

Feedback as Open-Ended Conversation: Inviting Students to Co-Regulate and Metacognitively Reflect During Assessment

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Abstract: The following discourse analysis examines the ways open-ended feedback, defined as dialogic, interpretative, and revisionary, fosters co-regulation and metacognition. Data come from a Writing in the Major course at a large land-grant institution in the Pacific Northwest. Students' written essays and reflections, both with teacher feedback included, were collected along with interviews with both students and teachers. Analysis focused on instances of interdiscursivity, when students incorporated their teachers' discourse into their revisions and reflections. The study suggests that open-ended feedback promotes opportunities for co-regulation and metacognition when students become active agents in the assessment process.

Keywords: feedback, metacognition, co-regulation, discourse, writing assessment, interdiscursivity, reflection, teacher education

Introduction

Feedback is often conceptualized as an instructional tool with the purpose of improving academic performance (Brookhart, 2011; Wisniewski, Zierer, & Hattie, 2020). This approach emphasizes the quality of the task over the quality of the student. Nowhere is this more apparent than in Hattie and Timperley's (2007) landmark meta-analysis, which reviews three major aims of feedback: task, process, and self-regulation. Each of these aims is measured by outcomes associated with the students' assignment. In effect, even self-regulation is understood in terms of the student's ability to regulate their performance on a specific task. With such a narrow frame, it is no surprise that Hattie and Timperley (2007) find fault with feedback practices that promote students' emotions, self-efficacy, or personal growth. For instance, they caution that the effects of "self feedback:"

Are too diluted, too often uninformative about performing the task, and too influenced by students' self-concept to be effective. The information has too little value to result in learning gains. (p. 96)

Their findings come as a result of 1) a conceptualization of self feedback as simply evaluative praise ("Good job!") and 2) measuring feedback's success exclusively as it relates to achievement. While it is certainly important for feedback to assist students on immediate tasks, the research begins to thin in the context of feedback's sociocultural potential (Lee, 2014). As a result, educators aren't yet certain exactly how to provide feedback in a way that positively shapes students, and not just their tasks, through their performance (Irwin, Hepplestone, Holden, Parkin, & Thorpe, 2013; Hyland, 2013).

In the context of writing assessment, Graham, Harris, and Hebert (2011) as well as Huot (2002) illustrate the importance of feedback practices that encourage the development of *students as writers*—as opposed to the exclusive development of students' writing. This approach to feedback emphasizes the need to view academic performance, and its assessment, as a process (Elbow, 2002). Indeed, Graham, Gillespie, and McKeown (2013) call for an environment where "students can be successful, and their development can prosper" by instructors showing "enthusiasm for writing" and

encouraging students to “act in a self-regulated fashion” (p. 9). One way that feedback can encourage students to dive deeper into the revision process is to promote reflection, especially at the level of self-analysis (Schön, 1983). Combining reflection with revision emphasizes the student’s personal growth and development in relation to the content or discipline’s discourse (McLean, Bond, & Nicholson, 2015). In other words, feedback in a science class that engages students in a dialogue as if the students were developing scientists (and not simply students in a science class) might be more beneficial than simply task-specific feedback.

While focusing on academic performance is certainly necessary at times, thinking of feedback as exclusively corrective leaves out several important considerations about what feedback is and how it operates. From a discursive, rather than purely instructional, perspective, feedback is a text with multiple embedded meanings (Torres & Anguiano, 2016; Torres & Ferry, 2019). Thus, feedback might not be as linear a process as educators tend to think. Of course, task-specific feedback is one possibility. Say, for instance, a student leaves out a comma where one is needed. The teacher writes, “Insert comma here.” Upon reading the feedback, the student inserts said comma. While this is a rudimentary example of linear explicit feedback, educators would be right to question how much the student actually learned about commas, as opposed to following directions, via this textual exchange (Ruiz-Primo & Brookhart, 2018).

This study examines a more conversational practice of feedback by putting the theory to work in a college classroom and assessing outcomes beyond improved scores on assignments. The purpose is not to replace or discredit feedback as a method of correcting students, for such a strategy does have its merits; rather, this study seeks to expand considerations of feedback, especially in regards to its potential to act as a social interaction that contributes to meaningful learning. By closely examining the discursive interactions occurring through feedback between two students and faculty in a designated Writing in the Major course (explained below) at a large land-grant institution in the Pacific Northwest, the case is made that feedback provides opportunities for the development of co-regulation and metacognition.

Open-Ended Feedback: Theory and Practice

In many classrooms, feedback is provided to students as closing remarks on a performance. The majority of students are not given any opportunity to respond to their teachers’ feedback (Bing-You, Varaklis, Hayes, Trowbridge, Kemp, & McKelvy, 2018). In fact, many students, perhaps because of this lack of opportunity to respond, don’t even read their teachers’ feedback (Winstone, Nash, Rowntree, & Parker, 2017). Going beyond simply allowing time for students to read and think about feedback, this study asks what happens when response to feedback becomes part of the performance. Specifically, I ask: In what ways does feedback as an open-ended conversation promote meaningful learning, which, following Stetsenko (2017), is conceptualized as the ability to co-regulate and metacognitively reflect upon learning processes?

In order to answer this question in light of the data presented below, the study draws from sociocultural learning theory. In particular, I combine the concept of interdiscursivity with Vygotsky’s Zone of Proximal Development. When students incorporate their teachers’ feedback into their own use of language, learning becomes interdiscursive (Lewis & Ketter, 2004, p. 118). Interdiscursivity is not just about following directions, it is also about the agency to change one’s life project. According to Stetsenko (2017):

To learn something new in a meaningful way means to reassemble one’s life project (who one is and who one wants to be) in light of the realities and possibilities for being,

doing, and knowing that are opened up by each act of learning and understanding. To learn means *to be changed as a person*. (p. 338, original emphasis)

Interdiscursivity occurs when students generate “reconstructed discourses” that guide new courses of thought, belief, and action (p. 117). Rather than imitation, students who consciously and critically incorporate feedback into their discourse internalize learning. If a teacher uses explicitly corrective feedback that students follow to correct their work, there’s no guarantee students are making sense of the changes they are making to their work. On the other hand, if students can engage open-ended feedback conversationally, they are left to make agential decisions about improvement.

Interdiscursivity and the Zone of Proximal Development can be thought of as interdependent concepts. According to Vygotsky (1978), closing the gap between what students can and cannot do depends on “collaboration with more capable peers” (p. 86). This collaboration is crucial to fostering agency. It is not that a more capable agent—who is often, but not always, the teacher—tells the student what to do; rather, the more capable agent engages the student in cooperation, collaboration, and dialogue. Recent studies, such as one from Graham, Gillespie, and McKeown (2013), continue calls for an environment where “students can be successful and their development can prosper” by teachers showing “enthusiasm” and encouraging students to “act in a self-regulated fashion” (p. 9). For meaningful learning to occur, students need to co-create the agency to determine which elements of feedback to employ and how to employ them (Skovholt, 2018). The kind of agency described here depends on two important indicators, co-regulation and metacognition.

Co-regulation and Metacognition

Heritage and Heritage (2013) study the ways teacher questioning forms the foundation for instruction and assessment. In their analysis of a fifth-grade writing class, they reveal how teachers use feedback as a series of questions that remain “at the edge of the student’s thinking” (p. 184). In one case, the teacher designed questions to:

Extend [the student’s] reasoning about his arguments and counterarguments. She ends the interaction with a suggestion for [the student] to consider in developing his writing further. Crucially here, she does not tell [the student] what to do—that would result in short-circuiting his learning. Instead she builds directly on their preceding interaction and provides him with a sufficient scaffold (feedback) from which he can propel and advance his own thinking. He now has to make decisions about how he might counteract the argument that he has just proposed. (p. 184)

Heritage & Heritage (2013) conclude their study by suggesting three ways feedback can open up possibilities for student agency. First, feedback can offer students choices they can make in moving within the relevant ZPD structure. Second, students’ response to feedback might signal to teachers a necessary backstep, at least temporarily, before progressing within the relevant ZPD structure. And third, when students demonstrate mastery, feedback can encourage students to move beyond the relevant ZPD structure by asking them to think about new ways to approach the current task.

As explained earlier, movement through the ZPD depends on co-regulation. Developed from research into self-regulation, co-regulation emphasizes the “shared control” of learning (Vermunt & Verloop, 1999, p. 265) that occurs through social interaction (Hadwin, Järvelä, & Miller, 2011). Co-regulation does not see agency as an individual endeavor; rather, it is made possible interdiscursively, via the many interactions between students-teachers, students-students, students-parents, and students-technology. Andrade and Brookhart (2019) offer a simplified formula of co-regulation that

proves helpful for this study: “feedback + adaptation” (p. 6). While feedback can and does come from a variety of agents, this study will pay attention to the feedback interactions between students-teachers.

When student-teacher feedback interactions are open-ended, as this study illustrates, students are provided opportunities to metacognitively reflect on their learning strategies and intended outcomes (Goos, Galbraith, & Renshaw, 2002; Tan, Whipp, Gagné, & Van Quaquebeke, 2019). Beginning with Flavell (1976), researchers have considered the ways metacognition, or the awareness and regulation of one’s learning processes, creates learner agency. For instance, if a student receives teacher feedback that provides a list of competing options, so that no single option immediately stands out as the “right answer,” the student is encouraged to critique the options, elaborate on and monitor each option’s possibility for a positive outcome, and, if needed, request an explanation from the teacher (Baker, 2017). This shift in agency, allowing students to think about and choose the best strategy for a particular learning task, is also known to enhance intrinsic motivation (Miyamoto, Pfof, & Artelt, 2019) as well as accuracy of confidence (Callender, Franco-Watkins, & Roberts, 2016). Recent literature continues to support the idea that developing metacognitive skills depends on effective feedback (Molin, Haelermans, Cabus, & Groot, 2020).

Sato, M., & Loewen, S. (2018) demonstrate that metacognition might best be viewed as more closely linked to the feedback loops of learning than the learning itself. In other words, making use of feedback—interpreting it, selecting useful components, recognizing evidence of negative or positive evaluation—requires metacognitive skills separate from those skills required to master a given learning task. While some studies provide examples of how students might develop metacognitive skills by reflecting on feedback either through writing (Gibson, Kitto, & Bruza, 2016) or in conversation (Sato & Loewen, 2018), research into feedback strategies teachers can employ to promote metacognition remains inconsistent. Thus, the primary contribution of this study is the notion that students are more likely to co-regulate their learning through metacognitive reflection when feedback is open-ended, allowing students to question, critique, and respond to the feedback. The current study promotes an engagement of feedback that goes beyond correcting students or giving explicit directions. To propose a dialogic model of feedback, this study examines the use of open-ended conversational feedback in an undergraduate Writing in the Major course.

Method

The course, Reading & Writing in Grades 4-8, taught by Professor Thompson (pseudonym), is designed for preservice teachers. 23 students were enrolled in the course at the time of the study. As part of the teacher education program, the course focuses on teaching reading and writing to intermediate and middle school students. Students create reading and writing assignments in the subject areas as well as in their language arts classes. Particular courses at the university that assign writing at significant levels are designated as a “Writing in the Major” course. This is one such course. Therefore, the following guidelines apply to written assignments: (1) The instructor will model each section of the plans and provide in-class opportunities for students to draft written components. (2) These in-class products will receive feedback from peers and the instructor. (3) Then, students will receive opportunities in class to receive comments on drafts of their assigned writing plans. (4) The rubrics for the reading and writing plans designate the expectations for the quality of writing. (5) Students who receive low scores in the area of written expression will receive critical feedback from the instructor, explicit instruction as necessary, and have the opportunity to revise and resubmit their product. This feedback, instruction, and resubmission are intended to improve the quality of students’ written presentation of their ideas.

The students’ writing analyzed in the study comes from the course’s central assignment: the Writer’s Workshop. The first few weeks of the course focused on the writing process as well as the

assessment and instruction of writing through the 6-trait writing rubrics. Drawing on associated readings, students took a piece of creative writing through the writing process, from drafting to revision. They had complete freedom in choosing the writing topic. Afterwards, they engaged in frequent workshops with peers, and received feedback from Professor Thompson four times throughout the semester. Students also completed written reflections about how the process shaped their writing as well as their views on teaching writing.

Data

The following discourse analysis works to reveal the ways teachers' feedback as a text shifts agency to students. Following Gee (2014), I approach discourse as "recognition," that is the performance of language in such a way that others in a particular community recognize the performer's membership (p. 35). Often, assessment acts as recognition. When a student submits a research essay in a biology class, assessment determines the quality of their membership as a biologist. Similarly, when a basketball player tries out for a team, assessment determines whether the performer is recognizably a basketball player. Context determines performance, which is then assessed in terms of recognition within a particular community. Analysis in this study focuses on moments of text and talk that shift agency in ways that recognize students as members of a community of pre-service writing teachers. Discourse analysis homes in on moments when students adapt feedback in interdiscursive ways that encourage them to reflect on their learning, fostering the metacognitive habits performed by professional writing teachers.

I began by open-coding for sequences where students textually responded to open-ended feedback (e.g., incorporating feedback into a revision or written reflection). Open-codes identified moments of teacher feedback that relied on questioning, invitations for dialogue, or some other discursive feature that warrants student response (e.g., "I'd like to know more about this..."). Students' responses were then coded in comparison with feedback open-codes to generate indicators of co-regulation and metacognition. Moments of interest included responses from students that incorporated the teacher's language or ideas into their revision and/or reflection. These moments do not always necessarily indicate agreement. In some cases, students made choices about their writing and reflection that contrasted the teacher's feedback, even as they continued to engage the learning process (Zyngier, 2007). As Gee (2014) warns, "difference" in response should not be seen as "deviant"; rather, "difference" can simply be an alternative path of collaboration (p. 81).

Consider the feedback a teacher might provide: "I see you arrived at your answer by counting with your fingers. Would you arrive at the same answer using another method? What about a calculator?" Say the student does try another method, but chooses to write out the equation instead of a calculator. Yes, the student employed a different strategy than what the teacher recommended, but the overall goal of arriving "at the same answer using another method" was still met. Cases like these would be coded as instances of co-regulation. Both the teacher and the student demonstrate a shared agency in learning.

Finally, both faculty and students were interviewed about the interdiscursive relationality constructed throughout the feedback conversation. Faculty were asked questions like, "What should your student think about in regard to a particular comment? What did you hope your student would do with this comment?" Students were asked questions like, "How did you engage this comment from your teacher? How did particular instances of feedback change the way you approached the assignment or the way you think of yourself as a writing teacher?" Interviews were transcribed and coded in comparison with the students' texts and the teacher's feedback. Codes remained at the macro level, which were then organized into cases that illustrate stories of situated learning processes emerging through feedback encounters (Melander & Sahlström, 2009).

In the next section, I present crucial moments from two cases that tell stories of significant writing improvement (i.e., both students closed a large gap between what they could not do at the semester's start with what they could do by the semester's close). The moments, drawn from various points over the course of an entire semester, illustrate open-ended feedback engaging students in co-regulation and metacognition through interdiscursivity. Both students are identified using pseudonyms.

Analysis

Case 1: Alyssa

In this first segment, Alyssa has written her first draft of a memoir about friendship:

Friendship is sometimes a tricky thing to come by. When it becomes tricky, you see that life is made up of consistently dealing with people so you learn to adjust to think that you are simply just trying to get by in life with the least amount of scrapes and pain as possible. I always thought that a broken heart was left to a boyfriend to bring to you during a breakup, but I've learned friends can leave the deepest and most broken hearts possible.

In a comment to this passage, Professor Thompson writes:

You are brave for choosing this topic. It is very personal, but personal topics bring out strong writing. Do you intend for this piece to be instructive about friendship? Is that why you begin with a definition of friendship over a description of a particular scene? Or, is your intention to tell a dramatic story about heartbreak in an empathetic way?

Professor Thompson employs clear open-ended questions that invites Alyssa to make decisions about her writing and the way she thinks about writing. Here, Alyssa is encouraged to engage with two of the three stages of metacognition provided by Flavell (1976): knowledge about herself as a writer and knowledge about the task of writing. During the interview stage about this exchange, Professor Thompson expressed that she tends to “nudge my students to be as concrete as possible, writing in scenes, through scenes. But, you know, I don't want to force that notion. I want them to move beyond telling and show.” Her feedback to Alyssa clearly suggests her desire to begin in a concrete scene, but she leaves the choice to Alyssa. To reinforce the invitation for collaboration, Professor Thompson asks questions that cannot all be answered at once. For instance, Alyssa must choose between the story being “instructive about friendship” or being a “dramatic story about heartbreak.” While the feedback does recognize Alyssa as a writer, Alyssa is left to decide what *kind* of writer she wants to be recognized as: a moralist or a dramatist. The following exchange demonstrates a potential challenge for students facing such decisions.

In a later draft, one composed after she had received the above feedback, Alyssa's writing becomes even less scene-driven:

I don't know what was wrong with me; I still don't know what is wrong with me. I always want to put the blame on my friends that they were jealous that my family was normal compared to theirs. I had two parents who planned for our family, they loved each other so deeply, they would do anything for anyone out of the kindness of their

hearts, and they were so full of life and laughter that it made my friends despise what I had. Yet, they had something that I didn't... they had each other.

While reflecting on this passage during the interview, Professor Thompson worried that “I would lose her here. I had to take her back a step before moving ahead.” To do so, Professor Thompson’s feedback becomes a bit more closed, guiding Alyssa while remaining careful “not to invalidate her experience.” This instance reaffirms Andrade and Brookhart’s (2019) suggestion that co-regulation requires humility from all agents, as both student and teacher should learn from formative assessment practices such as these. Humility emerged as a frequent code during analysis, appearing in Professor Thompson’s feedback here:

I can feel the pain you experienced. I appreciate your willingness to go deep with your writing. But guide me into the specific scenes that made you think something is wrong with you. What happened? Describe the events and interactions that made you feel this way.

As the literature on co-regulation makes clear, learning is not a linear process (Stetsenko, 2017). It requires recursive steps that move forward and back incrementally along the relevant ZPD. For Alyssa to improve her writing, she needed to compose concrete scenes that develop character and narrative (references to the course standards). Seemingly aware of the challenge Alyssa faced in rendering such personal emotions into writing, Professor Thompson provides more explicit feedback: “Guide me into the specific scenes.” Of course, Professor Thompson does continue to ask questions, but even these are less open-ended, shifting the agency back to the teacher. Consistent with Charteris and Smardon’s (2015) study, analysis here suggests that the more directive the feedback, the more agency is shifted to teachers. With this relationship in mind, formative assessment might be thought of as agential tides, rising and falling based on the gravitational forces of student progress and teacher sensitivity. Too much agency all at once, and the student risks being swept away. Too little, and interdiscursivity becomes the more rudimentary imitation.

Alyssa’s interview reveals the challenge faculty face in balancing these agential tides:

I had a hard time deciding to share this with others, as it’s something that I feel still affects me today, and it’s not completely something that I want many knowing about. I think that’s why I struggled so much writing. Writing is supposed to be clear, structured, and all that, but I didn’t want to bring up the details that brought so much pain, so I think I kept those buried behind more ambiguous wording. But [Professor Thompson] kept pushing for me to tell the story that, that I felt so passionate about. She told me to imagine an audience with generous hearts, flexible and intelligent minds, and warm demeanors that could welcome even the coldest of people into a room.

Alyssa also mentioned these sentiments on her written reflection submitted alongside her final draft. In it, she demonstrates her progress as a student in a teacher education program preparing to teach middle school children how to read and write, the ultimate objective of the course. She writes:

While teaching, we talk about how we should connect the knowledge to students so they can gain empathy and understanding, which I think this experience is how I best connect to the work that we will be doing. I gained a new level of understanding by taking a closer look at my own writing and being critical of my writing style.

The final feedback Professor Thompson provides:

Can you see the many ways your experience will help you link to your own students and others who struggle in some way--and don't we all?

What this exchange illustrates is the constant negotiation teachers make in agency and improvement. The course had multiple goals: serving as a Writing in the Majors course that require students to meet particular writing standards and serving as a teacher education course that require students to meet particular teaching standards. Despite Alyssa's resistance to writing more detailed scenes during revision, as stated by the writing standards, she did express an understanding of learning to write, especially in terms of the strategies required to achieve positive outcomes (Baker, 2017). As Professor Thompson shared in the interview, "The reflection students write carry more weight than the actual writing. The goal is for them to think about the writing process as an instructional tool, becoming [recognized] as writing teachers, not just writers." Just as Alyssa meets these standards by "being critical of my writing style," Professor Thompson again opens up her feedback, inviting even more reflection from Alyssa, asking her to think about how her struggles can help her extend the "empathy and understanding" stated in her reflection.

Open-ended feedback cannot be a standardized approach. As Alyssa's case demonstrates, Professor Thompson altered her feedback strategies based on the perceived needs, both emotional and cognitive, in each particular student. The next case illustrates a different approach used during the same assignment.

Case 2: Courtney

In the following exchange, Courtney begins the writing process with a first draft. The feedback she receives from Professor Thompson occurs early in the semester, during the first workshop.

Courtney: The Harp's image of a mystical forest with low hanging trees, mini waterfalls, and a flowing river, along with the quote, "So it's true he thought, it's really true." really made me think back to my time spent in Switzerland this summer.

Professor Thompson: You are composing some poetic lines with rich details. I'm curious as to the paragraph form. Do you intend to write a poem or something more like a journal? Remember what we read about genre, how it offers different frames for the true story you want to tell? Which form calls out to you?

Rather than interpreting Courtney's use of fragment sentences as incorrect, Professor Thompson frames the style as a conscious choice made by Courtney. Thus, she calls attention to it and invites the student to think about the choices she can make for improvement. Not only is the feedback open-ended in its reliance upon questions, but it is also open-ended in its evaluation of correctness. Nowhere does Professor Thompson's feedback mention that Courtney made a wrong choice in syntax. Instead, she implies that Courtney has more decisions yet to make. More poignantly, Professor Courtney communicates a particular discourse of writing that emphasizes a belief that genre determines authenticity and that texts have the agency to "call out to you." This communicated discourse becomes interdiscursive, which researchers like Koriati (2018) suggest lead to metacognition, in the next exchange.

Courtney's reflections, both during the interview and in writing, display instances of interdiscursivity leading to metacognition. Not only does Courtney "hear [Professor Thompson's] voice while revising" (interview), but also while reflecting on the writing process. This segment from her written reflection is a clear example:

At first when I started the Writer's Workshop assignment, I was positive (sic) that I was going to write it on the poem Where I'm From. It was personal, unique and I knew I could take it through a solid writing process. Although, as I looked through my notebook and the in class writing pieces, the piece that I wrote on The Harp's image kept sticking out to me. I'm not sure if it is because I have been feeling extremely nostalgic lately, or that I'm feeling extra emotional, but I knew I needed to change and take this particular piece through the writing process. The image completely reminded me of my time spent in Switzerland over the summer and now that I am finished with it, I have found that choosing a genre and form can change the meaning of the experience being written about. It also is less of a poem, and more of a journal style. I am still not the fondest of poems because of their strict outline, and paying too much attention to form kept me from getting at my true experience with Switzerland. With the journal piece I was able to write with ease and get my ideas out without worrying if it was in the correct format.

First, Courtney demonstrates an awareness of the role played by genre, such as noting the importance in considering genre when writing ("choosing a genre and form can change the meaning"). She goes one step further in articulating how the choice of genre in her experience shaped the possibilities of her writing ("with the journal piece I was able to write with ease and get my ideas out"). Second, Courtney's adoption of Professor Thompson's discourse about writing ("getting at the true experience" and "the piece...kept sticking out to me") makes visible evidence of interdiscursivity. While Courtney does not borrow Professor Thompson's feedback verbatim, she does reproduce a discourse of writing that emphasizes a possibility for authenticity and agency of the writing itself. This reproduction is validated in later feedback Professor Thompson offers:

Nicely handled, [Courtney]. I see a lot of growth over the course of this piece. I'm glad you enjoyed the slow dance with writing. When we slow down, writing can reveal some pretty cool things about us and the experiences we had. It would be interesting to see what your summer in Switzerland looks like as a poem as well. There might be other things waiting to be revealed. Maybe set it aside for a couple of months and come back to it or returned to it as this summer approaches.

Even when Professor Thompson's feedback primary function is to praise and validate the student's performance, she still provides open-endedness in further suggestions for ways Courtney can develop her writing. She includes Courtney in a community of writers, using the collective "we" to recognize her as a writer/teacher of writing, and she further emphasizes a discourse of textual agency that promotes a relationality with texts that can continue to "reveal" depending on form, time, and season.

As suggested throughout this case, interdiscursive relationality is not limited to linear 1:1 interactions, such as student-teacher. A later segment from Courtney's written reflection reaffirms the notion put forth by Andrade and Brookhart (2019) that co-regulation can also occur in relation to agents besides the teacher:

When I was editing and revising my piece I found a great amount of things to elaborate on. I loved elaborating, because that meant I got to think back into some fond memories and write them all out. There were many sentences that needed more descriptive words to add to create a greater sense of imagery, and surprisingly that was very easy to do. There are so many wonderful adjectives to describe Switzerland and its scenery. Another thing that [name removed], my peer, pointed out to me, was to explain and describe what canyoning is. This was very crucial to my paper because a lot of people have no idea what canyoning is. It added great detail to my paper as a whole, and made it more attainable for readers.

Not only does Courtney articulate an awareness of how feedback from peers can help her improve her writing, but also credits the agency of a text (*The Harp*) to “stick out” and choose itself for the Writer’s Workshop.

By the end of the Writer’s Workshop, Courtney’s decision to stick with the journal format produced significant improvement both in syntax and in content. The following example provides evidence of the possibility for open-ended feedback to improve student performance by asking students to adopt useful discourses and strategically act on them. As a whole, Courtney’s case suggests that enhancing metacognition through interdiscursive co-regulation also improves students’ ability to meet stated standards:

I went on a walk through the small, stunning town of Interlaken. The whole town had a very peaceful feeling, everyone was asleep and nature had slowly begun to wake up alongside me. The mountains, the crisp warm air of summer, the distant waterfalls and adventures could all be seen. My travel group and I were going on a canyoning trip that day, high up in the gorgeous forest.

Canyoning is a mix of high action outdoor sports. You can find yourself repelling down waterfalls, jumping off of cliffs into tiny spots, swinging through canyons, swimming and of course, floating through the river.

Discussion

As is apparent with the two cases, and especially with the final draft of Courtney’s writing, co-regulation and metacognition serve as desirable outcomes of interdiscursivity. For these outcomes to be achieved, educators might employ open-ended feedback strategies when possible. When students understand the reasons for and meanings of feedback interactions, they begin to, as Courtney reflected, “hear their teacher’s voice while writing.” In other words, they can predict assessment and act accordingly, revising their learning *in situ*, rather than *ex post facto*. Considering both cases together, three critical points that frame feedback as open-ended stand out: dialogue, interpretation, and revision. Students should be provided opportunities to dialogically engage feedback, such as elaborating on provided examples (Callender, Franco-Watkins, & Roberts, 2016), requesting clarification when needed (Sato & Loewen, 2018), and monitoring revision processes (Goos, Galbraith, & Renshaw, 2002).

We have known for some time that feedback must be dialogic, however rarely dialogic feedback occurs (Yang & Carless, 2013). Both Alyssa and Courtney are provided opportunities to express themselves in relation to the feedback as well as the assignment. Additionally, Professor Thompson validates both students’ expressions by noticing and naming their progress (e.g., “I can feel the pain you experienced”). One of the most powerful aspects of dialogic feedback is the

opportunity it creates for empathy, which Steen-Utheim and Wittek (2017) suggest provides emotional and relational support for students. Dialogue also invites students in the assessment process. Rather than passively waiting for assessment to happen to them, students participate in assessment by asking questions about feedback and expressing their emotional experiences about the assignment in general. This co-regulatory involvement invites students to think about their processes, progress, and performance, resulting in the development of important metacognitive skills (Flavell, 1976).

Interpretation operates on many critical levels. At the most basic, teachers need to ensure students can interpret the feedback at all (Tan, Whipp, Gagné, & Van Quaquebeke, 2019). For Draper (2009), this process is necessary regardless of the nature of feedback, whether it is explicit and corrective or open-ended and dialogic. Draper (2009) provides helpful guidelines that indicate the grounds on which students might question feedback: (1) feedback was based on technical knowledge; (2) feedback awarded effort; (3) feedback reflected a task's criteria; (4) feedback was based on inherent ability; (5) feedback was random; and (6) feedback was il/legitimate. Without thoughtful and consistent collaboration, students might be left to guess which guideline best interprets the feedback they received. For instance, when Professor Thompson provides feedback to Alyssa that encourages her to employ the technical knowledge of scene-building, Alyssa could have easily interpreted the feedback as “wrong,” or illegitimate. Professor Thompson's reliance on the criteria for the course, and the criteria that signify “strong writing,” helps guide Alyssa's interpretation, fostering an accurate metacognition aligned with the goals of the course. Teachers can better serve students by remaining sensitive to their interpretations of feedback and dialogically responding to them with clear reference points (e.g., other texts, course standards, parallel examples). By guiding metacognitive reflection, teachers help students ensure a more purposeful revision engagement. In other words, teachers can help students know what to do during revision.

Revision needs to happen on multiple levels. On one level, students must be provided opportunities to incorporate feedback directly into their work. Co-regulatory movement through the ZPD means students, through interaction with other agents, can answer Hattie and Timperley's (2007) three questions: Where am I going? How am I going? And where to next? Clarifying all the levels of revision goes beyond the scope of this study (for such a stratification, see: Magnifico, Woodard, & McCarthey, 2019); what is important to mention here, however, is that revision depends on re-occurring instances of dialogue and interpretation. In other words, revision should not simply be a predetermined stage in the learning process; it might be helpful to consider it as *part of* the learning process, in each stage. As seemed to be the case with Alyssa, Professor Thompson encouraged an immediate revision that focused more on concrete details. When that feedback did not seem to improve Alyssa's writing, Professor Thompson invited Alyssa to think about her own experience and reflect on the specific events that influence her feelings, taking revision “back a step” in the learning. Similarly, in Courtney's case, revision emphasized reflection, encouraging Courtney to rethink genre and form before revising her writing. For revision to occur at the macro level, it needs to take place reflectively, metacognitively, in relation to others. Students need to consider new ways to think about and act on their knowledge before they can approach an assignment using novel strategies (Cutumisu & Schwartz, 2018).

The purpose of this study is to clarify open-ended feedback as helpful among other forms of feedback. Open-ended feedback, however, also has its limits. Leaving students to interpret teachers' intentions can not only hinder learning, but it can also lead to dangerous self-reflections like learned helplessness (Brookhart, 2011). Additionally, depending on students' level of knowledge needed for a particular performance, open-ended feedback can be confusing or discouraging for students who simply need explicit directions. When used well, however, students engage in meaningful learning made visible through their agency in co-regulatory practice and metacognitive reflection.

Conclusion

Other forms of feedback, such as explicit corrective feedback, should not be entirely abandoned. Many cases require such strategies. On the other hand, when students are at the edge of particular Zones of Proximal Development, faculty might employ feedback that asks questions, offers multiple possibilities, and calls for reflection rather than explicitly stating the next step. Agency is never an absolute term. It is not something that exists within one individual; one cannot completely have or not have agency. This study makes clear that both faculty and students are better served to consider agency as a fluid quality that is always in flux. Open-ended feedback can help shift the tides of agency until students can cross into new zones of (re)action that result in improved performance.

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