perspective of cultural-historical activity theory, thesis writing is a collaborative work between the supervisor and the student and is governed by the division of labour (Engeström, 2015; Lei & Hu, 2019; Tolman, 1999). My examination of the foci and functions of feedback provided on thesis drafts suggested that, in most cases, the supervisors were unable to support and scaffold students' learning as expected. Besides, the failure to take students' perspectives into consideration appeared to create little room for much needed shared understanding (i.e., intersubjectivity) between the supervisors and the students (Löfström & Pyhältö, 2015).

8.3 Supervisors' attitudes conveyed in feedback

The second research question concerned supervisors' attitudes conveyed in their feedback comments. The analysis showed that among three categories of attitudes (i.e., affect, judgement, and appreciation) in Martin and White's (2005) appraisal system, instances of appreciation were most frequent in both oral and written supervisory feedback. The finding is in line with the principle that the major concern of thesis evaluation is the quality of the research (Holbrook, Bourke, Fairbairn, & Lovat, 2014). Appreciation of a thesis in terms of its value, as well as coherence and clarity in presentation, constitutes 'official' evaluation, whereas, expressions of direct judgements and affect is considered 'unofficial' (Starfield et al., 2015). However, the instances of direct judgements were also highly prominent in the present data set. These results reflect those of Starfield et al. (2015) who also found frequent use of judgements in examiners reports. The analysis revealed distinct patterns in the expression of supervisors' attitude in oral and written feedback. First, the instances of tenacity, capacity, veracity, and normality were found in oral feedback only. This finding appeared to suggest that presentations are more likely to elicit judgements than thesis drafts. It seems to be plausible because while supervisors interact with written texts while commenting on thesis drafts, the focus might shift to students in providing oral feedback. Given that students' agency is crucial to improve the quality of a thesis, supervisors' expression of judgements on social sanctions (i.e., propriety and veracity) is understandable. However, instances of judgement aiming at students' social esteem (i.e., normality, capacity, and tenacity) in a very critical and direct manner appeared to make students feel vulnerable and powerless (Boud, 1995) with the likelihood of damaging the students' fragile self and wavering confidence (Hyatt, 2005). The following quote from an Engineering student illustrates the case in point:

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.

The analysis also revealed that the instances of attitudinal meanings in both oral and written feedback were predominantly negative, although “the notions of positive and negative are not absolute” (Hyatt, 2005, p. 350). This finding was also reported in previous studies (Basturkmen et al., 2014; Hyatt, 2005). Three possible explanations can be offered. First, as positive evaluation usually remains invisible (Basturkmen et al., 2014), there is more opportunity to communicate the negative appraisal. Second, overly critical comments targeting students social esteem might indicate supervisors’ and limited “expertise in knowing how to enhance feedback processes” (Winstone & Carless, 2020, p. 16) and lack of awareness of a crucial aspect of feedback practice that is “[t]he ways we convey our praise or criticism, and how we phrase our suggestions, are central to effective feedback” (K. Hyland & Hyland, 2019b, p. 168). Third, as the closer examination of thesis drafts and presentations revealed, poor quality of students’ work tended to elicit more negative comments as suggested in previous literature (Paltridge & Starfield, 2019; Skinner & Pitzer, 2012). It is worth noting that, among other things students’ poor quality of work seemed to be associated with suboptimal supervision process characterized by low supervisor-student collaboration, poor supervisor-student relationship, minimal supportive feedback.

8.4 Perceptions of supervisory feedback

How supervisors and students perceive feedback plays very important roles in their practices. The third research question that addressed such perceptions revealed significant differences in the supervisors’ and the students’ views.

8.4.1 Purposes of supervisory feedback

The supervisors agreed more about the stated purposes of supervisory feedback than the students did although the difference was not significant. From the cultural-historical activity theory perspective, thesis writing, and supervisory feedback are artifacts mediated activities. In this regard, experience and knowledge resources expand their horizon of knowledge and understanding, thereby leading to a qualitative transformation in the perceptions of purposes (Blackler, 2009; Sannino, Daniels, & Gutierrez, 2009). Therefore, the students, as novice researchers, might have engaged in the activity “without being fully conscious of [the purposes]” (Engeström, 2015, 54). In this regard, some variation in their perceptions would seem understandable given the supervisors’ and the students’ diverse historically accumulated experience and access to mediating artifacts because repeated exposure makes things clearer (Vygotsky, 1978).

8.4.2 Foci of supervisory feedback

The supervisors and the students had significantly different perceptions regarding the foci of supervisory feedback (i.e., core research aspects, language and academic writing conventions, and content), with the former indicating that they provided more feedback on each of these aspects than the latter thought they received. This finding corroborates previous research, which found that “tutors perceived their feedback more positively than students did” (Carless, 2006, p. 224). The analysis of the feedback provided on the thesis drafts, observations of comments made on students’ presentations, and interviews with students and supervisors seemed to support the students’ views. First, the analysis of in-text feedback comments showed minimal comments targeting core research aspects (i.e., literature review, methodology, analysis and discussion). Second, in their responses to the open-ended questions as well as during the interviews, students explicitly shared their bewilderment regarding core aspects. The most pronounced struggle was with the selection of a topic. As

the saying goes, ‘well begun is half done.’ However, lack of support in the selection of a topic not only wasted students’ precious time which could have been more productively used in other aspects of writing, but also led them to make a less informed topic selection. Challenges were also reported in other areas such as the development of a conceptual framework and the review of related literature. The students felt better supported when they were referred to published literature, though this did not appear to be a common practice. Notwithstanding students’ difficulties, the supervisors tended to assume that their students should be well cognizant of and capable of completing these tasks (van Heerden et al., 2017; K. Hyland, 2019).

Significant differences were also observed in the supervisors’ and the students’ perceptions of feedback on language use and academic writing conventions, with the supervisors again indicating that they did more than the students received. In this case as well, the data from multiple sources seemed to corroborate the students’ views that they did not get enough support in writing. This finding does not contradict with the observation that there were more linguistics and mechanics-related comments. There are several possible explanations for these discrepancies in perceptions. First, many supervisors admitted that they did not provide linguistic feedback because they did not believe it to be beneficial for students, echoing Truscott’s (1996) controversial claim that “correction is harmful rather than simply ineffective” (p. 360). However, consistent with the findings of the existing literature (e.g., F. Hyland, 2003), the students valued feedback on language use and academic writing conventions simply because they lacked confidence in their language abilities (Ferris & Kurzer, 2019).

Second, some supervisors thought that providing feedback on language use and academic writing conventions was not incumbent on them. They believed that advanced-level students either should take charge of such issues themselves or have their work edited. This

view seemed to imply that content and language are separate things, and supervisors can exclusively focus on content without expending their valuable resources on language. However, scholarship on supervisory feedback has shown that content and language are closely intertwined and mutually inclusive (Cayley, 2018; Kumar & Stracke, 2017; Paré, 2011). Therefore, supervisors are essentially language teachers (Paré, 2011) and must assist the students with limited writing ability so that they can “acquire the writing conventions and practices that they need to demonstrate in their thesis” (Kumar & Stracke, 2017, p. 17).

Third, although some supervisors acknowledged the value of such feedback, they were unable to attend to these aspects because of time constraints and their students’ unacceptably low levels of writing competence. Having gone through similar experience, I can identify with this view. However, it is unethical to leave the most vulnerable ones on their own devices. Although developing writing literacy takes an excessive amount of time, enabling writing is “the sine qua non of [supervisors’] practice” (Grant & Xu, 2017, p. 23).

8.4.3 Effective supervisory feedback

The supervisors and students were on the same page regarding the principles of effective supervisory feedback. It was comforting to know that most supervisors were aware of what their students needed and wanted; however, at the same time, it was sad to see those principles not being enacted. The students expected adequate supervisory time and support; motivation, encouragement and empowerment; good supervisor-student relationships involving regular communication; and guidance in locating and accessing reading resources. The existing body of literature also reported students’ expectations of directive feedback to improve their work (e.g., Beaumont et al, 2011; Davis & Dargusch, 2015; Harks et al., 2014; Henderson et al., 2019). Students’ limited contact opportunities with supervisors’ time has also been reported in the extant literature (MacKay et al., 2019). The supervisors’ seemingly inattentive behaviour appeared to be severe in the present research context perhaps owing to

the lack of supervision guidelines, little monitoring of supervision practices, and culture of not keeping appointments.

Another recurring theme regarding students' expectations in the participants' responses to the open-ended questions and interviews was the need for feedback that is motivating, encouraging, and empowering. This finding is consistent with the extant literature (Adcroft & Willis, 2013; Gibbs & Simpson, 2005; D.J. Nicol & Macfarlane-Dick, 2006). In this regard, Kumar and Stracke (2017) emphasize that "Focusing on the positive – 'this paragraph is really clear' – is probably the most constructive way" (p. 73) to avoid breaking students' fragile shells of selves. However, despite supervisors' cognizance that positive feedback would be necessary, many students reported a lack of positive feedback received. The discrepancies between the supervisors' perceptions and their actual practice might suggest that awareness of what constitutes good practice does not ensure its implementation.

8.4.4 Challenges in supervisory feedback

Four different types of challenge were identified in the present data set: students' language constraints, supervisors' time constraints, resource constraints, and institutional culture.

Students' language constraints. The supervisors and the students had significantly different views regarding students' language constraints, with supervisors finding the challenges more pressing than the students did. This finding is in agreement with the literature that documents common problems associated with research students' writing (e.g., A. Lee, 2017; Beddoe & Maidment, 2017). However, the students in the present study, in general, did not seem to acknowledge the problems they were facing. Two possible reasons might explain the results. First, the results might have been influenced by great variations among students. For example, the Physics and Engineering students seemed to have better academic writing proficiency than their counterparts in Education and English Studies (despite the latter's

specialization in English). Second, students' little awareness of their problems can be attributed to the Dunning-Kruger effect, which posits that "the scope of people's ignorance is often invisible to them" (Dunning, 2011, p. 249). It requires a certain level of expertise and knowledge to recognize the limitations of one's knowledge. Therefore, students with low and limited language proficiency might have been "largely unaware of just how deficient their expertise is" (Dunning, 2011, p. 249). For cultural-historical activity theory perspective, the lack of the students' lack of readiness for the academically demanding task illustrates the existence of tertiary contradiction between subject-producing activities and object. In such a situation, feedback alone might not have been enough because the students might have "problems in understanding the key issues of the research setting, theoretical concepts or methodology" (Vehviläinen & Löfström, 2016, p.517).

Supervisors' time constraints. Although no significant differences were observed in the supervisors' and the students' perceptions of supervisors' time constraints, in their responses to the open-ended questions and interviews, the students vociferously complained about inadequate supervisory time. The supervisors also admitted they did not have time to read students' work thoroughly. Perhaps the negatively worded items in the questionnaire contributed to such discrepancies. Two factors seemed to explain supervisors' time constraints. First, similar to what has been reported in the extant literature, the supervisors had a tight schedule owing to their full-teaching and/or heavy supervisory load (Beaumont et al., 2011; (Price et al., 2011) which prevented them "from designing and creating impactful feedback information" (Ryan et al., 2019, p. 168). Second, it appeared to be a limited sense of responsibility or accountability because 'time' is also a management issue. Acts like making students wait for hours, failing to keep appointments, and cursory reading of students' work appeared to be grossly irresponsible. It needs to be pointed out that the supervisors taking the supervision seriously appeared to manage time despite their busy schedule. They were guided

by the motto ‘do not take students if you cannot train them.’ However, it would be unfair to ignore students’ sense of responsibility in this discussion. The students’ lack of commitment, to some extent, seemed to have contributed to supervisors’ lack of care. Students’ desire for detailed guidance and supervisors’ expectations for student independence (Beaumont et al., 2011) also contributed to the challenge. From cultural-historical activity theory perspective, the supervisors lack or management of time gave rise to a primary contradiction within the division of labour and a secondary contradiction between the division of labour and the object (Li, 2013). Consequently, the students felt not supported, whereas the supervisors tended to view supervision as a burden.

Resource constraints. As mentioned elsewhere in this thesis, constraints on material resources (i.e., reading materials, lab facilities, and financial support) were characteristics of the university where the present study was conducted. The major cause of resource constraints was an inadequate higher education budget (about 0.3% of the national budget) (Mathema, 2019a). As most of the budget was spent on salary, limited amount (only 0.16% of the total budget of the focal university) was available for the promotion and enhancement of research (Mathema, 2019b). Resource constraints have been reported in the extant literature as well (Price et al., 2011).

The supervisors and the students had significantly different views regarding challenges posed by limited access to resources, with the supervisors perceiving the constraints to be more severe. In the words of Esterhazy (2019), “[f]eedback practices are always enacted through ‘feedback encounters’ in which students, teachers, and knowledge resources in the environment come together and ‘do feedback’” (p. 72). In this regard, the supervisors’ better understanding of research and the role of knowledge resources might have contributed to their greater concerns with resource shortages.

From a cultural-historical activity theory perspective, the lack of resources contributed contradictions between object and tools (Engeström, 2015, 2018). Tools (i.e., relevant literature, lab facilities, and financial support) not only help supervisors and students to understand the purposes (i.e., developing students' research and writing skills) and allow invest new meanings (Engeström, 2018). It is worth noting that the success of any activity is "largely dependent on the employment of appropriate tools" (Engeström, 2016, p. 59). Not only action but also thinking is performed with tools (Engeström, 2016). In the absence of students' adequate access to relevant resource materials, supervisory feedback alone appeared to be insufficient to promote students' agency in learning and achieve the object of graduate research and education (Roth, 2019).

That thesis writing students must 'wander here, and there' in search of reading resources was particularly unbecoming of any research university. However, some supervisors' effort to ensure students' access to resources by guiding them to freely available resources, providing them with a collection of relevant materials, and using their own network was commendable, although many students did not get this opportunity. The message was loud and clear: supervisors who keeps students' learning at the centre of their practice could create better learning affordances for their students despite challenges. This shows that when people are committed to what they are doing, they can find innovative ways to address challenges and resolve contradictions that arise in their activities (Engeström, 2015, 2018).

Institutional culture. Unconducive institutional research culture was another prominent challenge in understanding and valuing the fundamental purpose of graduate research and education (i.e., developing students' scientific research, academic writing, and self-regulated learning skills). Envisioned for thesis writing were dedicated and full-time students, enough support from supervisors, access to required resources, adherence to institutional rules,

responsible division of labour, and a shared understanding of the activity in the community. The overall institutional culture, however, did not seem to support the intended object, although there were some inspiring cases.

Like objects of other activity systems, the object of thesis writing has a use value (i.e., the development of the student's research and academic writing skills) and exchange value (i.e., a requirement for graduation) (Engeström, 2015, 2016, 2018). Unfortunately, in many cases, the exchange value tended to be prominent manifesting itself in the form of a 'simple solution' (Engestrom, 2018) resulting in low quality research (M. Pokhrel, 2019; Yadav, 2019). Multiple factors appeared to have contributed to this situation.

First, there was low priority to research reflect in the form of minimal research budget (Dhamala, 2019; Gupto, 2020; M. Pokhrel, 2019). Adding to the degrading research culture seemed to be the practice of appointing an individual with few research credentials as a Rector, a Dean, a member of the Research Council or a PhD supervisor (Dhamala, 2019; KC, 2019; Mathema, 2019; M. Pokhrel, 2019); and the low weight given to research and publication in the selection and promotion of faculty members (Dhamala, 2019). Second, there was the absence of a mechanism for ensuring research ethics and integrity and "appropriate policy...[and] procedure for addressing allegations of research misconduct" (UGCN, 2019, Section 1.14.3). As Löfström and Pyhältö (2015) point out, "students pick up ethical standards and norms by observing faculty and peers and by participating in the practices of their scholarly communities" (p. 2722). In this regard, the university community, in many cases, failed to provide the students with best examples to follow. As a consequence, some students found unintended ways to circumvent the rules (Eco, 2015). Third, factor contributing to this contradiction was students' lack of time. It was not unusual for students enrolled in a full-time study mode to have a full-time job. This situation is in line with the observation that "increasingly, students are enrolled as full-time but are in reality studying

part-time” (Sutton & Gill, 2010, p. 6). As these students struggled to manage time to meet their supervisor, learning from supervisory feedback was secondary to completing their thesis. Fourth, a lack of monitoring of supervisory feedback activities, an evaluation mechanism that failed to make a distinction between poor and good quality theses, and a virtual absence of supervisor development programs seemed to suggest that the fundamental purpose of thesis writing was backgrounded. Last but not the least, allowing students to submit their thesis in haste at the end of their maximum study period, arbitrary allocation of students to supervisors, and making thesis writing as a compulsory requirement that overwhelmed the available supervisors contribute to the prominence of exchange value.

8.4.5 Student engagement with supervisory feedback

Recent scholarship on feedback characterizes feedback as a process rather than the mere transmission of information from supervisors to students (Ajjawi & Boud, 2018; Winstone & Carless, 2020). The feedback process becomes meaningful only with the attentive and purposeful engagement of students with the feedback. This study revealed significant differences in the supervisors’ and the students’ perceptions of different dimensions of student engagement (i.e., emotional, cognitive, and behavioural) with supervisory feedback.

Emotional engagement. Emotional engagement consisted of two dimensions (i.e., positive affect and negative affect). The students believed that they engaged with supervisory feedback more positively than their supervisors thought they did. The students’ views were consistent with responses to the open-ended questions and the interview data. A significant difference was also observed in the perceptions of students’ negative affect, with the supervisors indicating greater negativity in students’ emotional engagement than the students did. The main reason for the discrepancy between the supervisors’ and the students’ perceptions appeared to be perspectival. The supervisors tended to view the students’

emotions in terms of their dispositions such as low commitment to their research, aversion to multiple revisions, and little understanding of the value of research. In contrast, the students mostly associated their emotions, positive or negative, with the receipt of feedback (Yu et al., 2018). This finding is resonant with the literature which reports that “learners’ attitudes and emotions are mediated by encouragement and support from others” (Han & Hyland, 2019, p. 250). The students attributed their positive emotions to supportive, encouraging, and inspiring supervisors who showed genuine interest in their work (Molloy, Noble, & Ajjawi, 2019; Skinner & Pitzer, 2012).

As pointed out in Section 8.3, students’ negative affect also resulted from less than optimal supervisor-student relationships and/or expressly negative and overly judgemental feedback comments. This finding agrees with the existing literature, which suggests that “unsupportive interpersonal interactions or perceptions of the self as unwelcome, incompetent, or pressured” (Skinner & Pitzer, 2012, p. 30) contribute to students’ negative affect. Students shared that they were subject to frequent yelling and humiliation in interaction with supervisors or other research committee members. Such upsetting comments resulted in their plummeting self-confidence, demotivation and a negative attitude toward thesis writing itself (Henderson et al., 2019). Perhaps the supervisors were unaware of such unintentioned consequences unlike those in previous studies (e.g., F. Hyland & Hyland, 2001; K. Hyland & Hyland, 2019).

Students’ cognitive engagement. Significant differences with a very large effect were also observed in the supervisors’ and the students’ views of students’ cognitive engagement, with students’ believing that they had a higher level of cognitive engagement than their supervisors perceived. The students indicated that they persisted in the face of difficulties, self-regulated their learning, and appreciated learning opportunities (Finn & Zimmer, 2012). Three explanations can be offered for these differences in perceptions. First, the supervisors’

perceptions appeared to be based on their general observations because they tended to draw examples from students they supervised over the years. In contrast, the students talked about their own experience. The supervisors' generalizations, at times, seemed to be simplistic because they tended to overlook students' valuable efforts. Second, some supervisors appeared to assume that students approached thesis writing like themselves, although for students it was the first time that they did such an arduous writing task. Therefore, students might not have been cognitively prepared to live up to supervisors' expectations. Third, students' level of academic competence, the time they had at their disposal, and their access to resources seemed to have affected their cognitive engagement with supervisory feedback (Basturkmen et al., 2014; Biggam, 2017; Paran et al., 2017). Students experienced greater cognitive engagement with supervisory feedback given by caring, motivating, and inspiring supervisors who were competent and showed genuine interest in their work (Davis & Dargusch, 2015; Price et al., 2011).

Behavioural engagement. The students reported a higher level of behavioural engagement with supervisory feedback than their supervisors perceived. Previous research also suggested that, in teachers' view, students tended to ignore feedback (Beaumont et al., 2011; Kumar & Stracke, 2017), did not engage with feedback "as extensively as teachers had hoped" (Han & Hyland, 2019, p. 247), or engaged with feedback passively (Ali et al., 2017). In contrast, students consistently reported that "they attempted to make use of feedback – if it was meaningful and relevant" (Beaumont et al., 2011, 680). The conditional clause "if it was meaningful and relevant" is of critical importance here, and there might be multiple factors that determine the meaning and relevance of feedback. Because a thesis is a new mode of learning for a master's student, "[h]ow quickly and comfortably the student acculturates into this new mode of learning depends on several factors" (Lum, 2018, p. 112) related to feedback content, supervisors, students, and context.

First, feedback that only identified flaws in writing but failed to suggest ways to improve might not have been meaningful to students to warrant their behavioural engagement. The clarity of feedback is another crucial factor because “the content of feedback undoubtedly influences the quality of students’ engagement” (Winstone, Nash, Rowntree, et al., 2017, p. 2027). Some students in this study reported that they were unable to use supervisory feedback when it was unclear or insufficiently detailed. Perfunctory comments (such as question marks, underlines, wavy lines in the margin), which were abundant, just left the students in bewilderment because they did not know how they could improve their work. On the other hand, there was also evidence in this study that caring and supportive supervisors crafted their messages by keeping their students at the centre. These findings support the observation that “students were more likely to put [supervisors’] feedback into practice when the problems had been clearly located in the [thesis], [and] solutions were proposed” (Winstone, Nash, Parker, et al., 2017, p. 23).

Second, students’ behavioural engagement with feedback was largely influenced by their supervisors. Consistent with previous literature (e.g., Telio, Ajjawi, & Regehr, 2015; Sutton, 2012), a cordial, and respectful supervisor-student relationship contributed to better student engagement. The supervisors who really cared for their students allotted their time for “longer sit-down sessions in which a careful review of performance is undertaken with planning for the next educational experience(s)” (Lockyer, Armson, Könings, Zetkusic, & Sargeant, 2019, p. 191).

Third, contributing to students’ behavioural engagement were their academic competence, motivation, and self-regulation. Academically competent students with capabilities, motivation, and self-regulation engaged with feedback better than those who were less academically competent and had lower levels of motivation and self-regulation. This result is consistent with findings of previous studies (Boud, Lawson, & Thompson,

2013; Carless, 2019; D. J. Nicol & Macfarlane-Dick, 2006; Winstone, Nash, Parker, et al., 2017). Paradoxically, those who had a long way to go could cover little distance because they could not benefit much from the feedback they received.

Finally, and yet most importantly, context played a crucial role in students' less than optimal behavioural engagement with feedback (Price et al., 2011). While contexts that valued rigorous research appeared to promote students' behavioural engagement, those with laxer research attitude deflected students from meaningful engagement. In less rigorous research culture, students tended to follow bad examples to justify their less than optimal behaviour and viewed requirement for genuine engagement as an unnecessary burden.

8.5 Supervisors' and students' motives

The fourth research question was about supervisors' and students' motives for supervisory feedback and thesis writing, the influence of their motives in their practices, and the factors shaping the motives. The analysis found four major motives for the supervisors (i.e., supporting students, encouraging and inspiring students, evaluating students' performance, and learning from the process of supervision) and two motives for the students (i.e., learning and completion).

Consistent with the findings of previous studies (Yu & Hu, 2017; Yu & Lee, 2015; Zhu & Mitchell, 2012), this study revealed the strong influence of supervisors' motives on their supervisory feedback practices. While the same supervisor had multiple motives, one was more prominent than others. Supervisors striving to empower their students were able to enhance the latter's agency and self-regulation in learning (D.J. Nicol & Macfarlane-Dick, 2006; Winstone & Carless, 2020). They could adapt their supervision according to students' needs (Vehviläinen & Löfström, 2016; Harwood & Petrić, 2020). Their students so inspired that they wanted to exceed their expectations and felt cared for and supported even when they were working on their own. This finding corroborates previous observation (Roth, Lee, &

Hsu 2009) that students' internal motivation "increase[s] emotional energies and intensity of their participation" (p. 139).

Supervisors with "supporting" motives created more learning affordances for students by providing guidelines to take their work to the next level, tended to view thesis writing from students' perspective, modelled expected behaviour, and helped students to locate and access relevant resources. They preferred to read students' work carefully in students' presence, made sure that their students understood the feedback, and created conditions for collaborative learning. However, their support did not inspire much agency in their students, although the latter carefully attended to the former's comments. A body of research suggests that students who follow feedback without much questioning may not improve their texts, develop their critical thinking, or advance their academic writing skills (Jonsson, 2013).

Like supervisors with a "supporting" motive, supervisors possessing a "learning" motive supported their students keenly. However, they had more resources to cope with challenging and demanding situations. They would actively explore students' needs and expectations to adapt supervisory feedback, learn from their mistakes, shoulder their share of responsibility for failures, and relinquish their egos. This observation corroborates the finding of a previous study that reported supervisors learning institutional rules and appropriate manners of expressions of emotions, better awareness of self and others, and developing a more in-depth understanding of disciplinary research and scholarship through supervision (Halse, 2011). Consequently, they became better supervisors over time, created better learning affordances to their students, and garnered students' appreciation.

In contrast, supervisors playing a gatekeeping role (i.e., evaluating students' performance) expected students to take charge of their learning without providing the much-needed scaffolding. They were more oriented to identifying what was wrong in students' writing and usually missed the "what should be done" aspect. It is worth noting that students

need to be empowered to take responsibility for their work (Winstone & Carless, 2020). Such empowerment is a gradual process and may require more supervisory support in the beginning (Morton et al., 2014). Expecting students to be more responsible without due support appeared to create not only an undue pressure on students but also made them feel neglected and disappointed. Supervisors holding such expectations were also frustrated because their students failed to meet their expectations.

This study also revealed two different motives (i.e., learning or completion) driving students' thesis writing practices. Students driven by learning motives appeared to be more dedicated, perseverant, resilient, and proactive. They wanted to produce good quality work, appreciated the process of writing, and were more self-regulated. They approached their supervisors only after trying their best (Winstone, Nash, Rowntree, & Menezes, 2016). They carefully took note of feedback, made sure to accommodate it and were not easily disappointed when they faced challenges or received critical feedback. In general, they owned their work deeply. In contrast, those who were guided by completion motives were rarely proactive, wanted to be told what to do, and tended to procrastinate. They also inclined to resort to bad examples rather than solid evidence to justify their views (Winstone et al., 2016). These findings are in consonance with the literature which shows that students' motives influence their activities (Yu & Hu, 2017; Yu & Lee, 2015; Zhu & Mitchell, 2012).

From a cultural-historical activity theory perspective, supervisors and students with different motives were "engaged in different activities" (Zhu & Mitchell, 2012, p. 379). Up to now, studies focusing on supervisory feedback (e.g., Carter & Kumar, 2017; Kumar & Stracke, 2017; Xu, 2017) have not explained supervisors' and students' motives. This study found that supervisors' motives were defined and mediated by different historical and individual factors. In this regard, this study goes "beyond the individual act of feedback itself to consider the factors that influence feedback choices and student responses to these

[choices]’ (Han & Hyland 2019, p. 12).

8.6 Disciplinary variations in supervisory feedback

Significant disciplinary variations were observed in the foci and functions of feedback, supervisors’ attitudes conveyed in feedback, and the supervisors’ and the students’ perceptions of supervisory feedback, owing to both disciplinary culture and individual differences. It is essential to note that there were considerable variations within the disciplines owing to the participants’ backgrounds, experiences, motives, and identities (Morton & Storch, 2019). Notwithstanding such intradisciplinary variations, some striking cross-disciplinary differences need to be explained. The findings from different data set, whenever relevant, are discussed together in the interest of clarity and precision.

8.6.1 Foci of supervisory feedback

Significant cross-disciplinary variations were observed in the foci of feedback in terms of content, coherence and organization, expected components of a thesis, mechanics, and language use and academic writing conventions.

Although all the interviewed supervisors from the four disciplines mentioned content as one of their foci, the frequency of content-related comments differed greatly across the disciplines. The 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 Education. The questionnaire surveys also confirmed this observation, as Engineering supervisors and students reported fewer content-related comments than their counterparts in Physics and Education did. To a large extent, the predominantly oral mode of feedback adopted by the Engineering supervisors 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! Besides, students in English studies are expected to develop a gaze as a knower in the area they are working with. Given that such a gaze is subjective and relative, (Bernstein, 1999; van Heerden et al., 2017; Maton, 2014), it might be unfeasible for English studies supervisors to provide specific feedback on content, although they emphasized that they focused on content. 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 Education worked within less clearly demarcated content areas and hence needed more content support. A close match between supervisors' and students' research interests might also have contributed to the Physics supervisors' content-based feedback (Becher, 1994). This was observed in the highest number of referential comments on content provided by the Physics supervisors. The significant differences in the frequencies of coherence/organization comments between the Education and Engineering theses could be attributed to 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 were observed between Education and Engineering supervisors on the one side and their Physics and English Studies counterparts on the other side. The questionnaire surveys corroborated the findings obtained from the analysis of in-text feedback provided on the thesis drafts. The findings seemed to reflect both disciplinary practices and local supervision practices. As applied disciplines, both Education and Engineering stress the practical value and contributions of their research. This hallmark was embodied by the 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 the other disciplines (Paré, 2011). Such disciplinary propensities were coupled with local supervision practices concerning topic selection and pre-writing feedback. In the 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 Physics participants' responses to the questionnaire surveys indicated that they provided or received more feedback on core research aspects (i.e., objectives, research questions, literature, methodology, analysis of data and discussion of results) than their counterparts in the other disciplines. This difference can be attributed to the hierarchical and cumulative knowledge structure of physics, and specific standards and procedures for the generation and verification of knowledge (Becher, 1994; Bernstein, 1999).

Both the analysis of the in-text supervisory feedback and responses to the questionnaire surveys revealed that the supervisors and the students in Physics and Engineering provided or received the most and the least feedback, respectively two aspects (i.e., mechanics, and language use and academic writing conventions). Consistent with the

previous study (Anderson et al., 2006), although supervisors across the disciplines emphasized the need for students to produce coherent and linguistically precise discourse, they differed significantly in their provision of linguistic feedback. 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. The 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 to help them produce linguistically 'flawless' text. Perhaps the discipline's focus on objectivity and accuracy might have contributed to this. 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). Besides, consistent with previous research (Ylonen et al., 2018), in English Studies supervisors stressed that their focus was on helping their students develop arguments and promoting their creativity; therefore, they believed that undue emphasis on language might impede students' creativity (van Heerden et al., 2017). 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. Previous research (e.g., K.

Hyland, 2019) also showed that writing-focused feedback was rare in Engineering because the academics did not consider themselves responsible for developing their students' academic writing literacy. The oral mode of feedback provision made it infeasible to correct the multitude of language problems and mechanics-related issues. Unfortunately, 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).

8.6.2 Functions of supervisory feedback

The present study also revealed significant cross-disciplinary differences in the distributions of pragmatic functions of feedback comments. First, the cross-disciplinary difference in the absolute frequencies of expressive comments provided by Physics supervisors on the one side and Education, English Studies, and Engineering supervisors on the other side reflected both disciplinary practices and local supervision practices. The highest number of expressive comments in Physics could be explained by the discipline's emphasis on content accuracy and objectively verifiable knowledge (Becher, 1994; K. Hyland, 2013; Yeo & Boman, 2019; Ylonen, et al., 2018). Supervisors used tick marks to indicate the accuracy of the content and underlined or encircled the wrong information. Besides, there was strict adherence to the prescribed format. Physics supervisors indicated such formatting issues throughout the text instead of marking some and asking students to make changes, accordingly, as was common in the other disciplines. The lowest number of expressive comments in Engineering resulted from little in-text feedback and the predominant use of verbal feedback.

The prevalence of directive feedback in Education reflected a didactic and transmission-focused approach of supervision characterized by more asymmetrical supervisor-student power relations (Filippou, 2020; Harwood & Petric, 2020; Winstone &

Carless, 2020). Despite having fewer directive comments in comparison to Education, it is worth noting that Engineering had the second highest number of directive comments, also suggesting a teacher-centered transmission-based approach to learning (Carberry & Baker 2018; Gilbert, 2009). An interviewed Engineering student complained that no student had “an actual chance to ‘defend’ their work” work because professors asked questions after questions without allowing students to respond. Contrary to the finding of previous research that showed supervisors being cautious in using directive feedback, especially instructions (F. Hyland & Hyland, 2001; Xu, 2017), the Education and Engineering supervisors frequently used instructions, which seemed to present them as indisputable authority figures. The lower number of directive comments in Physics can be attributed to more participatory and collaborative supervision practices, as describe by an interviewed Physics supervisor. Lab-based research, frequent meetings, and close match between supervisors’ and students’ research interests made such a collaboration feasible. In contrast, in English Studies, text-based qualitative research, greater emphasis on argument development with textual evidence, and the valorisation of creative expression perhaps made directive feedback less feasible (Becher, 1994; K. Hyland, 2013).

8.6.3 Supervisors’ attitudes

Supervisors’ attitudes conveyed in feedback comments were analysed using appraisal theory framework (Martin & White, 2005; Starfield et al., 2015). The framework divides attitudes into three categories (i.e., affect, judgement, and appreciation) and subcategories along with the polarity of attitude. The separate analysis of oral and written feedback revealed that, in oral feedback, the supervisors across disciplines were similar in the use of negative tenacity, negative veracity, negative capacity-physical, and negative capacity-cognitive, negative composition-complexity, and negative valuation-propriety. In written feedback, disciplinary

similarities were observed in the use of negative composition-balance, negative composition-complexity, and negative standard-valuation.

However, some subcategories of judgement and appreciation varied significantly across disciplines. In oral feedback, cross-disciplinary differences were observed in one subcategory of judgement (i.e., negative propriety) and five subcategories of appreciation (i.e., positive reaction-quality, negative composition-balance, negative valuation-standard, negative valuation-capacity, and negative valuation-veracity). In written feedback, significant differences were observed in one subcategory of each judgement (i.e., negative propriety) and appreciation (i.e., negative valuation-propriety). In this regard, in oral feedback, instances of negative propriety and positive reaction-quality were more frequent in Education, instances of valuation-capacity in Engineering, and those related to negative composition-balance, negative valuation-standard, and negative valuation-veracity in Physics. In written feedback, while the use of negative-propriety was significantly higher in Education, negative valuation-propriety was common in Physics.

The observed differences are consistent various types of disciplines with distinct hierarchical and horizontal knowledge-knower structure (Becher & Trowler, 2001; Bernstein, 1999; Maton, 2014). In this regard, Education as a soft applied discipline is concerned with utilitarian knowledge for the “enhancement of [semi-] professional practice” (Becher & Trowler, 2001, p. 36), has horizontal knowledge structure (Bernstein, 1999), and places emphasis on legitimate knower (Maton, 2014). This might explain more frequent use of personal feedback in Education, that is, negative propriety in response to less standard work and the expression of positive reaction when the quality was satisfactory. Alternatively, it might suggest a didactic and transmission-focused supervision with a higher exercise of asymmetrical supervisor-student power relations (Winstone & Carless, 2020).

In contrast, Physics has hierarchical knowledge and horizontal knower structure; is impersonal and concerned with universals; and has “clear criteria for knowledge verification and obsolescence” (Becher & Trowler, 2001, p. 36). Such positivist epistemology (Hu & Wang, 2015) appeared to have prompted Physics supervisors to use a significantly higher number of evaluative instances directed to the formation of a text (i.e., composition-balance), the standard of the text (i.e., valuation-standard), and content accuracy (i.e., valuation-veracity) than their counterparts in Education and English Studies. This finding is consistent with Hu and Choo’s (2016) study which explained that “it is natural for teachers from hard disciplines to be impersonal in their feedback and focus on content of work, hard knowledge involved, and criteria of performance” (p. 343). Engineering, as hard applied discipline, is concerned with the mastery of the physical environment and the creation of new or more advantageous products or techniques (Becher & Trowler, 2001). This might explain Engineering supervisors’ more use valuation-capacity to comment on the feasibility of studies and the utility of products.

8.6.4 Challenges in supervisory feedback

There were significant differences across the disciplines regarding students’ language constraints. The greater gaps between supervisors’ and students’ perceptions found in Education and English Studies than in Physics and Engineering can be explained by student selection mechanisms for admission. Unlike in Education and English Studies, students had to pass strict entrance examinations to secure admission into the Physics and Engineering programs. Perhaps, owing to their comparatively lower level of academic competence and language proficiency, Education and English Studies students seemed to have made less progress in developing their English language proficiency despite their specialization in English. A close examination of the students’ thesis drafts, the interviews with the

supervisors and the students, and the participants' responses to the open-ended questions supported this interpretation.

Significant cross-disciplinary variations were also observed in the perceptions of supervisors' time constraints. Issue concerning supervisors' time was felt more acutely in Education, English Studies, and Engineering than in Physics. As discussed in the previous section, this can be attributed to the heavy supervisory load in the department concerned, to some extent. However, a major factor appeared to be institutional research culture. In Physics, quality control mechanisms were comparatively strong, research was valued, and supervisors appeared to be more supportive to students. Therefore, despite being busy, they seemed to manage time for supervisory feedback, read their students' work carefully, and provided support.

8.6.5 Students' engagement with supervisory feedback

Supervisors across the disciplines perceived lower student engagement with feedback than the students did. However, the Education and English studies supervisors perceived lower levels of students' emotional, cognitive, and behavioural engagement with supervisory feedback than the Physics and Engineering supervisors did. Multiple factors might have contributed to the disciplinary variation in perceptions. First, Education and English Studies students' lower English language proficiency might have negatively affected their engagement. Second, the supervisors in these disciplines admitted that they were unable to adequately support students, and the examination of in-text feedback showed the same. Therefore, the lack of adequate scaffolding might have affected students' engagement with feedback. Third, in general, Physics and Engineering supervisors were more research active as indicated by their publications in SCI journals. Therefore, they might have been better able to present themselves as a model for students to follow, thereby promoting their engagement

through ‘mimetic desire’ (Gunn, 2014). Finally, yet importantly, other factors such as a merit-based student selection mechanism for thesis writing, the match of the supervisor’s and the students’ research interest, the value placed on research, and stronger collaboration between the supervisors and the students seemed to have promoted physics students’ engagement.

8.7 Summary

The present study set out to examine supervisory feedback practices as well as supervisors’ and students’ perceptions and motives. This chapter discussed the major findings in relation to the theoretical framework adopted in the study and the relevant literature. Next chapter presents conclusion and implications of the study.

CHAPTER 9

CONCLUSION AND IMPLICATIONS

9.1 Chapter overview

The present study, informed by cultural-historical activity theory, has explored supervisory feedback on master's theses in terms of practices, perceptions, and motives from multiple perspectives across four disciplines (Education, English Studies, Physics, and Engineering).

More specifically, the study set out to answer the following research questions:

RQ1: What areas do supervisors focus on in their feedback, and what functions do their feedback comments serve?

RQ2: What attitudes do supervisors convey in supervisory feedback?

RQ3: What are supervisors' and students' perceptions of purposes, practices, effectiveness, challenges, and student engagement with supervisory feedback?

RQ4: What are supervisors' and students' motives related to thesis writing? What factors shape their motives? How do their motives influence feedback practices?

RQ5: Are there disciplinary variations in supervisory feedback in terms of (a) foci and functions, (b) supervisors' attitudes, and (c) supervisors' and students' perceptions of feedback?

The preceding chapters introduced the research background, the theoretical framework, the methodology employed to answer the research questions that guided this study, the major findings, and the discussion of the findings in relation to existing research and cultural-historical activity theory. This chapter first summarizes the results and then outlines the significant contributions, limitations, and implications of this study.

9.2 Summary of the findings

The study employed an exploratory mixed-methods design and collected data from multiple sources, including thesis drafts with in-text supervisory feedback, oral feedback provided during proposal and thesis defences, semi-structured interviews with supervisors and students, questionnaire surveys, and relevant documents.

The study revealed that supervisors focused on various aspects (i.e., content, coherence/organization, expected thesis components, linguistic forms and mechanics) in their feedback. However, in most of the cases, the feedback was not constructive and thought-provoking feedback and failed to suggest way forward. There was an abundance of directive feedback that seemed to present supervisors as incontestable authority figures (Filippou, 2020). Although the feedback should principally focus on students' work (i.e., appreciation) (Starfield et al., 2015), often times students were judged in terms of how normal, capable, resilient, ethical, and trustworthy they were. While there was a noticeable lack of positive comments, negative comments tended to be highly critical and face-threatening, discouraging, and self-esteem busting.

The study revealed significant differences between the supervisors' and the students' perceptions of practices, challenges, and student engagement with supervisory feedback. The supervisors tended to believe that they were providing more feedback on different aspects than the students thought they received. The supervisors and the students also had divergent views regarding the challenges associated with students' English language proficiency, supervisors' time investment in supporting students, and access to resources. The supervisors perceived problems caused by students' limited language proficiency to be more acute than the students did, suggesting that the latter, in general, were unable to notice the gaps in their knowledge and skills. However, when it came to student engagement, the paradigm of

perceptions shifted. The students perceived that they better engaged with supervisory feedback emotionally, cognitively, and behaviourally than their supervisors believed.

Supervisors and students with distinct motives engaged in noticeably different practices providing supervisory feedback and writing their thesis, respectively. For example, supervisors appeared to have four different motives (i.e., empowering, supporting, learning and evaluating) forming an inclusive hierarchy with those inspiring and evaluating being most and least successful in enhancing students' agency and developing their research and academic literacy skills. While both supervisors possessing supporting and learning motives supported their students extensively, the latter had better impact on students' learning because of their growth mind set and genuine interest in improving their supervision skills.

The students, too, appeared to have two distinctly different motives (learning from the process and completing a thesis as a requirement for graduation). Those with learning-oriented motives evinced a positive outlook, were resilient and self-regulated, and benefitted more from the process of writing a thesis. In contrast, students who wrote a thesis mainly to satisfy the requirement for graduation found the process burdensome, unfair, and too demanding. They tended to think that their supervisors were just making their life difficult rather than helping them deal with the challenges they were facing. Different historical, cultural, social, and personal factors shaped the supervisors' and the students' motives.

The study also revealed disciplinary variations in supervisory feedback practices. In general, the students in Physics appeared to be better supported than the students in other disciplines. Overall, the study showed that supervisory feedback was not as supportive as it should be because of insufficient investment of time on the demanding task, limited availability of resources, lack of measures to ensure rigorous and ethical research practice, and the low observance of shared responsibility. In many cases, the supervisors and the

students appeared to lack the prerequisites for performing the academically demanding tasks of providing supervisory feedback and writing a thesis, respectively.

From the cultural-historical activity theory perspective, the study revealed different levels of contradictions. The primary contradiction was between the use-value and the exchange value of thesis writing, with the latter gaining prominence due to uncondusive research environment. Contributing to such a situation were multiple secondary contradictions between the object and other components, that is (a) limited to access to mediating artifacts (i.e., reading resources, lab facilities, and fund), (b) less dedication and commitment of subjects (i.e., supervisors and students), (c) ineffective (enforcement of) rules, (d) community's low valuation of research, and (e) not appropriately observed division of labour. It should also be noted that, in many cases, the supervisors and the students seemed to lack the prerequisite skills. Such situations illustrated a quaternary contradiction between main activity (i.e., graduate research and education) and subject producing activities. However, it should be noted that there were cases of highly dedicated supervisors and students producing outstanding results, notwithstanding the challenges. Such cases suggested that contradictions can give way to innovative solutions if considered seriously.

9.3 Contributions of this study

The present study has made theoretical, methodological, and pedagogical contributions to our understanding of supervisory feedback. First, the significant theoretical contribution of the study is the application of cultural-historical activity theory to the study of supervisory feedback. Although some studies have used this theoretical framework to examine peer feedback (Yu, 2014; Yu & Hu, 2017; Yu & Lee, 2015; Zhu & Mitchell, 2012), there is scant research that investigates supervisory feedback as an activity system.

Second, the findings can contribute to a better understanding of supervisory feedback on master's theses and advance the frontiers of knowledge on graduate supervision because the study has unfolded the complexities and dynamics of supervisory feedback in the form of challenges, contradictions, and the dissonance between the supervisors' and the students' perceptions. Also explored in the study are supervisors' and students' motives, their impacts, and influencing factors. While previous studies focused on purposes/motives and expectations (Anderson, et al., 2006; Ginn 2014; Hu et al., 2016; Katikireddi & Reilly 2017; Vehviläinen & Löfström 2016), the role of motives in supervisory practices and their impact on students' agency has received little research attention. Further, the study provides a solid evidence base for the distinct roles of disciplinary culture and multiple factors (mediating artifacts, rules, community, and division of labour) in supervisory feedback, thereby indicating that the interaction between the supervisor and the student is just the tip of the iceberg. In brief, this study yields a deepened understanding of supervisory feedback on master's theses.

Third, the mixed-methods research design adopted in the study has contributed to both in-depth insights and broader generalizations. It has combined corpus-based analysis, multi-case studies, and questionnaire surveys to examine supervisory feedback from multiple perspectives. Overall, it has opened new avenues for supervisory feedback research.

Fourth, the pedagogical contribution of this study lies in a model for effective graduate research and education proposed below based on the findings of this study. It conceptualizes effective supervisory feedback as an interaction between students' thesis writing activity and supervisors' supervisory feedback activity, mediated by multiple factors (i.e., artifacts, rules, community, and division of labour). This study should, therefore, be of value to practitioners wishing to enhance supervision.

Finally, the study is an earnest endeavour to provide input for the formation of policy regarding graduate research and education. This research provides a timely and necessary study of the supervisory feedback and has provided valuable information that can be drawn on to make informed policy decisions to enhance graduate research and education.

9.4 Implications

The findings presented and discussed in the preceding chapters have implications for creating a conducive environment for graduate research and enhancing the quality of supervisory feedback. Although the study was conducted in Nepal, the findings have implications for supervisory feedback on master's theses in other contexts as well.

9.4.1 Suggestions for universities

For graduate research and education to be successful, there should be supportive institutional strategies and policies to promote the development of a research culture. First, it is important to keep in mind that although supervisors play a key role in the quality of graduate research and supervision, they “have received no formal preparation for this role” (Paré, 2011, p. 71). Therefore, faculty development programs should be made available for supervisors. Such programs might develop supervisors' understanding of and ability to provide different types of feedback (i.e., feedup, feedback, and feedforward; Hattie & Clarke, 2018) to better support students. 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). It might be useful to share effective feedback practices (including those of successful colleagues) among supervisors (Katikireddi & Reilly, 2017).

The quality of graduate research should be an essential component of institutional assessment. Although the quality of feedback is the most crucial factor with respect to

students' successful thesis completion, its effectiveness largely depends on multiple organizational factors such as the availability of resources (Yang & Carless, 2013). Students and supervisors must have "sufficient access to the scientific, financial, and human resources" (Denis et al., 2019, p. 33). In the absence of knowledge resources, students might not be able to make meaning and act upon the feedback they receive (Esterhazy, 2019). Research may risk the chances of reinventing the wheel rather than advancing the frontier of knowledge due to a lack of access to state-of-art knowledge resources.

Universities must formulate and implement effective graduate research and education policies. Notwithstanding the benefits of writing a thesis, compulsory thesis writing might not be in every student's best interest. Alternative arrangements seem to be necessary for those who are unable to commit time because of job- and/or family-related issues. Academic writing and research language assessment tests could be administered to select students for thesis writing considering seemingly insurmountable changes facing students with considerably low proficiency. The provision of making thesis writing optional and the introduction of research language and assessment tests might also help to reduce faculty members' supervisory load to some extent. Whenever feasible and appropriate, matching supervisors' and students' research interests would also increase the chances of quality feedback. A research handbook containing basic requirements, roles, and responsibilities might be useful for both supervisors and students.

Students who have failed to engage in a rigorous research process should not be allowed to submit a thesis just because they have come to the end of the maximum study period. Such a provision not only discourages those who work seriously but also implicitly condones unethical research practices. Therefore, monitoring and evaluation of the graduate research process and supervisory feedback are essential to achieving the intended outcomes of graduate research. Universities might consider introducing well-designed and carefully

coordinated graduate student writing support programs. It is necessary to introduce institutional policies to provide incentives and rewards to supervisors, for example, through workload planning and promotion (Healy & Jinkins, 2018).

9.4.2 Suggestions for supervisors

This study has found that supervisory feedback, in general, failed to encourage students to make meaningful learning efforts and seemed to miss the opportunity to socialize them in disciplinary discourse (K. Hyland, 2013). There is a clear need to address this issue if students are to benefit from supervisory feedback. To address this issue, supervisors “need to provide a wide range of feedback, thus going beyond the often dominantly provided referential type of feedback” (Kumar & Stracke, 2018, p. 22). Such wide-ranging feedback would increase students’ learning affordances and enhance their prospects of disciplinary socialization.

Second, the supervisors should bear in mind that the central role of feedback is to familiarize students with legitimate ways of writing and meaning making in their respective discipline. They should acknowledge that producing academic discourse valued in the disciplinary community is not “a technical skill that [the students] should already have” (Cayley, 2018, p. 76) but a challenging and demanding skill that needs much scaffolding from supervisors (Paltridge & Starfield, 2019; van Heerden et al., 2017). Therefore, disciplinary requirements of reading, writing, thinking, and constructing knowledge should be made explicit, and students should receive adequate support in meeting these disciplinary requirements.

Third, the way feedback is framed can greatly influence its impact. It should be noted that feedback becomes meaningful when it is “characterized by an ethos of care” (Sutton, 2012). Students are unlikely to make use of supervisory “feedback that causes them to feel baffled and demoralized” (Zhang, 2016, p. 325). Therefore, although academic critique tends

to focus on what needs to be improved, students' efforts deserve some appreciation (Wei et al., 2019). In particular, supervisors ought to respond to 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). In a nutshell, supervisors should "seek to develop open and trusting relationships with students' best interests at heart" (Winstone & Carless, 2020, p. 175)

Fourth, what supervisors consider to be useful may not address what students need. Research has shown that "comments which may seem very transparent and actionable to a teacher may not appear so to a student" (Winstone & Carless, 2020, p. 29). Students may not benefit if supervisors indicate flaws in their writing without providing suggestions for improvement. Therefore, it might be advantageous to listen to students' views, to critically examine and reflect on their own feedback practices to generate self-feedback, and design feedback accordingly to enhance their learning and progress (Anderson et al., 2006; Lam, 2017; Winstone & Carless, 2020; Xu, 2017; Zhang, 2016).

This study has shown that thesis writing students can have distinctly different motives. Therefore, it is crucial for supervisors "to develop an understanding of learners as agents of learning" (Zhu & Mitchell, 2012, p. 381) and "share with students the value of engaging in feedback processes" (Molly et al., 2019, p. 99). It might be helpful "to discuss their expectations of the supervisor and student role as they may be quite different" (Paltridge & Starfield, 2019, p. 40). Supervisors might also share their own views of the purposes and functions of feedback openly with students so as to negotiate a shared understanding (de Kleijn et al., 2013; Kumar & Stracke, 2018; Wei et al., 2019). Supervisors may need to understand how their students respond to feedback affectively, cognitively, and behaviourally (Zheng et al., 2019). Such an understanding may increase the intersubjectivity between the supervisor and the student. It is also essential to foster students' independent learning skills in

responding to feedback by providing them with exemplars and interaction opportunities to scaffold their learning (Smyth & Carless, 2020). To promote students' engagement with feedback, supervisors can encourage them to generate self-feedback through self-reflection (Lam, 2015, 2017) and "prepare a list showing changes they have made and notes if they chose not to act on some feedback" (Kumar & Stracke, 2018, p. 21).

Finally, students' judgements of supervisors' research integrity, credibility, and academic trust influence their engagement with feedback (Ajjwabi & Boud, 2017; Davis & Dargus, 2015; Price et al., 2010). As Winstone, Nash, Parker, et al. (2017) put it, students "may need to trust the source of feedback before they will be prepared to act on it" (p. 23). Therefore, supervisors should continuously engage in developing their research skills and knowledge base to present themselves as a model for students.

9.4.3 Suggestions for students

The ultimate beneficiaries of graduate research and supervisory feedback are students themselves. Students ought to be aware that each of them is "an agent responsible for the process and the product, not just someone who enjoys the benefit of supervision" (Vehviläinen & Löfström, 2016, p. 521). No amount of institutional support and quality feedback makes sense until and unless students engage with feedback seriously (Lam, 2017; Winstone & Carless, 2020). Students should bear in mind Supervisors may develop a better understanding of students who are proactive in seeking feedback (Biggam, 2017; Skinner & Pitzer, 2012). They should not expect ready-made answers from the supervisors because, in the first place, the supervisors are unlikely to have ones, and second, thesis writing is all about figuring out unknown answers. Students are encouraged to reflect on their practice (Starfield, 2019) and "judge the value of their own work prior to submission so that they can be confident that they have done their very best" (G. W. Scott, 2017, p.3).

Second, students need to appreciate supervisory feedback as a learning opportunity, manage emotions, not become defensive when receiving critical comments, and take agency in seeking and utilizing feedback (Bowen, Marshall, & Murdoch-Eaton, 2017; Winstone & Carless, 2020; Yang & Carless, 2013). Besides, it is important for students to “understand that feelings of a lack of confidence, fear of failure, and rejection are not uncommon” (Paltridge & Starfield, 2019, p. 46). Students should use strategies such as self-regulating their learning and being proactive in seeking feedback to close the gap between their current and expected level of performance (Zhang, 2016). It is vital to understand that multiple revisions are absolutely essential (Cayley, 2018).

Finally, it is essential to be aware that thesis writing is a time-intensive task, in which some setbacks and some detours are common (Paltridge & Starfield, 2019). However, every experience is a learning opportunity. At this point, it is relevant to quote Eco (2015, p.223) at some length:

If you devote yourself to your research, you will find that a thesis done well is a product of which nothing goes to waste. You can convert your finished thesis into one or more scholarly articles ... you may return to your thesis to find material to quote for other projects..., or even decide to return to your thesis after decades... In the end, it will represent your first serious and rigorous academic work, and this is no small thing.

Therefore, it is crucial for students to love the work, be dedicated in the process, and own and cherish the product.

9.4.4 Effective graduate research and education: A tentative conceptual and pedagogical model

Figure 18 presents the proposed model of effective graduate research and supervision with interacting activity systems of thesis writing and supervisory feedback. This model presents

that effective supervisory feedback requires a synergy between different factors. Although the supervisor and the student are the subjects of the interacting activity systems, their activities represent only the “tip of the iceberg” (Engeström, 2018, p. 15). For graduate research and supervision to be effective, the supervisor’s and the student’s initial objects (i.e., motives) are crucial as they give meaning to their activities and shape the actions necessary to accomplish the objects. Therefore, in the beginning of the process, it is necessary for the student to strive to learn, and the supervisor to promote students’ agency in learning.

When the supervisor and the student meet and discuss the latter’s proposal, they should consider each other’s perspectives and develop a shared understanding of the object (indicated by the overlapping space between the supervisor’s and the student’s object) that is meaningful to both. There can never be a complete overlap between their understanding, given their diverse backgrounds, experience, and roles (Engeström, 2018). However, greater overlap ensures better understanding (intersubjectivity), which ultimately leads to a better outcome. Greater intersubjectivity requires that the supervisor and the student understand each other’s needs and perspectives, take thesis writing as a collaborative project, develop a sense of mutual respect and trust, and keep the student’s learning at the centre of the whole endeavour. The objects depicted by dotted circles indicate that “object-oriented actions are always, explicitly or implicitly, characterized by ambiguity, surprise, interpretation, sense-making, and potential for change” (Engeström, 2018, p. 15). Such fluidity of the object provides the learning space, necessitates the supervisor’s scaffolding, and reflects the progress during the process. Therefore, certain level of ambiguity tolerance is necessary for both the supervisor and the student.

The interactions between the supervisor and the student are influenced by multiple mediating factors (i.e., artifacts, rules, community, and division of labour). Therefore, effective graduate research and supervision requires the supervisor’s and the student’s access

to relevant resources, clearly stipulated and effectively implemented rules, a supportive community, and responsible division of labour. From this perspective, graduate research and education involves multiple perspectives (i.e., multi-voicedness) of subjects and community members. These multiple perspectives and numerous mediating factors may give rise to contradictions, indicated by lightning arrows in the model. However, there will never be an optimal situation in an activity where everything is entirely in place. Challenges, contradictions, and dilemmas will always be there. Such challenges can lead to innovation when there are meaningful negotiations and interactions. Therefore, it is crucial to reflect on the practices and implement the lesson learnt to move the activity forward, that is, to enhance graduate research and education in the interest of all the stakeholders (i.e., students, supervisors, and university).

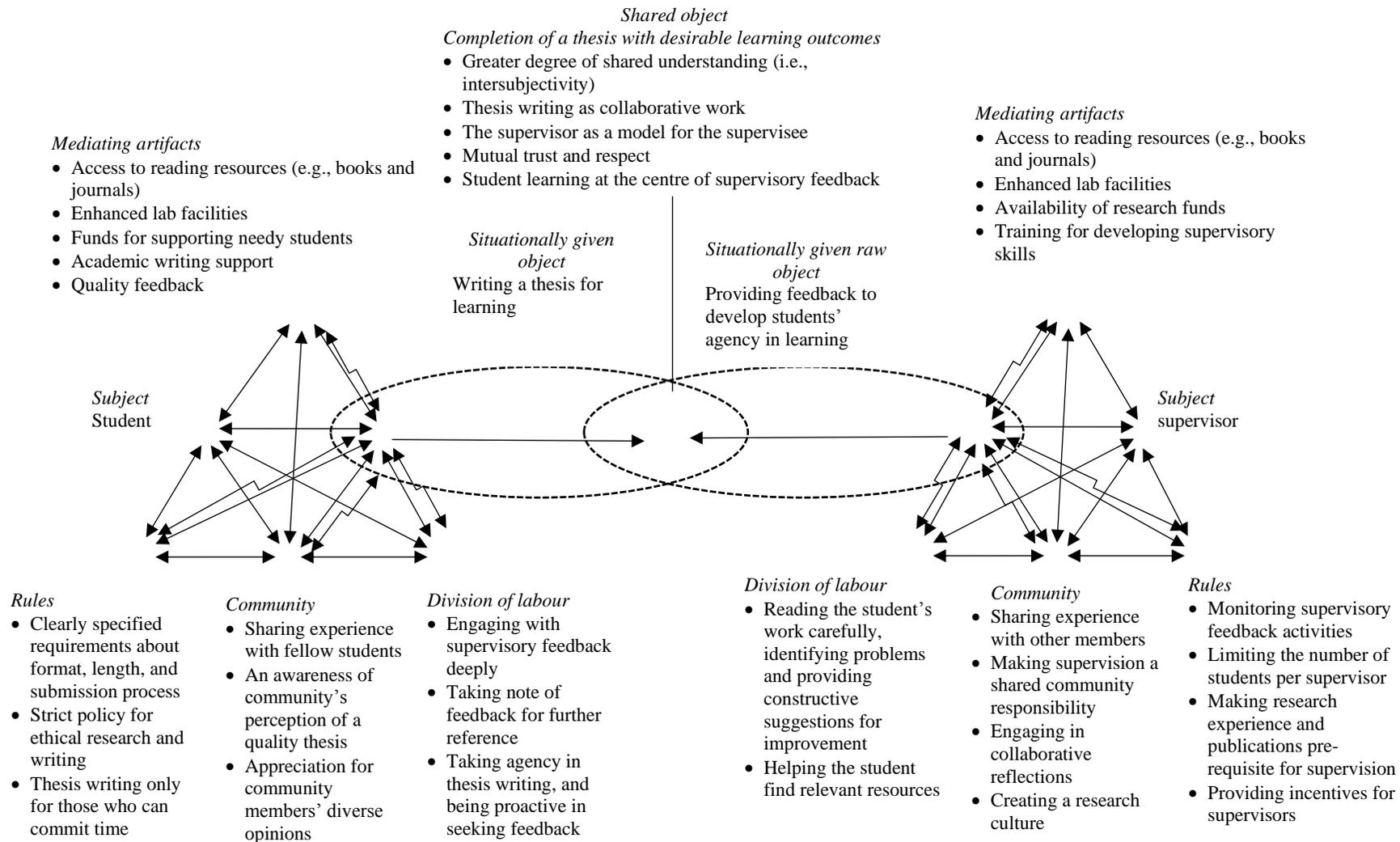


Figure 18. A proposed model for effective supervisory feedback based on Engeström (2018, p. 16)

9.5 Limitations of the study and suggestions for further research

Before presenting suggestions for further research, it is important to acknowledge the limitations of the study and steps adopted to address them. It should be noted that the number of thesis drafts and oral defences varied across disciplines. It could be argued that the size of the samples involved in the study influenced the level of statistical significance obtained. However, the sample size-related problem might have been ameliorated in three ways. First, the sub-samples in the analyses of foci and functions of feedback, ranging from 20 to 28, are not large ones. Second, for examining the supervisors' attitudes conveyed in feedback, ANOVAs were run on normalized frequencies per 1000 words only when at least one group mean exceeded 1.00. Third, in addition to statistical significance, effect sizes that are not subject to the influence of sample sizes (Cohen, 1988) have also been reported.

It might appear that, given their distinct roles and responsibilities, supervisors and students' perceptions are not comparable. Two steps were taken to make the constructs comparable. First, the items in both the questionnaires, except for wordings, were the same. Second, the principal component analysis was used to create scales with the same items in both the questionnaires. It is also possible that some of the significant differences in the supervisors' and the students' perceptions are due to repeated analyses of the same data. Therefore, to statistical significance was not affected by multiple analyses, the alpha level was adjusted. Whenever appropriate, bias-corrected confidence intervals have also been reported.

Another issue is concerned with the representativeness of the sample. Although random sampling would undoubtedly have enhanced the study's external validity, this was not a viable option for the present study. The generalizability of the finding was expected to be strengthened by the use of the principle of maximum variations (Patton, 2015) to select the

samples and by the triangulation of information obtained from different methods. Besides, the perceptions of both the supervisors and students might also have contributed to the generalizability of findings.

As supervisory feedback on master's theses is an emerging area of research, it is necessary to explore supervisors' and students' experiences further. Future researchers may take a longitudinal approach to examine the complete cycle of supervisory feedback from proposal to completion to explore how feedback evolves, how a student comprehends and acts on feedback comments, and how a student makes progress. This study focused on four disciplines (i.e., Education, English Studies, Physics, and Engineering). Future research could examine supervisory feedback practices in other fields to gain further insights into the role of disciplinary culture in supervisory feedback practices. It would be interesting to investigate supervisors' and students' perceptions of English-medium thesis writing in other disciplines where English is not the mandatory medium for writing a thesis. Such research would yield insights regarding the underlying reasons for using English, challenges facing supervisors and students, and mechanisms used to deal with difficulties. Similar studies in other contexts where English is used as an additional language would also contribute to a better understanding of supervisory feedback on master's theses. In general, research should strive to promote thesis writing students' well-being and learning opportunities so that they can contribute as valuable members of a community. Researchers might want to draw on cultural-historical activity theory to examine supervisory feedback because it offers a "holistic view and significant implications towards learning" (Roth et al., 2009, p. 160).

REFERENCES

- Acharya, N. (2019, June 9). Tribhuvan University should change the way it handles thesis writing. *The Kathmandu Post*. Retrieved from <https://kathmandupost.com/opinion/2019/06/08/tribhuvan-university-should-change-the-way-it-handles-thesis-writing>
- Acharya, P. (2016, September 14). Thesis on sale! *Center for Investigative Journalism, Nepal*. Retrieved from <https://cijnepal.org.np/thesis-on-sale/>
- Adamson, J. L., Coulson, D., & Fujimoto-Adamson, N. (2019). Supervisory practices in English-medium undergraduate and postgraduate applied linguistics thesis writing: Insights from Japan based tutors. *The Asian Journal of Applied Linguistics*, 6, 14–27.
- Adcroft, A., & Willis, R. (2013). Do those who benefit the most need it the least? A four-year experiment in enquiry-based feedback. *Assessment & Evaluation in Higher Education*, 38, 803–815. doi:10.1080/02602938.2012.714740
- Adolphs, S. (2006). *Introducing electronic text analysis: A practical guide for language and literary studies*. London: Routledge.
- Ajjawi, R., & Boud, D. (2018). Examining the nature and effects of feedback dialogue. *Assessment & Evaluation in Higher Education*, 43, 1106–1119. doi:10.1080/02602938.2018.1434128
- Ali, N., Ahmed, L., & Rose, S. (2017). Identifying predictors of students' perception of and engagement with assessment feedback. *Active Learning in Higher Education*, 19, 239-251. doi:10.1177/1469787417735609
- Ali, N., Rose, S., & Ahmed, L. (2015). Psychology students' perception of and engagement with feedback as a function of year of study. *Assessment & Evaluation in Higher Education*, 40(4), 574–586. doi:10.1080/02602938.2014.936355

- Allison, D., Cooley, L., Lewkowicz, J., & Nunan, D. (1998). Dissertation writing in action: The development of a dissertation writing support program for ESL graduate research students. *English for Specific Purposes, 17*, 199–217.
- Amundsen, C., & McAlpine, L. (2011). New academics as supervisors: A steep learning curve with challenges, tensions and pleasures. In L. McAlpine & C. Amundsen (Eds.), *Doctoral education: Research-based strategies for doctoral students, supervisors and administrators* (pp. 37–56). New York: Springer Science & Business Media.
- 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.
- Anderson, C., Day, K., & McLaughlin, P. (2008). Student perspectives on the dissertation process in a masters degree concerned with professional practice. *Studies in Continuing Education, 30*, 33–49. doi:10.1080/01580370701841531
- Angermuller, J., Maingueneau, D., & Wodak, R. (Eds.). (2014). *The discourse studies reader: Main currents in theory and analysis*. Amsterdam: John Benjamins Publishing Company.
- Avasthi, T. P. (2014). Thesis writing at master's level in education. *The Third Pole: Journal of Geography Education, 13*, 57–59. doi:10.3126/ttp.v13i0.11548
- Barlösius, E. (2019). Concepts of originality in the natural science, medical, and engineering disciplines: An analysis of research proposals. *Science, Technology, & Human Values, 44*, 915–937. doi:10.1177/0162243918808370
- 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. doi:10.1080/13562517.2012.752728

- Beaumont, C., O'Doherty, M., & Shannon, L. (2011). Reconceptualising assessment feedback: A key to improving student learning? *Studies in Higher Education*, *36*, 671–687. doi:10.1080/03075071003731135
- Becher, T. (1994). The significance of disciplinary differences. *Studies in Higher Education*, *19*, 151–161. doi:10.1080/03075079412331382007
- Becher, T., & Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines* (2nd ed.). Philadelphia, PA: Open University Press.
- Beddoe, L., & Maidment, J. (2017). Directive feedback in honors or master's degree research. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 119–124). London: Routledge.
- Bernstein, B. B. (1999). *Pedagogy, symbolic control, and identity: Theory, research, critique*. London: Rowman & Littlefield.
- Bhattarai, A. (2009). The first activity in research. *The Journal of NELTA*, *14*, 21–25.
- Bhattarai, G. R., & Gautam, G. R. (2005). English language teachers at the crossroads. *Journal of NELTA*, *10*, 1–5.
- Bhattarai, M. (2018, April 30). Sharing my experiences of master's thesis writing. Retrieved from ELT Choutari: Nepal's First ELT Digital Magazine website: <http://eltchoutari.com/2018/04/sharing-my-experiences-of-masters-thesis-writing/>
- Biber, D., Conrad, S., & Reppen, R. (1994). Corpus-based approaches to issues in applied linguistics. *Applied Linguistics*, *15*, 169–189. doi:10.1093/applin/15.2.169
- Biggam, J. (2017). *Succeeding with your master's dissertation: A step-by-step handbook*. London: Open University Press.
- Biglan, A. (1973). The characteristics of subject matter in different academic areas. *Journal of Applied Psychology*, *57*, 195–203.

- Bista, K., Sharma, S., & Raby, R. L. (Eds.). (2020). *Higher education in Nepal: Policies and perspectives* (1st ed.). London: Routledge.
- 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. (2006). Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section. *Journal of English for Academic Purposes*, 5, 4–18. doi:10.1016/j.jeap.2005.10.002
- 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.
- Blackler, F., & Gutierrez, K. D. (2009). Cultural-historical activity theory and organization studies. In G. Gutierrez (Ed.), *Learning and expanding with activity theory* (pp. 19–39). New York: Cambridge University Press.
- Blin, F., & Appel, C. (2011). Computer supported collaborative writing in practice: An activity theoretical study. *CALICO Journal*, 28, 473–497.
- Boud, D. (1995). *Enhancing learning through self assessment*. London: Kogan Page.
- Boud, D., Lawson, R., & Thompson, D. G. (2013). Does student engagement in self-assessment calibrate their judgement over time? *Assessment & Evaluation in Higher Education*, 38, 941–956. doi:10.1080/02602938.2013.769198
- Bowen, L., Marshall, M., & Murdoch-Eaton, D. (2017). Medical student perceptions of feedback and feedback behaviors within the context of the “educational alliance.” *Academic Medicine*, 92, 1303–1312. doi:10.1097/ACM.0000000000001632
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. doi:10.1191/1478088706qp063oa

- Brondin, E. M., & Frick, B. L. (2017). The SISA matrix for feedback fostering doctoral students' creativity. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 41–42). London: Routledge.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6, 97–113. doi:10.1177/1468794106058877
- Cadman, K. (1997). Thesis writing for international students: A question of identity? *English for Specific Purposes*, 16, 3–14.
- Can, G., & Walker, A. (2011). A model for doctoral students' perceptions and attitudes toward written feedback for academic writing. *Research in Higher Education*, 52, 508–536. doi:10.1007/s11162-010-9204-1
- Carberry, A. R., & Baker, D. R. (2018). The impact of culture on engineering and engineering education. In Y. J. Dori, Z. R. Mevarech, & D. R. Baker (Eds.), *Cognition, metacognition, and culture in STEM education* (pp. 217–239). London: Springer.
- Cao, F., & Hu, G. (2014). Interactive metadiscourse in research articles: A comparative study of paradigmatic and disciplinary influences. *Journal of Pragmatics*, 66, 15–31. doi:10.1016/j.pragma.2014.02.007
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31, 219–233. doi:10.1080/03075070600572132
- Carless, D. (2019). Learners' feedback literacy and the longer term: Developing capacity for impact. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 51–65). London: Palgrave Macmillan.
- Carless, D., & Boud, D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43, 1315–1325. doi:10.1080/02602938.2018.1463354

- Carless, D., Salter, D., Yang, M., & Lam, J. (2011). Developing sustainable feedback practices. *Studies in Higher Education*, *36*, 395–407.
doi:10.1080/03075071003642449
- 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.
doi:10.1080/14703297.2015.1123104
- Casanave, C., & Li, Y. (2015). Novices’ struggles with conceptual and theoretical framing in writing dissertations and papers for publication. *Publications*, *3*, 104–119.
doi:10.3390/publications3020104
- Cayley, R. (2018). Giving early feedback to doctoral writers. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 71–76). London: Routledge.
- Central Bureau of Statistics. (2012). *National population and housing census 2011 (National report)*. Kathmandu: Central Bureau of Statistics.
- Chizhik, E. W., & Chizhik, A. W. (2018). Using activity theory to examine how teachers’ lesson plans meet students’ learning needs. *The Teacher Educator*, *53*, 67–85.
doi:10.1080/08878730.2017.1296913
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed). Hillsdale, N.J: L. Erlbaum Associates.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). London: Routledge.
- Compton-Lilly, C. (2013). Case studies. In A. A. Trainer & E. Graue (Eds.), *Reviewing qualitative research in the social sciences* (pp. 54–65). London: Routledge.
- Cooper, M. (2019). ‘Born Originals, how comes it to pass we die Copies?’ (Edward Young): A case study analysing the Masters’ thesis as a vehicle for student creativity,

- engagement, and transformative learning. *Student Engagement in Higher Education Journal*, 2(3), 7-14.
- Cornelius, S., & Nicol, S. (2016). Understanding the needs of masters dissertation supervisors: Supporting students in professional contexts. *Journal of Perspectives in Applied Academic Practice*, 4, 1–12.
- Cosgrove, P., B., & Jonas, P. M. (2016). Moving from tension to texture: The paradigmatic roots of mixed methods research. In M. L. Baran & J. E. Jones (Eds.), *Mixed method research for improved scientific study* (pp. 28–38). Hershey, Pennsylvania: IGI Global.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). Los Angeles: SAGE Publications.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: SAGE Publications.
- Cummings, J. B. (2008). *An activity theory analysis of three instructors' knowledge about teaching writing in a pre-university English-for-Academic-Purposes course Teacher mind as mediated action*. Retrieved from <https://www.collectionscanada.gc.ca/obj/thesescanada/vol2/002/NR39802.PDF>
- Curriculum Development Center. (2007). *National curriculum framework for school education in Nepal*. Author: Bhaktapur, Nepal.
- Davis, S. E., & Dargusch, J. (2015). Feedback, iterative processing and academic trust—Teacher education students' perceptions of assessment feedback. *Australian Journal of Teacher Education*, 40, 177-191. doi:10.14221/ajte.2015v40n1.10
- Davydov, V. V. (1999). The content and unsolved problems of activity theory. In Y. Engestrom, R. Miettinen, & R-L. Punamaki (Eds.), *Perspectives on activity theory* (pp. 39–52). Cambridge: Cambridge University Press.

- de Kleijn, R. A. M., Bronkhorst, L. H., Meijer, P. C., Pilot, A., & Brekelmans, M. (2016). Understanding the up, back, and forward-component in master's thesis supervision with adaptivity. *Studies in Higher Education, 41*, 1463–1479.
doi:10.1080/03075079.2014.980399
- de Kleijn, R. A. M., Mainhard, M. T., Meijer, P. C., Pilot, A., & Brekelmans, M. (2012). Master's thesis supervision: Relations between perceptions of the supervisor–student relationship, final grade, perceived supervisor contribution to learning and student satisfaction. *Studies in Higher Education, 37*, 925–939.
doi:10.1080/03075079.2011.556717
- de Kleijn, R. A. M., Meijer, P. C., Brekelmans, M., & Pilot, A. (2013). Curricular goals and personal goals in master's thesis projects: Dutch student-supervisor dyads. *International Journal of Higher Education, 2*, 1–11.
- de kleijn, R. A. M. de, Meijer, P. C., Brekelmans, M., & Pilot, A. (2015). Adaptive research supervision: Exploring expert thesis supervisors' practical knowledge. *Higher Education Research & Development, 34*, 117–130.
doi:10.1080/07294360.2014.934331
- 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.
doi:10.1080/13562517.2013.860109
- Denis, C., Colet, N. R., & Lison, C. (2018). Doctoral supervision in North America: Perception and challenges of supervisor and supervisee. *Higher Education Studies, 9*, 30-39. doi:10.5539/hes.v9n1p30

- Denscombe, M. (2008). Communities of practice: A research paradigm for the mixed methods approach. *Journal of Mixed Methods Research*, 2, 270–283.
doi:10.1177/1558689808316807
- Dhakal, M. (2019, July 19). Thesis submission at TU departments meagre. *The Rising Nepal*. Retrieved from <http://therisingnepal.org.np/news/33112>
- Dhamala, T. N. (2019, July 18). त्रिविकी भविष्य [Future of TU]. *The Nagarik Daily*. Retrieved from <https://nagariknews.nagariknetwork.com/opinion/185028-1563418620.html>
- Dong, Y. R. (1998). Non-native graduate students' thesis/dissertation writing in science: Self-reports by students and their advisors from two U.S. institutions. *English for Specific Purposes*, 17, 369–390.
- Dörnyei, Z. (2014). *Questionnaires in second language research: Construction, administration, and processing*. London: Routledge.
- Duff, P. A. (2010). Language socialization into academic discourse communities. *Annual Review of Applied Linguistics*, 30, 169–192. doi:10.1017/S0267190510000048
- Duff, P. A., & Doherty, L. (2015). Examining agency in (second) language socialization research. In P. Deters, X. Gao, E. R. Miller, & G. Vitanova (Eds.), *Theorizing and analyzing agency in second language learning: Interdisciplinary approaches* (pp. 54–72). Bristol: Multilingual Matters.
- Dunning, D. (2011). The Dunning–Kruger effect. In M. P. Zanna, P. Devine, J. M. Olson, & A. Plant (Eds.), *Advances in experimental social psychology* (pp. 247–296). London: Academic Press Inc.
- 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. doi:10.1080/03075070600680562

- 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.
- Eco, U. (2015). *How to write a thesis* (C. Mongiat Farina & G. Farina, Trans.). Cambridge, Massachusetts: MIT Press.
- Edwards, A. (2009). From the systemic to the relational: Relational agency and activity theory. In A. Sannino, H. Daniels, & K. D. Gutiérrez (Eds.), *Learning and expanding with activity theory* (pp. 197–211). New York: Cambridge University Press.
- Emilsson, U. M., & Johnsson, E. (2007). Supervision of supervisors: On developing supervision in postgraduate education. *Higher Education Research & Development*, 26, 163–179. doi:10.1080/07294360701310797
- Engestrom, Y. (1999). Activity theory and individual and social transformation. In Y. Engestrom, R. Miettinen, & R-L. Punamaki (Eds.), *Perspectives on activity theory* (pp. 19–38). Cambridge: Cambridge University Press.
- Engestrom, Y. (2000). Activity theory as a framework for analyzing and redesigning work. *Ergonomics*, 43, 960–974. doi:10.1080/001401300409143
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14, 133–156. doi:10.1080/13639080020028747
- Engestrom, Y. (2009). The future of activity theory: A rough draft. In A. Sannino, H. Daniels, & K.D. Gutierrez (Eds.), *Learning and expanding with activity theory* (pp. 303–328). Cambridge: Cambridge University Press.
- Engeström, Y. (2015). *Learning by expanding* (second). Cambridge: Cambridge University Press.

- Engeström, Y. (2018a). *Expertise in transition: Expansive learning in medical work*.
Cambridge: Cambridge University Press.
- Engeström, Y., & Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5, 1–24.
doi:10.1016/j.edurev.2009.12.002
- Engeström, Y., & Sannino, A. (2011). Discursive manifestations of contradictions in organizational change efforts: A methodological framework. *Journal of Organizational Change Management*, 24, 368–387. doi:10.1108/09534811111132758
- Esterhazy, R. (2019). Re-conceptualizing feedback through a sociocultural lens. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 67–82). London: Palgrave Macmillan.
- Evans, S., & Morrison, B. (2011). The first term at university: Implications for EAP. *ELT Journal*, 65, 387–397. doi:10.1093/elt/ccq072
- Eyres SJ, Hatch DH, Turner SB, & West M. (2001). Doctoral students' responses to writing critique: Messages for teachers. *Journal of Nursing Education*, 40(4), 149–155.
- Ferris, D., & Kurzer, K. (2019). Does error feedback help 12 writers?: Latest evidence on the efficacy of written corrective feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in Second Language Writing* (2nd ed., pp. 106–124). doi:10.1017/9781108635547.008
- Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs-principles and practices. *Health Services Research*, 48(6pt2), 2134–2156. doi:10.1111/1475-6773.12117
- Field, A. P. (2009). *Discovering statistics using SPSS: (And sex, drugs and rock “n” roll)* (3rd ed). Los Angeles: SAGE Publications.

- Filippou, K. (2020). Identifying thesis supervisors' attitudes: Indications of responsiveness in international master's degree programmes. *Innovations in Education and Teaching International*, 54, 274-284. doi:10.1080/14703297.2019.1621764
- 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. doi:10.1080/14675986.2017.1333713
- Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter? In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 97-131). doi:10.1007/978-1-4614-2018-7_5
- Flyvbjerg, B. (2004). Five misunderstandings about case-study research. In C. Seale, G. Gobo, J.F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 420-434). London: SAGE Publications.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59-109. doi:10.3102/00346543074001059
- Gardner, S. K. (2009). Conceptualizing success in doctoral education: Perspectives of faculty in seven disciplines. *The Review of Higher Education*, 32(3), 383-406. doi:10.1353/rhe.0.0075
- Gautam, S., Bhattarai, P. C., & Sharma, T. N. (2020). Understanding the policies, priorities, and roles Higher education in Nepal at crossroad. In K. Bista, S. Sharma, & R. L. Raby (Eds.), *Higher education in Nepal: Policies and perspectives* (1st ed., pp. 51-61). New York, NY: Routledge, Taylor & Francis Group.
- Gibbs, G., & Simpson, C. (2005). Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education*, 1, 3-31.

- Gilbert, A.-F. (2009). Disciplinary cultures in mechanical engineering and materials science: Gendered/gendering practices? *Equal Opportunities International*, 28, 24–35.
- Ginn, F. (2014). “Being like a researcher”: Supervising masters dissertations in a neoliberalizing university. *Journal of Geography in Higher Education*, 38, 106–118. doi:10.1080/03098265.2013.836746
- Giri, R. A. (2009). The politics of ‘unplanning’ of languages in Nepal. *Journal of NELTA*, 14, 32–44.
- Giri, R. A. (2011). Languages and language politics: How invisible language politics produces visible results in Nepal. *Language Problems and Language Planning*, 35(3), 197–221. doi:10.1075/lplp.35.3.01gir
- Grant, B., & Xu, L. (2017). Framing feedback expectations: A “pedagogy of explicitness.” In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 23–29). London: Routledge.
- Greene, J. C. (2007). *Mixed methods in social inquiry* (1st ed). San Francisco, CA: Jossey-Bass.
- Greene, J. E., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274.
- Gruba, P., & Zobel, J. (2017). *How to write your first thesis* (1st edition). New York, NY: Springer.
- Guerin, C., & Aitchison, C. (2017). Peer writing groups. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 46–50). London: Routledge.
- Guerin, C., Kerr, H., & Green, I. (2015). Supervision pedagogies: Narratives from the field. *Teaching in Higher Education*, 20, 107–118. doi:10.1080/13562517.2014.957271

- Gunn, V. (2014). Mimetic desire and intersubjectivity in disciplinary cultures: Constraints or enablers to learning in higher education? *Studies in Continuing Education*, 36(1), 67–82. doi:10.1080/0158037X.2013.787981
- Gupto, A. (2020, April 28). हाम्रा विश्वविद्यालय: धमाधम डिग्री वितरण, अलपत्र अनुसन्धान [Our universities: Incessant distribution of degree, neglected research]. *Himal Khabar*. Retrieved from <https://www.himalkhabar.com/news/113530>
- Hakala, J., & Ylijoki, O.-H. (2001). Research for whom? Research orientations in three academic cultures. *Organization*, 8, 373–380.
- Halliday, M. A. K. (2009). Methods-techniques-problems. In M. A. K. Halliday & J. Webster (Eds.), *Continuum companion to systemic functional linguistics* (pp. 59–86). London: Continuum.
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *Halliday's introduction to functional grammar* (Fourth Edition). London: Routledge.
- Han, Y., & Hyland, F. (2019). Learner engagement with written feedback: A sociocognitive perspective. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing* (2nd ed., pp. 247–264). doi:10.1017/9781108635547.015
- Handley, K., Price, M., & Millar, J. (2011). Beyond 'doing time': Investigating the concept of student engagement with feedback. *Oxford Review of Education*, 37, 543–560. doi:10.1080/03054985.2011.604951
- Haneda, M. (2008). Modes of engagement in foreign language writing: An activity theoretical perspective. *Canadian Modern Language Review*, 64(2), 297–327. doi:10.3138/cmlr.64.2.297
- Hardy, J. A., & Römer, U. (2013). Revealing disciplinary variation in student writing: A multi-dimensional analysis of the Michigan Corpus of Upper-level Student Papers (MICUSP). *Corpora*, 8(2), 183–207. doi:10.3366/cor.2013.0040

- Harks, B., Rakoczy, K., Hattie, J., Besser, M., & Klieme, E. (2014). The effects of feedback on achievement, interest and self-evaluation: The role of feedback's perceived usefulness. *Educational Psychology, 34*(3), 269–290.
doi:10.1080/01443410.2013.785384
- Harwood, N., & Petrić, B. (2020). Adaptive master's dissertation supervision: A longitudinal case study. *Teaching in Higher Education, 25*, 68–83.
doi:10.1080/13562517.2018.1541881
- Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research, 77*(1), 81–112. doi:10.3102/003465430298487
- Hattie, J., & Clarke, S. (2018). *Visible Learning: Feedback*. London: Routledge.
- Henderson, M., Molloy, E., Ajjawi, R., & Boud, D. (2019). Designing feedback for impact. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 267–285). London: Palgrave Macmillan.
- Hesse-Biber, S. N. (2010). *Mixed methods research: Merging theory with practice*. New York: Guilford Press.
- Higgins, R., Hartley, P., & Skelton, A. (2002). The conscientious consumer: Reconsidering the role of assessment feedback in student learning. *Studies in Higher Education, 27*, 53–64. doi:10.1080/03075070120099368
- Holbrook, A., Bourke, S., Fairbairn, H., & Lovat, T. (2014). The focus and substance of formative comment provided by PhD examiners. *Studies in Higher Education, 39*, 983–1000. doi:10.1080/03075079.2012.750289
- Hu, G. (2018). Disciplinary knowledge making and academic discourse. In Y. Leung, J. Katchen, S. Hwang, & Y. Chen (Eds.), *Reconceptualizing English language teaching and learning in the 21st century* (pp. 553–573). Taipei: Crane Publishing.

- Hu, G., & Cao, F. (2015). Disciplinary and paradigmatic influences on interactional metadiscourse in research articles. *English for Specific Purposes*, 39, 12–25. doi:10.1016/j.esp.2015.03.002
- 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. doi:10.1080/13540602.2015.1058591
- Hu, G., & Wang, G. (2014). Disciplinary and ethnolinguistic influences on citation in research articles. *Journal of English for Academic Purposes*, 14, 14–28. doi:10.1016/j.jeap.2013.11.001
- Hu, Y., Rijst, R. M. van der, Veen, K. van, & Verloop, N. (2016). The purposes and processes of master's thesis supervision: A comparison of Chinese and Dutch supervisors. *Higher Education Research & Development*, 35, 910–924. doi:10.1080/07294360.2016.1139550
- Hyatt, D. F. (2005). 'Yes, a very good point!': A critical genre analysis of a corpus of feedback commentaries on Master of Education assignments. *Teaching in Higher Education*, 10, 339–353. doi:10.1080/13562510500122222
- Hyland, F. (1998). The impact of teacher written feedback on individual writers. *Journal of Second Language Writing*, 7, 255–286. doi:10.1016/S1060-3743(98)90017-0
- Hyland, F. (2003). Focusing on form: Student engagement with teacher feedback. *System*, 31, 217–230. doi:10.1016/S0346-251X(03)00021-6
- Hyland, F., & Hyland, K. (2001). Sugaring the pill: Praise and criticism in written feedback. *Journal of Second Language Writing*, 10, 185–212. doi:10.1016/S1060-3743(01)00038-8
- Hyland, K. (2013). Student perceptions of hidden messages in teacher written feedback. *Studies in Educational Evaluation*, 39, 180–187. doi:10.1016/j.stueduc.2013.06.003

- Hyland, K. (2019). What messages do students take from teacher feedback? In K. Hyland & F. Hyland (Eds.), *Feedback in Second Language Writing* (2nd ed., pp. 265–284). doi:10.1017/9781108635547.016
- Hyland, K., & Hyland, F. (2019). Interpersonality and teacher-written feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in Second Language Writing* (2nd ed., pp. 165–183). doi:10.1017/9781108635547.011
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31, 191–206. doi:10.1080/00461520.1996.9653266
- Jonsson, A. (2013). Facilitating productive use of feedback in higher education. *Active Learning in Higher Education*, 14, 63–76. doi:10.1177/1469787412467125
- Kang, Y.-S., & Pyun, D. O. (2013). Mediation strategies in L2 writing processes: A case study of two Korean language learners. *Language, Culture and Curriculum*, 26, 52–67. doi:10.1080/07908318.2012.762012
- Karn, S. K. (2009). Give me an easy topic, please: My experience of supervising theses. *The Journal of NELTA*, 12, 63–70.
- 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. doi:10.1093/pubmed/fdw107
- KC, G. (2019, August 4). नदोहोरियोस् भागबन्डा [May the political distribution of officials not repeated]. *The Kantipur Daily*. Retrieved from <https://www.kantipurdaily.com/opinion/2019/08/04/156488444008523794.html>

- King, K. A., & Mackey, A. (2016). Research methodology in second language studies: Trends, concerns, and new directions. *The Modern Language Journal*, *100*, 209–227. doi:10.1111/modl.12309
- Kobayashi, M., Zappa-Hollman, S., & Duff, P. A. (2017). Academic discourse socialization. In *Encyclopedia of Language and Education. Language Socialization* (pp. 239–254). doi:10.1007/978-3-319-02255-0_18
- Koen, M., Bitzer, E. M., & Beets, P. A. D. (2012). Feedback or feed-forward? A case study in one higher education classroom. *Journal of Social Sciences*, *32*, 231–242. doi:10.1080/09718923.2012.11893068
- Kowalczyk-Walędziak, M., Lopes, A., Underwood, J., Daniela, L., & Clipa, O. (2019). Meaningful time for professional growth or a waste of time? A study in five countries on teachers' experiences within master's dissertation/thesis work. *Teaching Education*, 1–21. doi:10.1080/10476210.2019.1649649
- Kumar, V., & Stracke, E. (2007). An analysis of written feedback on a PhD thesis. *Teaching in Higher Education*, *12*, 461–470. doi:10.1080/13562510701415433
- Kumar, V., & Stracke, E. (2017). Settling students into community of practice: In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 17–22). London: Routledge.
- Kumar, V., & Stracke, E. (2018). Reframing doctoral examination as teaching. *Innovations in Education and Teaching International*, *55*, 219–227. doi:10.1080/14703297.2017.1285715
- Lam, R. (2015). Feedback about self-regulation: Does it remain an “unfinished business” in portfolio assessment of writing? *TESOL Quarterly*, *49*(2), 402–413. doi:10.1002/tesq.226

- Lam, R. (2017). Enacting feedback utilization from a task-specific perspective. *The Curriculum Journal*, 28(2), 266–282. doi: 10.1080/09585176.2016.1187185
- Lancaster, Z. (2016). Expressing stance in undergraduate writing: Discipline-specific and general qualities. *Journal of English for Academic Purposes*, 23, 16–30.
doi:10.1016/j.jeap.2016.05.006
- Larcombe, W., McCosker, A., & O’Loughlin, K. (2007). Supporting education PhD and DEd students to become confident academic writers: An evaluation of thesis writers’ circles. *Journal of University Teaching and Learning Practice*, 4, 54–63.
- Lau, K., & Gardner, D. (2019). Disciplinary variations in learning styles and preferences: Implications for the provision of academic English. *System*, 80, 257–268.
doi:10.1016/j.system.2018.12.010
- Laurs, D. (2018). Making use of other resources along the way. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 41–42). London: Routledge.
- Lee, A. (2017). Five approaches to supporting students’ writing in English as an additional language. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 96–101). London: Routledge.
- Lee, I. (2007). Assessment for learning: Integrating assessment, teaching, and learning in the ESL/EFL writing classroom. *The Canadian Modern Language Review / La Revue Canadienne Des Langues Vivantes*, 64(1), 199–214.
- Lee, I. (2014). Revisiting teacher feedback in EFL writing from sociocultural perspectives. *TESOL Quarterly*, 48, 201–213.
- Lei, J., & Hu, G. (2015). Apprenticeship in scholarly publishing: A student perspective on doctoral supervisors’ roles. *Publications*, 3, 27–42. doi:10.3390/publications3010027

- Lei, X. (2008). Exploring a sociocultural approach to writing strategy research: Mediated actions in writing activities. *Journal of Second Language Writing, 17*, 217–236. doi:10.1016/j.jslw.2008.04.001
- Lektorsky, V. A. (2009). Mediation as a means of collective activity. In A. Sannino, H. Daniels, & K. D. Gutiérrez (Eds.), *Learning and expanding with activity theory* (pp. 75–90). New York: Cambridge University Press.
- Leont'ev, A. N. (1981). The problem of activity in psychology. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology: An introduction* (pp. 37–71). New York: M. E. Sharpe, Inc.
- Li, Y. (2013). Three ESL students writing a policy paper assignment: An activity-analytic perspective. *Journal of English for Academic Purposes, 12*, 73–86. doi:10.1016/j.jeap.2012.11.006
- 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. doi:10.1016/j.jeap.2017.02.005
- Lockyer, J. M., Armson, H. A., Könings, K. D., Zetkovic, M., & Sargeant, J. (2019). Impact of personalized feedback: The case of coaching and learning change plans. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 189–204). London: Palgrave Macmillan.
- Löfström, E., & Pyhältö, K. (2015). 'I don't even have time to be their friend!' Ethical dilemmas in Ph.D. supervision in the hard sciences. *International Journal of Science Education, 37*, 2721–2739. doi:10.1080/09500693.2015.1104424
- Lum, J. (2018). Supervising master's/honours: A project management approach to research development. In S. Carter & D. Laurs (Eds.), *Developing research writing: A handbook for supervisors and advisors* (pp. 119–124). London: Routledge.

- MacKay, J. R. D., Hughes, K., Marzetti, H., Lent, N., & Rhind, S. M. (2019). Using national student survey (NSS) qualitative data and social identity theory to explore students' experiences of assessment and feedback. *Higher Education Pedagogies*, 4, 315–330. doi:10.1080/23752696.2019.1601500
- Maher, P., & Milligan, S. (2019). Teaching master thesis writing to engineers: Insights from corpus and genre analysis of introductions. *English for Specific Purposes*, 55, 40–55. doi:10.1016/j.esp.2019.05.001
- Manathunga, C., & Brew, A. (2012). Beyond tribes and territories: New metaphors for new times. In P. Trowler, S. Murraray, & B. Veronica (Eds.), *Tribes and Territories in the 21st Century: Rethinking the significance of disciplines in higher education* (pp. 44–56). Florence, Italy: Taylor & Francis.
- Martin, J. (1999). Factoring out exchange: Types of structure. In M. Coulthard, J. Cotterill, & F. Rock (Eds.), *Dialogue Analysis VII: Working with Dialogue: Selected Papers from the 7th IADA Conference, Birmingham 1999* (pp. 19–40). Walter de Gruyter GmbH & Co KG.
- Martin, J. R., & Rose, D. (2003). *Working with discourse: Meaning beyond the clause*. London: Bloomsbury Academic.
- Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English*. New York: Palgrave Macmillan.
- Martin, J. R., Zappavigna, M., & Dwyer, P. (2010). Negotiating evaluation: Story structure and appraisal in youth justice conferencing. In A. Mahboob & N. Knight (Eds.), *Applicable linguistics* (pp. 44–75). London: Continuum International Pub. Group.
- Mathema, K. B. (2019a, August 4). नबोकौ झन्डा [Let's not bear (a political) flag]. *The Kantipur Daily*. Retrieved from <https://www.kantipurdaily.com/opinion/2019/08/04/156488453300545857.html>

- Mathema, K. B. (2019b, August 16). विश्वविद्यालय शिक्षाको संकट [Crisis of university education] *The Kantipur Daily*. Retrieved from <https://www.kantipurdaily.com/opinion/2019/08/16/156592351226627054.html>
- Maton, K. (2010). Canons and progress in the arts and humanities: Knowers and gazes. In K. Maton & R. Moore (Eds.), *Social realism, knowledge and the sociology of education: Coalitions of the mind* (pp. 154–178). London: Continuum.
- Maton, K. (2014). *Knowledge and knowers: Towards a realist sociology of education*. London: Routledge.
- Maunder, R. E., Gordon-Finlayson, A., Callaghan, J., & Roberts, A. (2012). Behind supervisory doors: Taught master's dissertation students as qualitative apprentices. *Psychology Learning & Teaching, 11*, 30–38. doi:10.2304/plat.2012.11.1.30
- McCallin, A., & Nayar, S. (2012). Postgraduate research supervision: A critical review of current practice. *Teaching in Higher Education, 17*, 63–74. doi:10.1080/13562517.2011.590979
- McEnery, T., & Hardie, A. (2012). *Corpus linguistics: Method, theory and practice*. Cambridge: Cambridge University Press.
- Mette, B. L., & Jones, J. E. (2016). *Mixed methods research for improved scientific study*. Hershey, Pennsylvania: IGI Global.
- Ministry of Education. (2016). *School sector development plan (2016/17-2022/23)*. Kathmandu: Author.
- Molloy, E., Noble, C., & Ajjawi, R. (2019). Attending to emotion in feedback. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 83–105). London: Palgrave Macmillan.
- Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry, 20*(8), 1045–1053. doi:10.1177/1077800413513733

- Morton, J., & Storch, N. (2019). Developing an authorial voice in PhD multilingual student writing: The reader's perspective. *Journal of Second Language Writing, 43*, 15–23.
- Morton, J., Storch, N., & Thompson, C. (2014). Feedback on writing in the supervision of postgraduate students: Insights from the work of Vygotsky and Bakhtin. *Journal of Academic Language and Learning, 8*, A24–A36.
- Muller, J. (2011). Through others' eyes: The fate of disciplines. In F. Christie & K. Maton (Eds.), *Disciplinary: Functional linguistic and sociological perspectives* (pp. 13–35). London: Continuum.
- Mulliner, E., & Tucker, M. (2017). Feedback on feedback practice: Perceptions of students and academics. *Assessment & Evaluation in Higher Education, 42*, 266–288.
doi:10.1080/02602938.2015.1103365
- Neupane Bastola, M. (2020). Engagement with and challenges in supervisory feedback: Supervisors' and students' perceptions. *RELC Journal, 1-15*
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*, 199–218. doi:10.1080/03075070600572090
- Nicol, S., & Cornelius, S. C. (2018). Effective supervision of master's researchers in professional context. In S. Carter & D. Laurs (Eds.), *developing research writing: A handbook for supervisors and advisors* (pp. 125–132). London: Routledge.
- Nummijoki, J., Engeström, Y., & Sannino, A. (2017). Defensive and expansive cycles of learning: A study of home care encounters. *Journal of the Learning Sciences, 0(0)*, 1–41. <https://doi.org/10.1080/10508406.2017.1412970>
- Odena, O., & Burgess, H. (2015). How doctoral students and graduates describe facilitating experiences and strategies for their thesis writing learning process: A qualitative

- approach. *Studies in Higher Education*, 42, 572-590.
- doi:10.1080/03075079.2015.1063598
- O'Donnell, M. (2011). UAM Corpus Tool (Version 3.3.2). Retrieved October 25, 2019, from <http://www.corpustool.com/download.html>
- OECD. (2016). *Education at a glance 2016*. Paris: Organisation for Economic Co-operation and Development.
- Paltridge, B. (2002). Thesis and dissertation writing: An examination of published advice and actual practice. *English for Specific Purposes*, 21, 125–153.
- Paltridge, B., & Phakiti, A. (2015). *Research Methods in Applied Linguistics: A Practical Resource*. London: Bloomsbury Publishing.
- Paltridge, B., & Starfield, S. (2007). *Thesis and dissertation writing in a second language: A handbook for supervisors*. London: Routledge.
- Paltridge, B., & Starfield, S. (2019). *Thesis and dissertation writing in a second language: A handbook for supervisors* (2nd ed.). London: Routledge.
- 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). London: Springer Science & Business Media.
- 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 Science & Business Media.
- Parkin, H. J., Hepplestone, S., Holden, G., Irwin, B., & Thorpe, L. (2012). A role for technology in enhancing students' engagement with feedback. *Assessment & Evaluation in Higher Education*, 37, 963–973. doi:10.1080/02602938.2011.592934

- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (Fourth edition). Thousand Oaks, California: SAGE Publications.
- Phakiti, A. (2014). Questionnaire development and analysis. In A. J. Kunnan (Ed.), *The Companion to Language Assessment* (pp. 1245–1261). Retrieved from doi:10.1002/9781118411360.wbcla068
- Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics*, 36, 50–72. doi:10.1017/S0267190515000094
- Phyak, P. B. (2011). Beyond the façade of language planning for Nepalese primary education: Monolingual hangover, elitism and displacement of local languages? *Current Issues in Language Planning*, 12, 265–287. doi:10.1080/14664208.2011.584203
- Pilcher, N. (2011). The UK postgraduate masters dissertation: An ‘elusive chameleon’? *Teaching in Higher Education*, 16, 29–40. doi:10.1080/13562517.2011.530752
- Pitt, E. (2019). Operationalising dialogic feedback to develop students’ evaluative judgement and enactment of feedback. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 129–146). London: Palgrave Macmillan.
- Pokhrel, K. (n.d.). Research and thesis writing a neglected priority in our academia. *The Rising Nepal*. Retrieved from <http://therisingnepal.org.np/news/14581>
- Pokhrel, M. (2019, July 27). बेकामे पिण्चडी ! [Useless PhDs!] *Siksha Sansar*. Retrieved from <https://shikshasansar.com/2019/08/13384/?fbclid=IwAR33zcyj5UoI9Bnh7K20HLivZjL3EpKapGL8g9nkSv0MLkPzXzQ7Ng4P07tQ#.XVD8yNYtpNg.facebook>
- Price, M., Handley, K., & Millar, J. (2011). Feedback: Focusing attention on engagement. *Studies in Higher Education*, 36, 879–896. doi:10.1080/03075079.2010.483513

- 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.
doi:10.1080/02602930903541007
- Pyhältö, K., Vekkaila, J., & Keskinen, J. (2015). Fit matters in the supervisory relationship: Doctoral students and supervisors' perceptions about the supervisory activities. *Innovations in Education and Teaching International*, 52, 4–16.
doi:10.1080/14703297.2014.981836
- Rai, M. (2018, April 30). Thesis writing: A hard nut to crack (a student's experience). Retrieved from ELT Choutari: Nepal's First ELT Digital Magazine website:
<http://eltchoutari.com/2018/04/thesis-writing-a-hard-nut-to-crack-a-students-experience/>
- Rai, T. (2018, July 19). Thesis writing: A next step in learning. Retrieved from ELT Choutari: Nepal's First ELT Digital Magazine website:
<http://eltchoutari.com/2018/07/thesis-writing-a-next-step-in-learning/>
- Ridgway, G. (2017). Modeling higher degree by research student writing feedback based on systemic functional linguistics: A collaboration of student, supervisor and academic language and learning adviser. *Journal of Academic Language & Learning*, 11, A174–A187.
- Roth, W.-M. (2009). On the inclusion of emotions, identity, and ethico-moral dimensions of actions. In A. Sannino, H. Daniels, & K. D. Gutiérrez (Eds.), *Learning and expanding with activity theory* (pp. 53–71). New York: Cambridge University Press.
- Roth, W.-M., & Lee, Y.-J. (2007). “Vygotsky's neglected legacy”: Cultural-historical activity theory. *Review of Educational Research*, 77(2), 186–232.
doi:10.3102/0034654306298273

- Roth, W.-M., Lee, Y.-J., & Hsu, P.-L. (2009). A tool for changing the world: Possibilities of cultural-historical activity theory to reinvigorate science education. *Studies in Science Education, 45*, 131–167. doi:10.1080/03057260903142269
- Russell, D. R. (2009). Uses of activity theory in written communication research. In A. Sannino, H. Daniels, & K. D. Gutiérrez (Eds.), *Learning and expanding with activity theory* (pp. 40–52). New York: Cambridge University Press.
- Ryan, T., Gašević, D., & Henderson, M. (2019). Identifying the impact of feedback over time and at scale: Opportunities for learning analytics. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 207–223). London: Palgrave Macmillan.
- Sadeghi, K., & Shirzad Khajepasha, A. (2015). Thesis writing challenges for non-native MA students. *Research in Post-Compulsory Education, 20*(3), 357–373. doi:10.1080/13596748.2015.1063808
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education, 35*, 535–550. doi:10.1080/02602930903541015
- Salter-Dvorak, H. (2017). “How did you find the argument?”: Conflicting discourses in a master’s dissertation tutorial. *London Review of Education, 15*, 85–100. doi:10.18546/LRE.15.1.08
- Sannino, A., Daniels, H., & Gutierrez, K. D. (2009). Activity theory between historical engagement and future-making practice. In A. Sannino, H. Daniels, & G. Gutierrez (Eds.), *Learning and expanding with activity theory* (pp. 1–18). New York: Cambridge University Press.

- Schaaf, M. V. der, Baartman, L., Prins, F., Oosterbaan, A., & Schaap, H. (2013). Feedback Dialogues That Stimulate Students' Reflective Thinking. *Scandinavian Journal of Educational Research*, 57, 227–245. doi:10.1080/00313831.2011.628693
- Schartel, S. A. (2012). Giving feedback – An integral part of education. *Best Practice & Research Clinical Anesthesiology*, 26, 77–87. doi:10.1016/j.bpa.2012.02.003
- Schoonenboom, J. (2019). A performative paradigm for mixed methods research. *Journal of Mixed Methods Research*, 13, 284–300. doi:10.1177/1558689817722889
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 69, 107–131. doi:10.1007/s11577-017-0454-1
- Scott, G. W. (2017). Active engagement with assessment and feedback can improve group-work outcomes and boost student confidence. *Higher education pedagogies*, 2, 1–13. doi:10.1080/23752696.2017.1307692
- Sharma, B. K. (2012). Beyond social networking: Performing global Englishes in Facebook by college youth in Nepal. *Journal of Sociolinguistics*, 16, 1–28.
- Shrestha, R. N., Pahari, B. R., & Awasthi, J. R. (2015). Impact of English on the career of engineering students: A brief overview in g(local) context. *Journal of the Institute of Engineering*, 11, 182–188.
- Simons, H. (2009). *Case study research in practice*. London: SAGE Publications.
- Skinner, E. A., & Pitzer, J. R. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 21–44). London: Springer.
- Smyth, P., & Carless, D. (2020). Theorising how teachers manage the use of exemplars: Towards mediated learning from exemplars. *Assessment & Evaluation in Higher Education*, 1–14. doi: 10.1080/02602938.2020.1781785

- Sopina, E., & McNeill, R. (2015). Investigating the relationship between quality, format and delivery of feedback for written assignments in higher education. *Assessment & Evaluation in Higher Education*, *40*, 666–680. doi:10.1080/02602938.2014.945072
- Starfield, S. (2019). Supervisory feedback: Building writing scaffolds with doctoral students. In K. Hyland & F. Hyland (Eds.), *Feedback in Second Language Writing* (2nd ed., pp. 206–225). doi:10.1017/9781108635547.013
- Starfield, S., Paltridge, B., McMurtrie, R., Holbrook, A., Bourke, S., Fairbairn, H., ... Lovat, T. (2015). Understanding the language of evaluation in examiners' reports on doctoral theses. *Linguistics and Education*, *31*, 130–144. doi:10.1016/j.linged.2015.06.004
- 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 Science & Business Media.
- Stracke, E., & Kumar, V. (2010). Feedback and self-regulated learning: Insights from supervisors' and PhD examiners' reports. *Reflective Practice*, *11*, 19–32. doi:10.1080/14623940903525140
- Strauss, P. (2012). 'The English is not the same': Challenges in thesis writing for second language speakers of English. *Teaching in Higher Education*, *17*, 283–293. doi:10.1080/13562517.2011.611871
- Sutton, P. (2012). Conceptualizing feedback literacy: Knowing, being, and acting. *Innovations in Education and Teaching International*, *49*, 31–40. doi:10.1080/14703297.2012.647781
- Sutton, P., & Gill, W. (2010). Engaging feedback: Meaning, identity and power. *Practitioner Research in Higher Education*, *4*, 3–13.

- Tai, J., Dawson, P., Bearman, M., & Ajjawi, R. (2019). Beware the simple impact measure: Learning from the parallels with student engagement. In M. Henderson, R. Ajjawi, D. Boud, & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 37–50). doi:10.1007/978-3-030-25112-3_3
- Taylor, J. R. (2009). The communicative construction of community: Authority and organizing. In A. Sannino, H. Daniels, & K. D. Gutiérrez (Eds.), *Learning and expanding with activity theory* (pp. 228–239). New York: Cambridge University Press.
- Telio, S., Ajjawi, R., & Regehr, G. (2015). The “educational alliance” as a framework for reconceptualizing feedback in medical education. *Academic Medicine*, 90, 609–614. doi:10.1097/ACM.0000000000000560
- Thapa, A., & Maharjan, U. (2020). Higher education and economic development in Nepal. In K. Bista, S. Sharma, & R. L. Raby (Eds.), *Higher education in Nepal: Policies and perspectives* (1st ed., pp. 25–36). London: Routledge, Taylor & Francis Group.
- Thomas, G. (2011). *How to do your case study: A guide for students and researchers*. London: SAGE Publications.
- To, J. (2016). ‘This is not what I need’: Conflicting assessment feedback beliefs in a post-secondary institution in Hong Kong. *Research in Post-Compulsory Education*, 21, 447–467. doi:10.1080/13596748.2016.1226588
- Tognini-Bonelli, E. (2001). *Corpus linguistics at work*. Amsterdam: Benjamins.
- Tolman, C. W. (1999). Society versus context in individual development: Does theory make a difference? In Y. Engestrom, R. Miettinen, & R-L. Punamaki (Eds.), *Perspectives on activity theory* (pp. 70–86). Cambridge: Cambridge University Press.

- Tran, B. (2016). The nature of research methodologies: Terms and usage within quantitative, qualitative and mixed methods. In M. L. Baran & J. E. Jones (Eds.), *Mixed method research for improved scientific study* (pp. 1–27). Hershey, Pennsylvania: IGI Global.
- Trowler, P. (2012). Disciplines and research: Key themes. In P. Trowler, M. Saunders, & V. Bamber (Eds.), *Tribes and territories in 21 century: Rethinking the significance of disciplines in higher education* (pp. 5–29). London: Routledge.
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46, 327–369. doi:10.1111/j.1467-1770.1996.tb01238.x
- Tsai, E. (2008). Learning to labor: Thesis supervision and academic work in the graduate school. *Inter-Asia Cultural Studies*, 9, 451–468. doi:10.1080/14649370802184783
- University Grants Commission. (2017). *Education management information system: Report on Higher Education 2015/16 A.D, Nepal*. Bhaktapur, Nepal: Author.
- University Grants Commission. (2019). *The UGC research development and innovation programs implementation guidelines, 2019* (5th ed.). Bhaktapur, Nepal: Author.
- van Barneveld, E. (2011). *Innovative problem-oriented pedagogies in engineering education: Conceptualizations and management of tensions* (Ph.D., Purdue University).
Retrieved from
<https://search.proquest.com/pqdt/docview/1014166252/abstract/7FF6837D9A7F4C03PQ/5>
- Van den Ende, J., & Jiang, L. (2014). *A blueprint for a 3-day workshop on thesis supervision*. Retrieved from <http://www.linqed.net/media/22330/Blueprint-suvithe-nepal-final.pdf>
- Van Heerden, M., Clarence, S., & Bharuthram, S. (2017). What lies beneath: Exploring the deeper purposes of feedback on student writing through considering disciplinary knowledge and knowers. *Assessment & Evaluation in Higher Education*, 42, 967–977. doi:10.1080/02602938.2016.1212985

- Van Horne, S. A. (2011). *An activity-theory analysis of how college students revise after writing center conferences* (PhD, University of Iowa). doi:10.17077/etd.30ddkj01
- Vattøy, K.-D., & Smith, K. (2019). Students' perceptions of teachers' feedback practice in teaching English as a foreign language. *Teaching and Teacher Education*, 85, 260–268. doi:10.1016/j.tate.2019.06.024
- Vehviläinen, S. (2009). Problems in the research problem: Critical feedback and resistance in academic supervision. *Scandinavian Journal of Educational Research*, 53, 185–201. doi:10.1080/00313830902757592
- 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. doi:10.1080/03075079.2014.942272
- Vilkinas, T. (2002). The PhD process: The supervisor as manager. *Education + Training*, 44, 129–137. doi:10.1108/00400910210424337
- Vygotsky, L. S. (1978). *Mind in society: Development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wagener, B. (2018). The importance of affects, self-regulation and relationships in the writing of a master's thesis. *Teaching in Higher Education*, 23, 227–242. doi:10.1080/13562517.2017.1379480
- 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. doi:10.1177/1469787411402438
- Wang, X., & Yang, L. (2012). Problems and strategies in learning to write a thesis proposal: A study of six M.A. students in a TEFL program. *Chinese Journal of Applied Linguistics*, 35, 325–341. doi:10.1515/cjal-2012-0024

- Weaver, M. R. (2006). Do students value feedback? Student perceptions of tutors' written responses. *Assessment & Evaluation in Higher Education*, *31*, 379–394.
doi:10.1080/02602930500353061
- 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. doi:10.1080/07294360.2018.1541074
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Wertsch, J. V. (1981). The concept of activity in Soviet psychology: An introduction. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology: An introduction* (pp. 1–36). New York: M. E. Sharpe, Inc.
- White, P. R. R. (2015). Appraisal theory. In *The International Encyclopedia of Language and Social Interaction* (pp. 1–7). doi:10.1002/9781118611463.wbielsi041
- Wichmann-Hansen, G., Bach, L. W., Eika, B., & Mulvany, M. J. (2012). Successful PhD supervision: A two-way process. In M. A. R. B. Castanho & G. Güner-Akdogan (Eds.), *The researching, teaching, and learning triangle* (pp. 55–64). London: Springer Science and Business Media.
- Winstone, N., & Boud, D. (2019). Exploring cultures of feedback practice: The adoption of learning-focused feedback practices in the UK and Australia. *Higher Education Research & Development*, *38*, 411–425. doi:10.1080/07294360.2018.1532985
- Winstone, N. E., & Carless, D. (2020). *Designing effective feedback processes in higher education: A learning-focused approach*. London: Routledge.
- Winstone, N. E., Nash, R. A., Parker, M., & Rowntree, J. (2017). Supporting learners' agentic engagement with feedback: A systematic review and a taxonomy of

recipience processes. *Educational Psychologist*, 52, 17–37.

doi:10.1080/00461520.2016.1207538

Winstone, N. E., Nash, R. A., Rowntree, J., & Menezes, R. (2016). What do students want most from written feedback information? Distinguishing necessities from luxuries using a budgeting methodology. *Assessment & Evaluation in Higher Education*, 41, 1237–1253. doi:10.1080/02602938.2015.1075956

Winstone, N. E., Nash, R. A., Rowntree, J., & Parker, M. (2017). ‘It’d be useful, but I wouldn’t use it’: Barriers to university students’ feedback seeking and recipience. *Studies in Higher Education*, 42, 2026–2041. doi:10.1080/03075079.2015.1130032

Wisker, G. (2012). *The good supervisor: Supervising postgraduate and undergraduate research for doctoral theses and dissertations*. London: Macmillan International Higher Education.

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. doi:10.1080/13562510309400

Withey, C. (2013). Feedback engagement: Forcing feed-forward amongst law students. *The Law Teacher*, 47, 319–344. doi:10.1080/03069400.2013.851336

Xu, L. (2017). Written feedback in intercultural doctoral supervision: A case study. *Teaching in Higher Education*, 22, 239–255. doi:10.1080/13562517.2016.1237483

Yadav, P. N. (2019, June). थरीथरी पीएचडीधारी [Different types of PhD beareres]. *The Kantipur Daily*.

Retrieved from

<https://ekantipur.com/opinion/2019/06/10/156013172251515094.html?fbclid=IwAR212pFsBzTOWsOBURhnpGAPvEbQKyXsu3UMVrfHs7QVTGfckTdpAuwplD0>

- Yamagata-Lynch, L. C. (2010). *Activity systems analysis methods: Understanding complex learning environments*. London: Springer Science & Business Media.
- Yang, M., & Carless, D. (2013). The feedback triangle and the enhancement of dialogic feedback processes. *Teaching in Higher Education, 18*, 285–297.
doi:10.1080/13562517.2012.719154
- Yeo, Marie. (2018). When less may be more: Rethinking teachers' written corrective feedback practices: interview with Icy Lee. *RELC Journal, 49*, 257–261.
doi:10.1177/0033688217738819
- Yeo, Michelle, & Boman, J. (2019). Disciplinary approaches to assessment. *Journal of Further and Higher Education, 43*, 482–493. doi:10.1080/0309877X.2017.1367371
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Los Angeles: SAGE Publications.
- Ylijoki, O.-H. (2000). Disciplinary cultures and the moral order of studying – A case-study of four Finnish university departments. *Higher Education, 39*, 339–332.
- Ylijoki, O.-H. (2001). Master's thesis writing from a narrative approach. *Studies in Higher Education, 26*, 21–34. doi:10.1080/03075070020030698
- Ylijoki, O.-H., Lyytinen, A., & Marttila, L. (2011). Different research markets: A disciplinary perspective. *Higher Education, 62*, 721–740. doi:10.1007/s10734-011-9414-2
- Ylonen, A., Gillespie, H., & Green, A. (2018). Disciplinary differences and other variations in assessment cultures in higher education: Exploring variability and inconsistencies in one university in England. *Assessment & Evaluation in Higher Education, 43*, 1009–1017. doi:10.1080/02602938.2018.1425369
- Yousoubova, L. (2011). Genre and disciplinarity: The challenge of grant writing for new non-anglophone scientists. In L. McAlpine & C. Amundsen (Eds.), *Doctoral Education:*

- Research-based strategies for doctoral students, supervisors and administrators* (pp. 133–155). London: Springer.
- Yu, S. (2014). *Understanding Chinese EFL students' participation in group peer feedback of L2 writing: A sociocultural and activity theory perspective* (An unpublished thesis). The Chinese University of Hong Kong, Hong Kong.
- Yu, S., & Hu, G. (2017). Can higher-proficiency L2 learners benefit from working with lower-proficiency partners in peer feedback? *Teaching in Higher Education*, 22, 178–192. doi:10.1080/13562517.2016.1221806
- Yu, S., & Lee, I. (2013). Understanding supervisors' commentary practices in doctoral research proposal writing: A Hong Kong study. *The Asia-Pacific Education Researcher*, 22, 473–483. doi:10.1007/s40299-012-0046-9
- Yu, S., & Lee, I. (2015). Understanding EFL students' participation in group peer feedback of L2 writing: A case study from an activity theory perspective. *Language Teaching Research*, 19, 572–593. doi:10.1177/1362168814541714
- Yu, S., Zhang, Y., Zheng, Y., Yuan, K., & Zhang, L. (2018). Understanding student engagement with peer feedback on master's theses: A Macau study. *Assessment & Evaluation in Higher Education*, 44, 50-65. doi:10.1080/02602938.2018.1467879
- Zappa-Hollman, S. (2007). Academic presentations across post-secondary contexts: The discourse socialization of non-native English speakers. *Canadian Modern Language Review*, 63, 455-485.
- Zepke, N. (2017). *Student engagement in neoliberal times*. Singapore: Springer.
- Zhang, Z. (Victor). (2016). Student engagement with computer-generated feedback: A case study. *ELT Journal*, 71, 317–327. doi:10.1093/elt/ccw089
- Zhang, Z. (Victor). (2017). Student engagement with computer-generated feedback: A case study. *ELT Journal*, 71, 317–328. doi:10.1093/elt/ccw089

Zheng, Y., Yu, S., Wang, B., & Zhang, Y. (2019). Exploring student engagement with supervisor feedback on master's thesis: Insights from a case study. *Innovations in Education and Teaching International*, 57, 186-197.

doi:10.1080/14703297.2019.1617181

Zhu, W., & Mitchell, D. A. (2012). Participation in peer response as activity: An examination of peer response stances from an activity theory perspective. *TESOL Quarterly*, 46,

362–386. doi:10.1002/tesq.22

APPENDIX I

CASE STUDY PROTOCOL

Purpose of the study

The purpose of this study was to identify the purposes, practices, effectiveness, challenges and students' engagement with supervisory feedback in English medium Master thesis supervision.

Theoretical relevance of the study

The study is expected to contribute to the formulation and implementation of institutional policy regarding Master thesis supervision in higher education. It is expected to inform the development and provision of academic writing courses to students and training to supervisors.

Relevant readings

Different documents related to thesis writing issued by the university as well as the ones maintained by the departments to regulate thesis supervision were consulted.

Gaining access to participants: Before visiting the site, I contacted the potential participants by email or telephone by using the network of my friends.

Resources for the field work

I have a personal computer. I took writing instruments (a pen and diary with me to note down required information) and two hand-held recording devices (in case one stops working) for recording interviews and oral defences. I collected case study data from 4 June to 31 August

2018. During the period, I also collected relevant documents from the Departments concerned.

Consent

I obtained informed consent from all the participants. Their participation in the study was voluntary and the participants could withdraw from the study any time they liked.

Research Questions

1. What types of in-text feedback do supervisors provide on thesis drafts and what functions do different types of feedback serve?
2. What attitude do supervisors express in supervisory feedback?
3. What are supervisors' and students' perceptions of supervisory feedback on English medium Master theses regarding purposes, practices, effectiveness, challenges, and student engagement?
4. What are supervisors' and students' motives for supervising and writing theses respectively and how do they influence their supervisory practices?
5. Are there disciplinary variations in supervisors' attitudes expressed in feedback types and focuses of in-text supervisory feedback; supervisors' and students' perceptions of in-text feedback; their motives for supervising and writing theses respectively, and influence of their motives in supervisory practices?

To answer these questions, the case study data was collected from interviews with supervisors and students, in-text supervisory feedback, and observation of supervisory dialogues between supervisors and students.

Interview schedule

Questions for supervisors

Background of the participant

1. How long have you been working in this Department?
2. How many theses have you so far supervised?
3. How many students do you have to supervise in an academic year?

Information for answering research questions

1. What are the purposes (e.g., correction, reinforcement, diagnosis of problem, evaluation, developing research skills, promoting independent learning) of supervisory feedback?
2. What areas (e.g., content, organization, requirements, linguistic accuracy and appropriateness) do you mostly focus on while providing feedback on students' thesis drafts? Why do you focus on those areas?
3. What kind of feedback is effective? What makes such feedback effective? (e.g., reformulating students' writing, correcting errors, indicating errors and asking them to make correction themselves, providing clear guidelines for future work, discussing feedback with students, showing them the big picture). Why do you think so?
4. What challenges (e.g., time, resources, students' language proficiency, multiple responsibilities) do you have in supervising students? What are the causes of the challenges? What should we do about them?
5. Do students utilize the feedback they get? Why do you think they engage/ do not engage with the feedback?

6. What are common practices of thesis supervision in your Department (e.g., selection of research topics, research methodology, content or language focus). Why do you think such practices are common?
7. What is your overall perception of thesis supervision? Would you like to share any unforgettable experience of thesis supervision?
8. Would you like to make any suggestion for making the thesis writing supervision experience better for supervisors?

For students

Background information

1. What is your area of research?
2. How far have you gone with your research?
3. When are you planning to submit your thesis?
4. Are you required to write theses in English?

Information for information research questions

1. What, in your opinion, are the purposes (e.g., correction, reinforcement, diagnosis of problem, evaluation, developing research skills, promoting independent learning) of supervisory feedback?
2. What areas (e.g., content, organization, requirements, linguistic accuracy and appropriateness) do you get feedback on from your supervisor? Why do you think your supervisors focuses on these areas?
3. What kind of feedback is effective for you? What makes such feedback effective? (e.g., reformulating students' writing, correcting errors, indicating errors and asking them to

- make correction themselves, providing clear guidelines for future work, discussing feedback with students). Why do you think certain kind of feedback is more effective?
4. What challenges (e.g. time, resources, guidance, legibility of handwriting, clarity of feedback) do you have in writing your thesis? Why do you think these problems occur? What might be solutions to such problems?
 5. Do you utilize the feedback you get? Why do/don't you act on with the feedback?
 6. What are common practices of thesis supervision in your Department (e.g., selection of research topics, research methodology, content or language focus). In your opinion, what are reasons behind such practices?
 7. What is your overall perception of thesis writing? Would you like share some unforgettable experience of writing your thesis?
 8. Would you like to make any suggestions for making thesis-writing experience better for students?

APPENDIX II

QUESTIONNAIRE FOR STUDENTS (PILOT)

The survey is designed to collect information on your experience of writing your thesis.

There are no right or wrong answers to these questions. We are interested in your opinion.

Please answer the questions truthfully because only such answers will guarantee the success of the study. The questionnaire should take you around 20-30 minutes to complete.

Purposes of supervisory Feedback

Please circle (O) the number that best indicates your opinion regarding the purpose of feedback that you receive from your supervisor.

1 = Strongly disagree (SD) 2 = Disagree (D) 3 = Somewhat disagree 4 = Somewhat agree (U)
5 = Agree (A) 6 = Strongly agree (SA)

S.N	Items	SD	D	SwD	SwA	A	SA
1.	Developing research skills (e.g., research methodology, literature review, analytical reasoning)	1	2	3	4	5	6
2.	Developing academic writing skills (e.g. presenting ideas in logical and coherent manner)	1	2	3	4	5	6
3.	Making informed choices (e.g., of topics, methodologies, conclusions)	1	2	3	4	5	6
4.	Developing independent and self-regulated learning skills	1	2	3	4	5	6
5.	Developing an awareness of ethical research practice	1	2	3	4	5	6
6.	Applying theoretical knowledge of research to practice	1	2	3	4	5	6
7.	Establishing a base for further study (e.g., MPhil or PhD)	1	2	3	4	5	6
8.	Fulfilling the requirements for graduation	1	2	3	4	5	6

Aspects focused on in supervisors' feedback

Please circle (O) the number that best indicates the feedback that you receive from your supervisor.

S.N.	Items	SD	D	SwD	SwA	A	SA
9.	Selection of a research topic	1	2	3	4	5	6
10.	The overall significance of the research	1	2	3	4	5	6
11.	Research questions/objectives	1	2	3	4	5	6
12.	Review of literature	1	2	3	4	5	6
13.	Research gaps	1	2	3	4	5	6
14.	Theoretical framework	1	2	3	4	5	6
15.	Research methodology	1	2	3	4	5	6
16.	Argument development	1	2	3	4	5	6
17.	Interpretation and discussion of results	1	2	3	4	5	6
18.	Drawing conclusions						
19.	Content accuracy	1	2	3	4	5	6
20.	Content coverage	1	2	3	4	5	6
21.	Consistency in writing	1	2	3	4	5	6
22.	Content relevance	1	2	3	4	5	6
23.	Alignment between different sections (e.g., between research questions and findings)	1	2	3	4	5	6
24.	Originality of ideas /avoiding plagiarism	1	2	3	4	5	6
25.	Language accuracy in writing	1	2	3	4	5	6
26.	Appropriate use of language	1	2	3	4	5	6
27.	Citing sources to support ideas	1	2	3	4	5	6
28.	Finding references	1	2	3	4	5	6
29.	Coherence and cohesion	1	2	3	4	5	6
30.	Structure, formatting, and mechanics	1	2	3	4	5	6

Effectiveness of supervisory feedback

Please circle (O) the number that best indicates your feeling about what makes feedback effective.

S.N	Items	SD	D	SwD	SwA	A	SA
31.	Supervisors should guide students to select a research topic.	1	2	3	4	5	6
32.	Supervisors should provide clear guidelines to improve students' work.	1	2	3	4	5	6

33.	Superficial comments like ‘rewrite’, underlining, and question marks without any explanation are not helpful.	1	2	3	4	5	6
34.	Supervisors should provide both oral and written comments.	1	2	3	4	5	6
35.	Supervisors should make positive and constructive comments along with critique.	1	2	3	4	5	6
36.	Criticism demotivates students.	1	2	3	4	5	6
37.	Supervisors should read drafts thoroughly and correct errors because students may not be able to correct their mistakes.	1	2	3	4	5	6
38.	Supervisor should provide information about useful references.	1	2	3	4	5	6
39.	Supervisors should respect students’ ideas in giving feedback.	1	2	3	4	5	6

Challenges

Please circle (O) the number that best indicates the challenges you are facing in writing your thesis.

S.N	Items	SD	D	SwD	SwA	A	SA
40.	I find it difficult to express my ideas in English.	1	2	3	4	5	6
41.	It is difficult for me to decide which information from reading material is appropriate to include in their writing.	1	2	3	4	5	6
42.	I find it difficult to develop arguments with supporting details.	1	2	3	4	5	6
43.	I am not able to manage my time for writing my thesis.	1	2	3	4	5	6
44.	My supervisor does not give me enough time.	1	2	3	4	5	6
45.	My supervisor does not provide me proper guidelines.	1	2	3	4	5	6
46.	My supervisor does not read my work thoroughly.	1	2	3	4	5	6
47.	I cannot find reference materials related to my study.	1	2	3	4	5	6
48.	There are limited lab resources.	1	2	3	4	5	6
49.	There is lack of financial support to conduct quality research.	1	2	3	4	5	6

Engagement with feedback

Please circle (O) the number that best indicates your engagement with feedback that you receive.

S.N	Items	SD	D	SwD	SwA	A	SA
50.	I pay attention to feedback from my supervisor.	1	2	3	4	5	6
51.	I look forward to feedback from my supervisor.	1	2	3	4	5	6

52.	I feel encouraged if I get positive comments.	1	2	3	4	5	6
53.	I feel discouraged if I get negative comments.	1	2	3	4	5	6
54.	I feel disappointed if I get comments that only point out problems but do not provide guidelines to improve my work.	1	2	3	4	5	6
55.	I enjoy revising my draft based on comments.	1	2	3	4	5	6
56.	I am grateful to my supervisor for his/her time, willingness, and support.	1	2	3	4	5	6
57.	I can contact my supervisor easily if I need feedback.	1	2	3	4	5	6
58.	I take feedback from my supervisor as an opportunity to learn.	1	2	3	4	5	6
59.	I think my supervisor's feedback will be useful in my future work (e.g., further study and research).	1	2	3	4	5	6
60.	I find it easy to revise my work based on my supervisor's feedback.	1	2	3	4	5	6
61.	I want to do as little work as possible because I am more interested to complete my thesis.	1	2	3	4	5	6
62.	I think revising a draft many time based on supervisor's comments is a waste of time.	1	2	3	4	5	6
63.	I find revising a draft multiple time based on my supervisor's comments frustrating.	1	2	3	4	5	6
64.	I discuss feedback with my friends.	1	2	3	4	5	6
65.	I incorporate all the comments from supervisor in revising a draft.	1	2	3	4	5	6
66.	I utilize feedback from previous drafts while revising my work.	1	2	3	4	5	6
67.	I self-assess my work before submitting it to make sure that I have incorporated all the comments.	1	2	3	4	5	6
68.	I talk to my supervisor if I do not understand feedback.	1	2	3	4	5	6
69.	When I receive feedback, I read it carefully and decide whether it makes sense.	1	2	3	4	5	6
70.	If I disagree with feedback, I will keep my original version.	1	2	3	4	5	6
71.	I hope my supervisor will point out problems and give suggestions to improve.	1	2	3	4	5	6
72.	I think it is important for me to utilize feedback that I get from my supervisor.	1	2	3	4	5	6
73.	I take note of useful comments for future reference.	1	2	3	4	5	6

Open-ended Questions

1. Please describe any unforgettable experience that you have during writing your thesis.

2. What are your suggestions for making the thesis-writing experience better for students?

Demographic Information

Gender: Male Female

Faculty: Education Humanities Science Engineering

Age: _____ years

Marks obtained in compulsory English (at bachelor level): _____

TOEFL/IELTS scores (if any): _____

Cumulative Grade Point Average: _____

Name of the campus: _____

Which stage of thesis writing are you in?

in the beginning halfway through about to complete Completed

APPENDIX III

QUESTIONNAIRE FOR SUPERVISORS (PILOT)

The survey is designed to collect information on your experience of supervising theses. There are no right or wrong answers to these questions. We are interested in your opinion. Please answer the questions truthfully because only such answers will guarantee the success of the investigation. The questionnaire should take you around 20-30 minutes to complete.

Purposes of thesis writing

Please circle (O) the number that best indicates your opinion regarding the purpose of feedback that you provide to your students.

1 = Strongly disagree (SD) 2 = Disagree (D) 3 = Somewhat disagree 4 = Somewhat agree (U)
5 = Agree (A) 6 = Strongly agree (SA)

S.N	Items	SD	D	SwD	SwA	A	SA
1.	Developing research skills (e.g., research methodology, literature review, analytical reasoning)	1	2	3	4	5	6
2.	Developing academic writing skills (e.g. presenting ideas in logical and coherent manner)	1	2	3	4	5	6
3.	Making informed choices (e.g. of topics, methodologies, conclusions)	1	2	3	4	5	6
4.	Developing independent and self-regulated learning skills	1	2	3	4	5	6
5.	Developing an awareness of ethical research practice	1	2	3	4	5	6
6.	Applying theoretical knowledge of research to practice	1	2	3	4	5	6
7.	Establishing a base for further study (e.g. MPhil or PhD)	1	2	3	4	5	6
8.	Fulfilling the requirements for graduation	1	2	3	4	5	6

Aspects focused on supervisors' feedback

Please circle (O) the number that best indicates the feedback that you provide to your students.

S.N.	Items	SD	D	SwD	SwA	A	SA
9.	Selection of a research topic	1	2	3	4	5	6

10.	The overall significance of the research	1	2	3	4	5	6
11.	Research questions/objectives	1	2	3	4	5	6
12.	Review of literature	1	2	3	4	5	6
13.	Research gaps	1	2	3	4	5	6
14.	Theoretical framework	1	2	3	4	5	6
15.	Research methodology	1	2	3	4	5	6
16.	Argument development	1	2	3	4	5	6
17.	Interpretation and discussion of results	1	2	3	4	5	6
18.	Drawing conclusions	1	2	3	4	5	6
19.	Content accuracy	1	2	3	4	5	6
20.	Content coverage	1	2	3	4	5	6
21.	Consistency in writing	1	2	3	4	5	6
22.	Content relevance	1	2	3	4	5	6
23.	Alignment between different sections (e.g., between research questions and findings)	1	2	3	4	5	6
24.	Originality of ideas /avoiding plagiarism	1	2	3	4	5	6
25.	Language accuracy in writing	1	2	3	4	5	6
26.	Appropriate use of language	1	2	3	4	5	6
27.	Citing sources to support ideas	1	2	3	4	5	6
28.	Finding references	1	2	3	4	5	6
29.	Coherence and cohesion	1	2	3	4	5	6
30.	Structure, formatting, and mechanics	1	2	3	4	5	6

Effectiveness of supervisory feedback

Please indicate (O) the number that best indicates your feeling about what makes feedback effective.

S.N	Items	SD	D	SwD	SwA	A	SA
31.	Supervisors should guide students to select a research topic.	1	2	3	4	5	6
32.	Supervisors should provide clear guidelines to improve students' work.	1	2	3	4	5	6
33.	Superficial comments like 'rewrite', underlining, and question marks without any explanation are not helpful.	1	2	3	4	5	6

34.	Supervisors should provide both oral and written comments.	1	2	3	4	5	6
35.	Supervisors should make positive and constructive comments along with critique.	1	2	3	4	5	6
36.	Criticism demotivates students.	1	2	3	4	5	6
37.	Supervisors should read drafts thoroughly and correct errors because students may not be able to correct their mistakes.	1	2	3	4	5	6
38.	Supervisor should provide information about useful references.	1	2	3	4	5	6
39.	Supervisors should respect students' ideas in giving feedback.	1	2	3	4	5	6

Challenges with supervision

Please indicate (O) the option that applies to you regarding the challenges you are facing in supervising students.

S.N	Items	SD	D	SwD	SwA	A	SA
40.	Students cannot express their ideas clearly in English.	1	2	3	4	5	6
41.	Students find it difficult to decide which information from reading material is appropriate to include in their writing.	1	2	3	4	5	6
42.	It is difficult to provide timely feedback because of other teaching and service commitments.	1	2	3	4	5	6
43.	I have to supervise several students at the same time.	1	2	3	4	5	6
44.	I do not have time to read students' drafts thoroughly.	1	2	3	4	5	6
45.	I do not have office space to consult with students.	1	2	3	4	5	6
46.	Remuneration for thesis supervision is not encouraging.	1	2	3	4	5	6
47.	Students tend to ignore feedback and make me repeat the same feedback on multiple drafts.	1	2	3	4	5	6
48.	Students are not committed to research.	1	2	3	4	5	6
49.	Students do not have access to resources.	1	2	3	4	5	6
50.	Plagiarism is increasing.	1	2	3	4	5	6
51.	There are limited lab resources.	1	2	3	4	5	6
52.	Lack of financial support is affecting the quality of students' work.	1	2	3	4	5	6

Engagement with feedback

Please circle (O) the number that best indicates student engagement with feedback that you provide.

S.N	Items	SD	D	SwD	SwA	A	SA
53.	Students pay attention to feedback that I provide.	1	2	3	4	5	6
54.	Students look forward to feedback on their work.	1	2	3	4	5	6
55.	Students are encouraged by positive comments on their work.	1	2	3	4	5	6
56.	Students are discouraged by negative comments.	1	2	3	4	5	6
57.	Students are very disappointed to see feedback that does not provide guidelines to improve their work.	1	2	3	4	5	6

58.	Students enjoy revising drafts based on comments.	1	2	3	4	5	6
59.	Students do not like feedback that only points out problems but does not give guidelines to improve their work.	1	2	3	4	5	6
60.	Students enjoy revising their work based on comments.	1	2	3	4	5	6
61.	Students express their gratefulness to my time, willingness, and support.	1	2	3	4	5	6
62.	Students can contact me easily if they need feedback.	1	2	3	4	5	6
63.	Students take feedback as an opportunity to learn.	1	2	3	4	5	6
64.	Students know that feedback will be useful in their future work (e.g., further study and research).	1	2	3	4	5	6
65.	Students find it easy to revise their work based on comments.	1	2	3	4	5	6
66.	Students want to do as little work as possible because they are more interested to complete their thesis.	1	2	3	4	5	6
67.	Students think that revising a draft many time based on comments is a waste of time.	1	2	3	4	5	6
68.	Students find it frustrating if they are asked to revise a draft multiple time.	1	2	3	4	5	6
69.	Students discuss feedback with their friends.	1	2	3	4	5	6
70.	Students accommodate all the comments that I provide.	1	2	3	4	5	6
71.	Students utilize feedback from previous drafts while revising their work.	1	2	3	4	5	6
72.	Students self-assess their work before submitting it to make sure that they have incorporated the comments.	1	2	3	4	5	6
73.	Students ask for clarification if they have any confusion about feedback.	1	2	3	4	5	6
74.	Students read feedback carefully and decide whether it makes sense.	1	2	3	4	5	6
75.	Students keep their original version if they disagree with my feedback.	1	2	3	4	5	6
76.	Students expect that their supervisor will point out problems and give suggestions to improve.	1	2	3	4	5	6
77.	Students think it is important for them to utilize my feedback.	1	2	3	4	5	6
78.	Students take note of useful comments for future reference.	1	2	3	4	5	6

Open-ended Questions

1. Please describe any unforgettable experience that you have during supervising students.
2. What are your suggestions for making the thesis-supervision experience better for supervisors?

Demographic Information

Gender: Male Female

Faculty: Education Humanities Science Engineering

Age: _____ years *Teaching experience:* _____ years

Academic qualification: _____

Number of thesis supervised: _____ *Number of publications:* _____

Name of the campus: _____

APPENDIX IV

QUESTIONNAIRE FOR STUDENTS (FINAL)

I would like to invite you to participate in a study entitled **Supervisory feedback: A mixed-methods multi-perspectival study**. I am a PhD scholar at the Department of English in The Hong Kong Polytechnic University, Hong Kong. I am conducting this research under the supervision of Professor Guangwei Hu for the fulfilment of my PhD degree. The research has been approved by the Human Subjects Ethics Sub-committee of The Hong Kong Polytechnic University (HSESC Reference Number: 20180326003). All information related to you will remain strictly confidential. Study findings may be published but you will not be individually identifiable in these publications.

I am interested in your experience of writing your thesis. Your experience might be beneficial to improve thesis supervision practices. There are no right or wrong answers to the questions. Please answer the questions truthfully because only such answers will guarantee the success of the study. The questionnaire should take you around 20-30 minutes to complete.

Thank you for your interest in participating in this study.

Ms. Madhu Neupane Bastola

Investigator

Purposes of thesis writing/supervisory feedback

Please circle (O) the number that best indicates your opinion regarding the purposes of feedback that you receive from your supervisor.

1 = Strongly disagree (SD) 2 = Disagree (D) 3 = Somewhat disagree (SwD) 4 = Somewhat agree (SwA) 5 = Agree (A) 6 = Strongly agree (SA)

S.N	Items	SD	D	SwD	SwA	A	SA
1.	Developing research skills (e.g., research methodology, literature review, and analytical reasoning)	1	2	3	4	5	6
2.	Developing academic writing skills (e.g., presenting ideas in a logical and coherent manner).	1	2	3	4	5	6
3.	Making informed choices (e.g., of research topics, methodologies, and conclusions)	1	2	3	4	5	6
4.	Developing independent and self-regulated learning skills (e.g., planning, monitoring, and self-assessing your work)	1	2	3	4	5	6

5.	Developing an awareness of ethical research practice (e.g., avoiding plagiarism, avoiding fabrication and falsification of data, and respecting participants)	1	2	3	4	5	6
6.	Applying theoretical knowledge of research to practice	1	2	3	4	5	6
7.	Laying a foundation for further study (e.g., MPhil)	1	2	3	4	5	6
8.	Fulfilling the requirements for graduation	1	2	3	4	5	6

Aspects that are focused on in supervisors' feedback

Please circle (O) the number that best indicates the feedback that you received from your supervisor.

S.N.	Items	SD	D	SwD	SwA	A	SA
9.	I received feedback on the selection of a research area/topic.	1	2	3	4	5	6
10.	I received feedback on the overall significance of the research.	1	2	3	4	5	6
11.	I received feedback on developing research questions/objectives.	1	2	3	4	5	6
12.	I received feedback on writing the literature review.	1	2	3	4	5	6
13.	I received feedback on identifying research gaps.	1	2	3	4	5	6
14.	I received feedback on the theoretical framework for my research.	1	2	3	4	5	6
15.	I received feedback on research methodology.	1	2	3	4	5	6
16.	I received feedback on developing arguments with supporting details.	1	2	3	4	5	6
17.	I received feedback on the interpretation and discussion of results.	1	2	3	4	5	6
18.	I received feedback on drawing conclusions from the findings.	1	2	3	4	5	6
19.	I received feedback on the accuracy of content in my writing.	1	2	3	4	5	6
20.	I received feedback on content coverage (i.e., content that is necessary to include in my thesis).	1	2	3	4	5	6
21.	I received feedback on consistency in writing.	1	2	3	4	5	6
22.	I received feedback on the relevance of content (e.g., crossing out unnecessary information).	1	2	3	4	5	6
23.	I received feedback on building connections among different sections of my thesis (e.g., between research questions, methodology, and findings).	1	2	3	4	5	6
24.	I received feedback on how to avoid plagiarism in my writing.	1	2	3	4	5	6
25.	My supervisor corrected language problems in my writing.	1	2	3	4	5	6
26.	My supervisor provided feedback on the appropriate use of language.	1	2	3	4	5	6

27.	My supervisor provided suggestions on citing sources to support ideas.	1	2	3	4	5	6
28.	My supervisor helped me in finding reference materials.	1	2	3	4	5	6
29.	I received feedback on maintaining coherence and cohesion (i.e., making ideas/sentences flow well).	1	2	3	4	5	6
30.	I received feedback on structure of the thesis, formatting, and mechanics.	1	2	3	4	5	6

Expectations of supervisory feedback

Please circle (O) the number that best indicates your expectations of feedback from your supervisor.

S.N	Items	SD	D	SwD	SwA	A	SA
31.	Supervisors should guide students to select a research area/topic.	1	2	3	4	5	6
32.	Supervisors should provide clear guidelines for improving students' work.	1	2	3	4	5	6
33.	Supervisors should avoid brief feedback like "rewrite", underlining, and question marks without any explanation.	1	2	3	4	5	6
34.	Supervisors should provide both oral and written comments.	1	2	3	4	5	6
35.	Supervisors should make positive and constructive comments along with negative comments.	1	2	3	4	5	6
36.	Supervisors should avoid criticizing students because criticism demotivates them.	1	2	3	4	5	6
37.	Supervisors should read drafts thoroughly and correct errors because students may not be able to correct their own mistakes.	1	2	3	4	5	6
38.	Supervisors should provide information about useful references.	1	2	3	4	5	6
39.	Supervisors should respect students' ideas when giving feedback.	1	2	3	4	5	6

Challenges

Please circle (O) the number that best indicates the challenges related to writing your thesis.

S.N	Items	SD	D	SwD	SwA	A	SA
40.	I find it difficult to express my ideas in English.	1	2	3	4	5	6
41.	I find it difficult to decide which information from reading materials is appropriate to include in my writing.	1	2	3	4	5	6
42.	I find it difficult to develop arguments with supporting details.	1	2	3	4	5	6
43.	I am not able to manage my time for writing my thesis.	1	2	3	4	5	6
44.	My supervisor does not give me enough time.	1	2	3	4	5	6

45.	My supervisor does not have time provide me with proper guidelines.	1	2	3	4	5	6
46.	My supervisor does not have time read my work carefully.	1	2	3	4	5	6
47.	I cannot find reference materials related to my study.	1	2	3	4	5	6
48.	There are limited lab resources.	1	2	3	4	5	6
49.	There is a lack of financial support to conduct quality research.	1	2	3	4	5	6

Engagement with feedback

Please circle (O) the number that best indicates your engagement with feedback that you receive.

S.N	Items	SD	D	SwD	SwA	A	SA
50.	I pay attention to feedback from my supervisor.	1	2	3	4	5	6
51.	I look forward to feedback from my supervisor.	1	2	3	4	5	6
52.	I actively approach my supervisor for feedback on my thesis.	1	2	3	4	5	6
53.	I take note of useful comments for future reference.	1	2	3	4	5	6
54.	I feel encouraged if I receive positive comments.	1	2	3	4	5	6
55.	I feel discouraged if I receive negative comments.	1	2	3	4	5	6
56.	I feel disappointed if I receive comments that only point out problems but do not advise me on how to improve my work.	1	2	3	4	5	6
57.	I find it frustrating to revise a draft many time.	1	2	3	4	5	6
58.	I am grateful to my supervisor for his/her time, willingness, and support.	1	2	3	4	5	6
59.	I take feedback from my supervisor as an opportunity to learn.	1	2	3	4	5	6
60.	I think it is important for me to utilize feedback that I receive from my supervisor.	1	2	3	4	5	6
61.	I think my supervisor's feedback will be useful in my future work (e.g., further study and research).	1	2	3	4	5	6
62.	I read feedback carefully to understand it.	1	2	3	4	5	6
63.	I talk to my supervisor if I do not understand feedback.	1	2	3	4	5	6
64.	I discuss feedback with my friends.	1	2	3	4	5	6
65.	I attend to all the comments from my supervisor in revising a draft.	1	2	3	4	5	6
66.	I self-assess my work before submitting it to my supervisor.	1	2	3	4	5	6

Open-ended Questions

1. Please describe any unforgettable experience that you have when writing your thesis.
2. What are your suggestions for making the thesis-writing experience better for students?

Demographic Information

Gender: Male Female

Faculty: Education Humanities Science Engineering

Age: _____ years

Marks obtained in compulsory English (at bachelor level): _____

TOEFL/IELTS scores (if any): _____

Cumulative Grade Point Average: _____ *Name of the campus:* _____

Which stage of thesis writing are you in?

in the beginning halfway through about to complete Completed

APPENDIX V

QUESTIONNAIRE FOR SUPERVISORS (FINAL)

I would like to invite you to participate in a study entitled *Supervisory feedback: A mixed-methods multi-perspectival study*. I am a PhD scholar at the Department of English in The Hong Kong Polytechnic University, Hong Kong. I am conducting this research under the supervision of *Professor Guangwei Hu* for the fulfillment of my PhD degree. All information related to you will remain strictly confidential. Study findings may be published but you will not be individually identifiable in these publications.

I am interested in your experience of supervising master's thesis. Your experience might be beneficial to improve thesis supervision practices. There are no right or wrong answers to the questions. Please answer the questions truthfully because only such answers will guarantee the success of the study. The questionnaire should take you around 20-30 minutes to complete.

Thank you for your interest in participating in this study.

Ms. Madhu Neupane Bastola

Investigator

Purposes of thesis writing

Please circle (O) the number that best indicates your opinion regarding the purpose of feedback that you provide to your students.

1 = Strongly disagree (SD) 2 = Disagree (D) 3 = Somewhat disagree (SwD) 4 = Somewhat agree (SwA) 5 = Agree (A) 6 = Strongly agree (SA)

S.N	Items	SD	D	SwD	SwA	A	SA
1.	Developing research skills (e.g., research methodology, literature review, analytical reasoning)	1	2	3	4	5	6
2.	Developing academic writing skills (e.g. presenting ideas in logical and coherent manner)	1	2	3	4	5	6
3.	Making informed choices (e.g. of topics, methodologies, conclusions)	1	2	3	4	5	6
4.	Developing independent and self-regulated learning skills (e.g., planning, monitoring, and self-assessing your work)	1	2	3	4	5	6
5.	Developing an awareness of ethical research practice (e.g., avoiding plagiarism, avoiding	1	2	3	4	5	6

	fabrication and falsification of data, and respecting participants)						
6.	Applying theoretical knowledge of research to practice	1	2	3	4	5	6
7.	Laying a foundation for further study (e.g., MPhil)	1	2	3	4	5	6
8.	Fulfilling the requirements for graduation	1	2	3	4	5	6

Aspects focused on supervisors' feedback

Please circle (O) the number that best indicates the feedback that you provide to your students.

S.N.	Items	SD	D	SwD	SwA	A	SA
9.	I provide on the selection of a research area/topic.	1	2	3	4	5	6
10.	I provide feedback on the overall significance of research.	1	2	3	4	5	6
11.	I provide feedback on formulating research questions/objectives.	1	2	3	4	5	6
12.	I provide feedback on writing the literature review.	1	2	3	4	5	6
13.	I provide feedback on identifying research gaps.	1	2	3	4	5	6
14.	I provide feedback on the theoretical framework.	1	2	3	4	5	6
15.	I provide feedback on research methodology.	1	2	3	4	5	6
16.	I provide feedback on developing arguments with supporting details.	1	2	3	4	5	6
17.	I provide feedback on the interpretation and discussion of results.	1	2	3	4	5	6
18.	I provide feedback on drawing conclusions from the findings.	1	2	3	4	5	6
19.	I provide feedback on content accuracy.	1	2	3	4	5	6
20.	I provide feedback on content coverage (i.e., content that is necessary to include in their thesis).	1	2	3	4	5	6
21.	I provide feedback on consistency in writing.	1	2	3	4	5	6
22.	I provide feedback on the relevance of content (e.g., crossing out unnecessary information).	1	2	3	4	5	6
23.	I provide feedback on building connections among different sections of a thesis (e.g., between research questions, methodology, and findings).	1	2	3	4	5	6
24.	I provide feedback on how to avoid plagiarism in writing.	1	2	3	4	5	6
25.	I provide feedback on language accuracy in writing.	1	2	3	4	5	6
26.	I provide feedback on the appropriate use of language.	1	2	3	4	5	6
27.	I provide feedback on citing sources to support ideas.	1	2	3	4	5	6
28.	I help students in finding references.	1	2	3	4	5	6
29.	I provide feedback on coherence and cohesion in writing (i.e., making ideas/sentences flow well).	1	2	3	4	5	6

30.	I provide feedback structure of the thesis, formatting, and mechanics.	1	2	3	4	5	6
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Expectations of supervisory feedback

Please indicate (O) the number that best indicates your opinion about expectations of supervisory feedback.

S.N	Items	SD	D	SwD	SwA	A	SA
31.	Supervisors should guide students to select a research area/topic.	1	2	3	4	5	6
32.	Supervisors should provide clear guidelines to improve students' work.	1	2	3	4	5	6
33.	Supervisors should avoid brief feedback like "rewrite", underlining, and question marks without any explanation.	1	2	3	4	5	6
34.	Supervisors should provide both oral and written comments.	1	2	3	4	5	6
35.	Supervisors should make positive and constructive comments along with negative comments.	1	2	3	4	5	6
36.	Supervisors should avoid criticizing students because criticism demotivates them.	1	2	3	4	5	6
37.	Supervisors should read drafts thoroughly and correct errors because students may not be able to correct their mistakes.	1	2	3	4	5	6
38.	Supervisors should provide information about useful references.	1	2	3	4	5	6
39.	Supervisors should respect students' ideas when giving feedback.	1	2	3	4	5	6

Challenges with supervision

Please indicate (O) the option that applies to you regarding the challenges you are facing in supervising master's theses.

S.N	Items	SD	D	SwD	SwA	A	SA
40.	Students find it difficult to express their ideas clearly in English.	1	2	3	4	5	6
41.	Students find it difficult to decide which information from reading material is appropriate to include in their writing.	1	2	3	4	5	6

42.	Students cannot develop argument with supporting details.	1	2	3	4	5	6
43.	Students do not give enough time to thesis writing.	1	2	3	4	5	6
44.	I find it difficult to manage time to provide feedback because of teaching and other service-related commitments.	1	2	3	4	5	6
45.	I do not have time to provide detailed guidelines to students.	1	2	3	4	5	6
46.	I do not have time to read students' drafts thoroughly.	1	2	3	4	5	6
47.	Students do not have access to reference materials.	1	2	3	4	5	6
48.	There are limited lab resources.	1	2	3	4	5	6
49.	Lack of financial support is affecting the quality of students' research.	1	2	3	4	5	6
50.	Remuneration for thesis supervision is not encouraging.	1	2	3	4	5	6
51.	Students tend to ignore feedback, and I have to provide the same feedback repeatedly.	1	2	3	4	5	6
52.	Students are not committed to research.	1	2	3	4	5	6
53.	Students tend to plagiarize.	1	2	3	4	5	6

Engagement with feedback

Please circle (O) the number that best indicates student engagement with feedback that you provide.

S.N	Items	SD	D	SwD	SwA	A	SA
54.	Students pay attention to feedback that I provide.	1	2	3	4	5	6
55.	Students look forward to feedback on their work.	1	2	3	4	5	6
56.	Students actively approach me for feedback on their thesis.	1	2	3	4	5	6
57.	Students take note of useful comments for future reference.	1	2	3	4	5	6
58.	Students are encouraged by positive comments on their work.	1	2	3	4	5	6
59.	Students are discouraged by negative comments.	1	2	3	4	5	6
60.	Students are disappointed if they receive comments that only point out problems but do not advise them on how to improve their work.	1	2	3	4	5	6
61.	Students find it frustrating if they are asked to revise a draft multiple time.	1	2	3	4	5	6
62.	Students are grateful to my time, willingness, and support.	1	2	3	4	5	6
63.	Students take feedback as an opportunity to learn.	1	2	3	4	5	6
64.	Students think it is important for them to utilize feedback.	1	2	3	4	5	6
65.	Students consider that feedback might be useful for their future work (e.g., further study and research).	1	2	3	4	5	6

66.	Students read feedback carefully to understand it.	1	2	3	4	5	6
67.	Students talk to me if they do not understand feedback that I provide.	1	2	3	4	5	6
68.	Students discuss feedback with their friends.	1	2	3	4	5	6
69.	Students accommodate all the comments that I provide.	1	2	3	4	5	6
70.	Students self-assess their work before submitting it to me.	1	2	3	4	5	6

Open-ended Questions

1. Please describe any unforgettable experience that you have when supervising students.
2. What are your suggestions for making the thesis-supervision experience better for supervisors?

Demographic Information

Gender: Male Female

Faculty: Education Humanities Science Engineering

Age: _____ years *Teaching experience:* _____ years

Highest academic qualification: _____

Number of theses supervised: _____ *Number of publications:* _____

Name of the campus: _____

APPENDIX VI
FEEDBACK POINTS

	Type	Example
1.	Correction or reformulation	<ul style="list-style-type: none"> • Asst.Prof. Dr. Nurapati Pantha <i>Assistant Professor</i> • The collisions in sheath region results high density of ions, thus it is close to sufficient to account collision between ions is less than in core plasma or even on the presheath due to the lower density of the plasma species.
2.	A mark	<ul style="list-style-type: none"> • Tick mark, cross mark, circle, underline, question mark
3.	Deletion of information (letter, word, phrase, sentence, or a paragraph or section)	<ul style="list-style-type: none"> • CO₂ gas when mixed with different medium...and the different biomolecules which plays (s deleted) milestone role for the ecological balance. • Collision between electrons and ion neutral particles tend to damp ... • Solar magnetic activity activities, including solar flares, can eject high energy charge particles. • Second one is kinetic theory. In kinetic theory we consider the assembly of particles and derive the plasma variables by using particle distribution function. Since fluid model is the simplest approach in the theory of plasma, but also there are some variables which cannot be calculated by this model. So we need to use kinetic theory approach. • 6.11 Electron Flux (Whole section crossed out)
4.	Addition of information (e.g., letter, single word, phrase or a paragraph)	<ul style="list-style-type: none"> • Results and Discussion • Sometimes the plasma is <i>also</i> called fourth state of matter. • The collision in sheath is not similar.....electrons. The collision <i>in sheath region</i> is less than in the core plasma.

		<ul style="list-style-type: none"> • PMFs have been calculated using the weighted histogram analysis method (WHAM) <i>which also removes the biasing effect during the umbrella sampling simulation.</i> • Figure 5.2 The counter map of the region of our cavity. <i>The contour levels are shown.</i> • <i>6.8 Ion kinetic energy</i> • <i>The typical variation of ion kinetic energy in the sheath region is shown in Fig. 6.10. Opposite to the wall of electron, the ions gain kinetic energy as they approach the wall, where the energy is maximum. In this typical case, the ion starting at the sheath entrance with 45 Joule has 406 Joule of energy when it reaches the wall.</i>
5.	A mark accompanying comments and or correction	<ul style="list-style-type: none"> • In 2006, AKARI, the first infrared astronomical observatory of japan (Murakami et al. 2007) (<i>This not the way to write reference</i>) was launched [XX]. • (The whole paragraph encircled) <i>Take this after sheath</i> • (An arrow suggesting moving reference before full stop in two places) [XX] <i>Keep reference before full stop.</i>
6.	One or more comments at the same place	<ul style="list-style-type: none"> • <i>You should not leave blank space</i> • <i>Read Anil's thesis for review. Add T.R Rana and A. Awasthi</i> • (Referring to a figure) <i>Readjust the figure and bring the caption under the figure in the same page.</i>

APPENDIX VII

LEXIS USED TO CONSTRUE ATTITUDE

Features	Subcategories	Polarity	
		Positive	Negative
Affect	Dis/satisfaction	enjoyed, enjoying, like(d), appreciate	tired, telling the same thing repeatedly, not meet/fulfil...expectation, not satisfied (at all), very dissatisfied, be ashamed of, angry, compelled to think seriously
	In/security	land safely, we all are human beings	not sure, in doubt, worried, concerned, crash-land, get you in trouble
	Dis/inclination	want, interested	Not--interested
Judgement	Normality	topper, a capable candidate, a good student,	in the wrong field/place, in your own way, obsessed
	Capacity	(done/defended /spoken) well, accomplished a big task, improved, progressed, can do/find,	not clear, without understanding, do not understand/know, create confusion, could not defend well, can/could not say/collect/modify/find, not be/been able to, lack understanding, can you...? Do you...? are you...?
	Tenacity	tried your best, worked hard, done hard work/thorough literature review, not taken easy route	not done any/sufficient/even basic work/homework/reading/literature review, a high degree of negligence, not worked hard, careless, not serious, in a hurry, in a rush, not have commitment, written whatever you like, very busy, escape, disappeared, not taken care, not done justice.

	Propriety	transcribed/summarized well, focused, presented nicely, done a good job, not plagiarized	not used/written properly, not specified/mentioned/verified/discussed/followed/paid attention/cited/measured, inappropriately, repeatedly, need to, should, must, have to, copied, lifted
	Veracity	-----	wrongly quoted/mentioned, not worked sincerely, cheated, trying to hide, difficult to trust, blind guess, not convinced
Appreciation	Reaction: Impact	interesting, fascinating, of interest,	not much interesting
	Reaction: Quality	Good, fine, ok, great	horrible, poor, not good, weak
	Composition: balance	-	too short, too direct, too long, too little information, not connected, biased, random, not organized, isolated, inconsistent, lack of coherence, problematic, not well-formed, not focused, not specific, not clear, incomplete, not reported well, very random, fragmented, quite hazy, incorrect, lengthy, highly disjunctive, mismatch, messy, scattered, not in format, lack of connection between sentences, problematic, not well formed, crude, not properly constructed, like padding, language shaky, poorly written,
	Composition: complexity	-	not clear, lacks clarity, misleading, not readable, vague, quite hazy

Valuation: standard	a new piece of work, in depth, not superficial, researchable	too much data, lacks analysis, customary, not required, not relevant, not sufficient, repeated, too general, not necessary, required, needed, no need, missing, common sensical, high sounding, not supported, half done, very generic, not pure, not standard, duplicated, the same, too broad, very basic, unnecessary, not academic, not acceptable, shallow, superficial, repetition, vast
Valuation: veracity	-	wrong, not convincing, not...accurate, not...true, incorrect,
Valuation: capacity	not difficult, confident, easier, doable	not possible, difficult, challenging, tough, not feasible, a big problem, less progress
Valuation: propriety	focused	too direct, lacks citation, not in this way, too long quote, not appropriate, plagiarized, little old, not acceptable, not recent, not focused, not specific, not well-focused,
Valuation: tenacity	-	lack of reading, not commitment, high degree of negligence, nothing revised, why so hurry?