Writing Development of the Case Analysis Genre: The Importance of Feedback and Negotiated Construction in the Teaching Learning Cycle



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Abstract In universities with English as the medium of instruction (EMI), boundaries between subject/content learning and language learning are crossed and the roles of content-area faculty and English for Academic Purposes faculty are bridged. In this chapter, we report on a study in which we, writing faculty/applied linguists, crossed disciplinary boundaries by working in collaboration with Information Systems (IS) professors to develop research-informed pedagogical interventions to scaffold the writing of disciplinary genres in the undergraduate IS curriculum at an American EMI university in the Middle East. Specifically, we report on how we adapted the Teaching Learning Cycle (TLC; Rothery, 1994) to scaffold the writing of the case analysis genre in two IS courses. We document the development of two students who made effective use of explicit instruction and written feedback on drafts and consulted with a writing specialist on multiple occasions in writing the case analysis. We examine the students' texts across time and contextualize the students' development by examining changes in their drafts based on the written feedback and one-on-one consultations with the writing specialist. Through these case studies, we argue for the importance of feedback and negotiated construction in the TLC. We also discuss the importance of crossing disciplinary boundaries in EMI contexts and the strategies we have used for promoting that boundary crossing.

Keywords Teaching learning cycle · Writing development · Case analysis · Explicit instruction · Written feedback · Boundary crossing

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169

1 The Teaching-Learning Cycle for Scaffolding Literacy Development: The Importance of Feedback and Negotiated Construction

In universities with English as the medium of instruction (EMI), boundaries between subject/content learning and language learning are crossed and roles of subject faculty and faculty of English for academic purposes are bridged. Over the past four years, we, writing faculty/applied linguists, have engaged in such boundary crossing by collaborating with Information Systems (IS) professors to develop researchinformed pedagogical interventions to scaffold the writing of disciplinary genres in the undergraduate IS curriculum at an English-medium campus of an American university in the Middle East, where most of the students use English as an additional language. Our interdisciplinary work employs design-based research (Anderson & Shattuck, 2012), an iterative approach that involves interviewing disciplinary instructors to understand their assignments and expectations, designing and implementing an intervention (e.g., by collaboratively designing scaffolding materials), analyzing its impact on learning and teaching, and reflecting upon the intervention to improve outcomes, teaching, and theory building. Ultimately, analyzing and reflecting on the effects of such interventions can lead to "profound changes in practices" (Akkerman & Bakker, 2011, p. 146) and even to the creation of a new "boundary practice" (Akkerman & Bakker, 2011, p. 146). In this paper, we report on a study in which we worked in collaboration with IS faculty and adapted the Teaching Learning Cycle (TLC) (Rothery, 1996) to scaffold the writing of the case analysis genre in two IS courses.

The case analysis genre, a prominent genre in IS, has been defined as a "written case response in which writers analyze a case and identify key factors influencing events and actions in the case or influencing possible recommendations and decision-making" (Nathan, 2013, p. 59). In a case analysis, the student applies disciplinary concepts, theory, and knowledge to the analysis of a business/organization to identify problems or opportunities to improve and provide recommendations. Writing case analyses poses several difficulties for students. One major challenge students face is crossing the boundary from reporting on the case or summarizing disciplinary knowledge—engaging in knowledge display—to using the disciplinary knowledge as a lens to identify problems in the case—engaging in knowledge transformation (Scardamalia & Bereiter, 1987). Another challenge that students may face when writing a case analysis is the lack of explicit guidelines about the case analysis genre and its expected stages. Miller and Pessoa (2016) found that many assignment guidelines do not make explicit the stages of the case analysis and consist of a series of questions for students to answer about the case. Thus, the case analysis often looks like a question-and-answer assignment rather than a fullfledged problem-solution-analysis genre. This can be attributed to the fact that many disciplinary faculty lack explicit knowledge of features of IS genres necessary to help students understand the various rhetorical moves that are expected within their specific discourse community.

To scaffold the writing of the case analysis, we crossed disciplinary boundaries, collaborated with the IS professors, and conducted one writing workshop in two IS courses (i.e., one writing workshop per course). In our workshops, we implemented an adapted version of the TLC. Framed within Systemic Functional Linguistics (SFL)¹ genre pedagogy, the TLC is an interactive and iterative writing-focused pedagogic cycle of teaching and learning activities that includes three main stages: deconstruction, joint construction, and independent construction of text. In the deconstruction phase, the teacher engages students in analyzing a mentor text's purpose, stages, and language. In joint construction, students practice writing the target genre with their teacher in preparation for independent construction (Miller & Pessoa, 2016). Research shows that these phases of scaffolding can lead to positive writing outcomes (Humphrey & MacNaught, 2016; Mitchell & Pessoa, 2017).

The TLC's potential to enhance writing development is in part attributed to its flexibility and adaptability to the needs of students across a variety of contexts. The process is recursive and, depending on students' mastery of the genre, instruction can begin at any stage of the cycle (Rothery, 1996). As Drury (2004) argues, joint construction can be done at any point of the TLC depending on students' needs, and teachers can move back and forth between phases as appropriate. During independent construction, teachers can meet with students individually in person or online and continue to offer support and feedback (de Oliveira & Smith, 2019). Some researchers have even added stages to the TLC or, in the words of Akkerman and Bakker (2011), have created a "boundary practice" (p. 146) by adapting the TLC to their needs. For example, *collaborative construction* is a bridge between joint and independent construction in which students brainstorm and negotiate ideas with other students while teachers continue to offer support as needed (Brisk, 2014; de Oliveira & Smith, 2019).

The inclusion of further support through stages of drafting and feedback during independent construction in the TLC has been a subject of interest to SFL scholars. Drury (2004) includes both group and individual feedback in her implementation of the TLC in university biology classes. Similarly, So (2005) and Feez (2002) include peer and teacher feedback as the next step after independent construction. Most recently, the SLATE project (see Dreyfus et al., 2016), in which SFL researchers collaborated with tutors to scaffold student writing development at the City University of Hong Kong, included a *consultative cycle* within the independent construction stage. In the consultative cycle, teachers provided further support and feedback to the students. This consultative cycle was conceptualized as cycles of support through drafting, commenting/feedback, and redrafting, a process that was referred to as *negotiated construction* (Mahboob, 2014, Mahboob & Devrim, 2013). During the consultative cycle, feedback plays a very important role in helping students meet genre expectations. Thus, Mahboob and Devrim (2013) argue that

¹ SFL is a theory of language developed by Halliday (1985) that focuses on the analysis of language as a meaning-making resource to accomplish different functions in different social contexts. SFL-based genre instruction aims to make language choices explicit to students and scaffold the production of increasingly complex genres.

"feedback has to play a role within the Teaching Learning Cycle" and that "it has to scaffold and support students to achieve the potential that they may not be able to achieve independently" (p. 107).

Despite the importance of feedback in aiding language development and in helping students meet genre expectations, its role is still relatively unexplored in the literature on genre pedagogy. This contrasts with the significant body of literature on feedback in Second Language Acquisition (SLA) and English Language Teaching (ELT). In SLA and ELT, feedback is often conceptualized in terms of corrective feedback, that is, as something that "signals an error in the usage of the second language" (Kregar, 2011, p, 3). For many researchers working in the area of corrective feedback (see Heift & Rimrott, 2008; Rezaei & Derakhshan, 2011; Sheen, 2007), the focus is mostly on syntactic and other surface-level errors (e.g., spelling, vocabulary, punctuation). For example, Kregar (2011) examined the effects of different types of corrective feedback on the improvement of learner performance of three uses of the Spanish preterite and imperfect; Rezaei and Derakhshan (2011) compared the impact of direct and metalinguistic written corrective feedback on EFL learners' grammatical knowledge; Heift and Rimrott (2008) investigated learner responses to three distinct types of corrective feedback for misspellings produced by native English-speaking learners of German; and Sheen (2007) examined the differential effect of two types of written corrective feedback (i.e., direct-only correction and direct metalinguistic correction) on the acquisition of articles by adult intermediate ESL learners (see also Kang & Han, 2015, whose meta-analysis of 21 studies examined whether written corrective feedback can help improve L2 writers' grammatical accuracy).

While such research on feedback in ELT and SLA is quite extensive, one problem is the narrow focus of feedback studies on syntactic errors. When drawing on work on genre studies, this narrow definition of an error is unhelpful because it only looks at students' morpho-syntactic issues as opposed to students' use of language across a range of strata. In addition, when working with the Teaching Learning cycle, which draws heavily on the notion of scaffolding (Vygotsky, 1978), the focus is on providing support and on scaffolding students' language development rather than just 'correcting.' Once again, despite the importance of feedback in aiding writing development, in genre pedagogy, there are currently very few studies that look at feedback from a genre perspective (however, see Mahboob & Devrim, 2013). Clearly, more research on students' writing development and their ability to meet genre and assignment expectations through analysis of whole texts is needed to show the importance of feedback and negotiated construction in the TLC.

2 The Present Study

In this study, we build on Mahboob's argument for making feedback and negotiated construction an important part of the TLC by presenting data showing student writing development of the case analysis genre from our interdisciplinary collaboration

in two different introductory IS courses at an English-medium campus of an American university in the Middle East.² In these two courses, after crossing disciplinary boundaries and collaborating with the faculty to redesign the assignments to make expectations more explicit to students, we delivered a writing workshop in which we engaged the students in the deconstruction of mentor texts and unpacked the purpose, stages, and language of the case analysis genre.

Because of time constraints, we did not engage in joint construction. Although students went straight from deconstruction to independent construction, in course 1, the writing specialist (the first author) gave students individual written feedback using a rubric that specifically addressed the expectations of the assignment and what we taught in the writing workshop. The writing specialist also met one-on-one with several students to provide further feedback. Thus, our adaptation of the TLC valued the importance of feedback and the consultative cycle.

Overall, the explicit teaching of the case analysis genre had positive outcomes compared to case analyses produced by former students who did not receive explicit instruction. However, out of the 22 students who enrolled in both classes and who participated in our workshops, 7 students performed low in both case analysis assignments, as judged by our own analysis and the grades they received from the professors (low performance was indicated by a letter grade of C or below). Interestingly, these students did not integrate the feedback they received and did not meet one-on-one with the writing specialist. Thus, these students did not make effective use of the consultative cycle of the TLC.

This contrasts sharply with students who performed high in the case analysis assignment in the two courses. These students met individually with the writing consultant, sometimes on multiple occasions. They actively engaged in the consultative process of the TLC and jointly reflected on the feedback they received with the writing specialist.

In this paper, we focus on the writing development of two high-performing students. We use these cases to provide further support for the value and importance of feedback in the form of a consultative cycle within the TLC. We examine these students' writing development contextualizing their development based on their first draft, the feedback they received, how they incorporated the feedback, and their consultations with the writing specialist. In the next section, we describe how we scaffolded the writing of the case analysis genre deconstructing a mentor text with students using the SFL-based Onion Model (Humphrey & Economou, 2015). We also used the Onion Model to provide feedback to students and to analyze student writing development.

²These two courses ran sequentially. One was a 100-level course offered in the Fall semester and the other was a 200-level course offered in the Spring semester.

3 The Onion Model for Scaffolding and Analyzing the Case Analysis Genre

To scaffold and analyze the case analysis genre, we used the Onion Model (Humphrey & Economou, 2015). The Onion Model distinguishes "four ways in which academic writing can be patterned into discourse: through description, analysis, persuasion and critique" (Humphrey & Economou, 2015, p. 37). These discourse patterns do not occur in isolation; on the contrary, they are layered and interdependent. Humphrey and Economou (2015) acknowledge that "successful persuasive and critical writing depends upon the accumulation of knowledge developed through both description and analysis" (p. 37). It is the strategic use of description and analysis in the service of persuasion and critique that allows students to meet disciplinary expectations of writing analytical arguments and critiques.

Since our previous research (Miller & Pessoa, 2016) showed that students found it challenging to shift from reporting of the case to analysis and argumentation, our workshop focused on the language of analysis and argumentation, using the Onion Model. In course 1, students analyzed a published case study about The LEGO Group using the disciplinary framework of *innovation* and evaluated the extent to which LEGO was successful in implementing innovation. In Fig. 1, we provide a sample analysis/argument stage based on the LEGO case analysis with the kinds of questions that we used with students to inductively unpack the language of argument, analysis, and description needed to effectively accomplish this stage.³

Briefly, the text starts with an explicit positive evaluation framed within the context of the disciplinary framework of innovation: LEGO was <u>successful</u> in its approach to innovation (Pessoa et al., 2019). This explicit evaluation makes the text argumentative as the main claim is stated explicitly at the beginning of the text. The text maintains its focus on positive evaluations (increase in profits and growth of the company's customer base) (Pessoa et al., 2019).

As an analytical text, the text uses the disciplinary framework of innovation and focuses the evaluation on selected elements of the disciplinary framework: *LEGO* was successful in its approach to innovation, particularly in its use of complementary and incremental innovation (Pessoa et al., 2019). To arrive at this, the writer engaged in analysis that involved breaking down the LEGO case to establish what activities LEGO engaged in and how those activities fit into the elements of the disciplinary framework of innovation. The analysis resulted in the selection of complementary and incremental innovation as the two main kinds of innovation that LEGO successfully engaged in. The writer then rearranged the information from the

³We used this mentor text to unpack the argumentative analytical nature of the case analysis in the second course (see Pessoa et al., 2019). In the first course, we used a mentor text from the second course. We did this so as not to provide students with a mentor text based on the same topic or case they had to write about. For the purposes of this paper, we use the mentor text based on the LEGO case to stay consistent and to enhance reader comprehension.

Read the analysis/argument section from this sample case analysis based on the LEGO company and answer the following questions.

- 1. What is the writer's attitude toward LEGO's approach to innovation and how do you see that reflected in the use of language? How does this relate to the main purpose of the case analysis?
- 2. What are the stages of this text? How is the text within this stage organized? How is the information presented? What is the focus of each paragraph? How do the two paragraphs relate to each other?
- 3. What language reveals that the writer is analyzing and not describing? What is the difference between how the information is presented in the source text (the LEGO case) and how the information is presented in the case analysis?
- 4. What voices does the writer bring in to the text? What language reveals the integration of multiple voices into the text? How are these voices used for the main purpose of the text?
- 5. Do you see any places where the language reveals the writer anticipates potential disagreement from a reader?

The case of LEGO can be analyzed through the lens of innovation. LEGO was successful in its approach to innovation, particularly in its use of complementary and incremental innovation. Complementary innovation is the process of creating new products that 'complement' a company's existing products in order to enhance the original product. LEGO's use of complementary innovation was successful because it led to an increase in profits and to the growth of the company's customer base. LEGO increased its profit through complementary innovation strategies such as licensing agreements with other products, movie productions, and the opening of theme parks. LEGO obtained licensing agreements to complement its main products (the bricks) with Star Wars and Harry Potter characters and vehicles. Since obtaining this licensing arrangement, LEGO has sold over 200 million Star Wars LEGO boxes (McNally, 2016). Although some of the early complementary products that LEGO produced did not sell well (i.e., Znap), the majority of LEGO's later complementary products were well-received by the public. Also, the production of the LEGO movie and the LEGO Star Wars movie were profitable for LEGO. Lego produced its first movie in [...] In addition, the opening of LEGO theme parks around the world has contributed to LEGO's financial success. Theme Park Magazine has ranked LEGO as one of the most visited theme parks around the world. It has even gained popularity in Orlando, Florida, despite the great competition from Disneyworld and its associated parks. This shows that LEGO was successful in the use of complementary innovation as it increased the company' profits.

LEGO's use of complementary innovation was also successful because it led to an increase in the number of customers. As stated in the LEGO case, until 2011, boys made up 90% of LEGO consumers. In an attempt to broaden its appeal to more girls, LEGO launched LEGO Friends, a complementary line designed specifically for girls. The line features five core female characters and the sets include bricks that can be used to build a veterinary clinic, a beauty salon, a design studio, an inventor's workshop, etc. According to the LEGO Group chief executive officer Knudstorp, launching a line designed specifically for girls allowed the company to "succeed in reaching the other 50 percent of the world's children" (2012). This confirms LEGO's success in its implementation of complementary innovation as it helped the company to increase the number of customers.

LEGO was also successful in its use of incremental innovation. Incremental innovation is...

Fig. 1 Mentor text to scaffold the analysis/argument stage of the case analysis genre

LEGO case (based on the two source texts) for the analytical and argumentative purposes of the text.

The elements of the disciplinary framework create a taxonomy for the presentation and organization of the ideas. The text in Fig. 1 focuses on complementary innovation in two paragraphs and proceeds to incremental innovation in subsequent paragraphs. It is the fronting of the elements of the taxonomy and their unpacking

into more descriptive language with evidence to support the claims and reasons that makes this text analytical.

The text also adopts a *claim-reasons* framework within the analysis of each kind of innovation adopted by LEGO. For example, the sentence *LEGO's use of complementary innovation was successful because it led to an increase in profits and to the growth of the company's customer base* presents a claim (*LEGO's use of complementary innovation was successful*) as well as the reasons that support this claim (i.e., *increase in profits* and *growth of the company's customer base*). The elements of this claim-reasons framework are stated as abstract nouns and are linked by logical relations using *because*. Figure 2 shows a visual representation of the disciplinary and claim-reasons frameworks used in the LEGO case analysis/argument mentor text from Fig. 1. Visualizing the text's organizational taxonomy brings to light the analytical argumentative nature of this stage of the case analysis genre, which differentiates it from a descriptive text.

In our workshops, we used Engagement, one of three main resources of the SFL system of APPRAISAL (Martin & White, 2005) so that students could understand how multiple voices are used to acknowledge source texts, show how evidence from source texts relates to their claims, and to consistently position the reader.

The writer includes voices from the readings assigned as part of the course (not explicitly stated in the text) to provide a definition of one of the elements of the disciplinary framework of innovation (complementary innovation). To support the claims being made, the writer uses evidence from the case and other sources, and

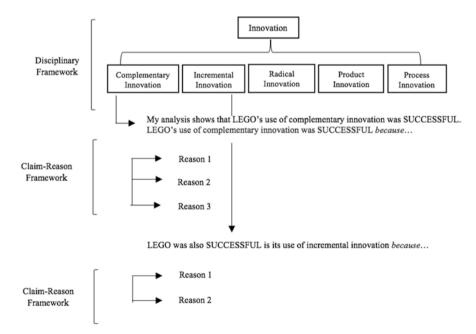


Fig. 2 Taxonomies in analytical section of a case analysis sample

signals the use of evidence with Attribute moves (i.e., moves to acknowledge the source text while introducing evidence from it) from the Engagement system, such as: Theme Park Magazine has ranked, As stated in the LEGO case, and According to the LEGO Group chief executive officer Knudstorp. The student writer moves the reader toward their understanding of the LEGO case through the use of Endorsement moves (i.e., moves to show how the evidence presented supports the claim being made): This shows that LEGO was successful in the use of complementary innovation as it increased the company' profits (Pessoa et al., 2019). By using the Endorsement move of "This shows that...," the writer moves the reader toward their interpretation of the evidence presented.

In order to produce effective analysis and argument, the writer needs to (1) imagine that the reader might disagree with their analysis or evaluation, and (2) provide additional evidence to counter the alternative interpretation through the use of phrases such as *although this...that*, *while this...that*, *might*. In the text in Fig. 1, the writer acknowledges alternative perspectives and counters them in the following sentences: <u>Although</u> some of the early complementary products that LEGO produced did not sell well (i.e., Znap), the majority of LEGO's later complementary products were well-received by the public, and It [Legoland in Orlando] has even gained popularity in Orlando, Florida, <u>despite</u> the great competition from Disneyworld and its associated parks.

In course 2, students were not required to write a full-fledged text for their case analysis assignment. Instead, students were given a case study about SmoothPay and were to respond to a set of nine questions with thorough answers that showed the students' understanding of the text, their ability to apply disciplinary knowledge, and their research skills. In our workshop, we went through these questions and, using mentor texts, we unpacked the language for providing analytical and argumentative responses, as described earlier for course 1.

Figure 3 summarizes the linguistic features of argumentative analytical writing that we made explicit in our writing workshops and that we used in our analysis of student writing.

4 Documenting the Writing Development of the Case Analysis Genre of Two High Performing Students

In this section, we examine the writing development of two students who performed high in both case analyses. We examine how these high-achieving students incorporated the linguistic features targeted in our explicit instruction of the case analysis genre using the Onion Model. We contextualize their development based on their first draft, the feedback they received from the writing specialist, how they incorporated the feedback, and their consultations with the writing specialist.⁴

⁴This study has been approved by our institution's Institutional Review Board.

- Clearly state an explicit evaluation (your claim) at the beginning of the text that stays
 consistent throughout the text.
- If relying on a disciplinary framework, frame it as a taxonomy with specific elements, define those elements, and use the taxonomy to present and organize your ideas by fronting them in key parts of the text (usually in the beginning of paragraphs).
- Create a claim-reasons framework and use abstract nouns to present reasons for your claim
- Ground your analysis and relate it to disciplinary concepts, authors, and/or incorporate
 evidence to support your claim using phrases such as According to, Author X argues; X
 states that
- 5. Use description usually from the case strategically to support your claims.
- Show how descriptions presented or evidence presented supports claims being made with phrases such as This shows that, this confirms.
- Anticipate or acknowledge alternative perspectives and counter them with more evidence (using phrases such as even, might, seem, although this...that, while this...that).

Fig. 3 Linguistic features of argumentative analytical discourse in the case analysis genre

Student	L1	High school	Data sources	Consultations with writing specialist
Samya (All names are pseudonyms)	Arabic	Arabic- medium	Course 1: Draft 1, Field notes from meetings with the writing specialist, Draft 2 Course 2: Draft, Field notes from meetings with the writing specialist	4
Yousra	Arabic	English- medium	Course 1: Draft 1, Field notes from meetings with the writing specialist Course 2: Draft, Field notes from meetings with the writing specialist	3

Table 1 Background information and data sources of focal students

Before course 1, neither of the students had experience with the case analysis genre, so the explicit guidelines and their investment in negotiated construction with the writing specialist seemed to have been beneficial to these students. They both developed a working relationship with the writing specialist (the first author) and constantly sought her feedback. We use these case studies of students who made active use of the resources available to them to successfully write their case analyses to provide further support for the value and importance of feedback and negotiated construction within the consultative cycle of the TLC.

Table 1 provides background information about each individual focal student and the data sources we draw on to describe their trajectory. The two students are first year IS students from Qatar and their L1 is Arabic.

Samya attended an Arabic-medium school in Qatar and learned English in her English classes at school and at an English language school. She self-assessed her academic writing abilities, her oral presentation skills and her ability to read academic texts in English as strong (in a survey administered to all first year IS students as part of a larger study). Yousra attended an English-medium school and self-assessed her ability to read academic texts and her oral presentation skills in English as strong, and her academic writing abilities as neither weak nor strong.

Given the focus on students' ability to analyze and argue, in our analysis we focus on the analysis/argument stage of the students' case analysis in course 1, and we focus on question #6 in the case analysis assignment in course 2. Question #6 in the case analysis assignment for course 2 was the most comparable to the analytical section of the LEGO case analysis as it required students to analyze SmoothPay's competitive strategy using the disciplinary framework of Porter's Five Forces. We analyze the students' drafts and final draft qualitatively using the discourse patterns of description, analysis, and argument that we taught in the writing workshops, and that are listed in Fig. 3. We examine how the students incorporated these discourse patterns into their texts and how their writing developed as a result of the feedback received from, and the consultations with, the writing specialist.

We provide excerpts from the students' texts as appropriate, and we rely on our own field notes from the consultation sessions with these students to provide a thorough representation of these students' trajectories.

Case 1: Samya – Boundary crossing: Moving from descriptive to analytical argumentative writing through cycles of drafting, feedback, and negotiated construction with the writing specialist

Overall, Samya's first draft of the case analysis in course 1 shows that she incorporated some of the explicit guidelines we discussed in our workshop on writing case analyses, but she falls short in some aspects. (1) below shows the analysis/argument section of Samya's first draft of her LEGO case analysis in course 1.

(1) Samya's first draft of the LEGO case in course 1

When LEGO faced their first phase of the decline for the first time between 1993 and 1998, they first decided not to risk too much by pursuing incremental innovation rather than radical innovation, so they made adjustment to their existing practice by making the manufacturing process faster in order to triple the toy production, but this led to a decrease in profits.

When Plougmann became the leader and dug deep to find the problem, he chose to go with radical innovation. When Plougmann introduced the "can't miss" products, he changed the manufacturing process; the normal LEGO brick was changed into shapes which did not allow the users to create anything but the shape it was intended to be. [...] This experiment, even though it made LEGO change its core product, was a success as those sets gained huge popularity and LEGO have gained large fan bases from all over the world.

Finally, in the Galidor experiment, the basic LEGO brick was improved and an electronic system was installed in the toy which allowed users to play games. [...] This experiment was an utter failure as it destroyed a couple of actors' careers, and the show was exceptionally bad. The LEGO company had no experience in that area and did not know how to grab people's interests.

Although Samya makes an explicit evaluation and introduces the disciplinary framework in the introduction of the case analysis (not shown in (1)), she does not reiterate the explicit evaluation at the beginning of the analysis/argument section of her first draft, as we taught in the writing workshop. Overall, the analysis/argument section of Samya's first draft is quite descriptive and narrative. In (1), Samya organizes her text in terms of temporal phases (e.g., When LEGO faced their first phase of the decline for the first time between 1993 and 1998). Although she also refers to the disciplinary framework of innovation (notice how she mentions that LEGO first used incremental innovation and then radical innovation), it is only at the end of the first paragraph that Samya states that LEGO's use of incremental innovation led to a decrease in profits. In addition, Samya does not develop a claim-reasons framework to explain why LEGO's use of incremental innovation led to a decrease in profits. On the contrary, she falls into a descriptive pattern and briefly retells the activities LEGO engaged in.

In the second paragraph, Samya also uses description that is not clearly linked to the disciplinary framework or a claims-reason framework. Rather than, for example, applying an element from the disciplinary framework to show LEGO's success/failure, Samya re-tells the events of the case. Once again, it is only at the end of the second paragraph that Samya evaluates LEGO's use of radical innovation as a success and uses a causal link to provide a reason for why it was a success (i.e., was a success as those sets gained huge popularity and LEGO have gained large fan bases from all over the world). In the third paragraph, Samya loses track of the disciplinary framework, falls again into narrative and descriptive writing, and characterizes one of LEGO's experiments as 'an utter failure'.

In the feedback given to Samya's on her first draft, the writing specialist commented that the analysis stage was too descriptive and lacked a fronted explicit evaluation. Table 2 shows the comments the writing specialist provided to the student writer.

Upon receiving the feedback, Samya met with the writing specialist twice before she submitted her final draft to the IS professor. In these meetings, they worked on making evaluations explicit, on providing relevant and sufficient evidence to support the evaluation (claim-reasons framework), and on the use of attribute moves to integrate material from outside sources into the text. Excerpt (2) below shows the analysis section of Samya's second (and final) draft of her LEGO case study in course 1.

(2) Samya's second (and final) draft of the LEGO case in course 1

As I mentioned in my introduction, my analysis shows that LEGO's use of incremental innovation in the first phase of its decline was unsuccessful because it only led to an increase in the number of products produced, and to an increase in the costs of production. This led the company to a state of financial trouble. In addition, LEGO did not succeed in its use of incremental innovation because its products did not really change and, therefore, did not adapt to the changing market. For example, [...].

In the second phase of the decline, LEGO was partly successful in its use of radical innovation because its new products, such as the sets produced in collaboration with the creators of Star Wars and the Harry Potter books, gained immense popularity. However,

Table 2 Feedback provided by the writing specialist

Comment	
Number	Comment
Comment 1	Samya, your analysis section is mostly descriptive and narrative. You have structured your text mostly as a sequence of events. Look at the language you are using: "When LEGO faced their first phase of the decline for the first time between 1993 and 1998," "When Plougmann became the leader and dug deep to find the problem." You are basically narrating everything LEGO did. For this assignment, however, you are expected to analyze and evaluate. Was LEGO successful in its implementation of innovation? When you work on your second draft, make sure you start your analysis section with an explicit evaluation of the case in relation to the concept(s) of innovation. It seems that your analysis of the case shows that LEGO was unsuccessful in its implementation of incremental innovation and was successful in its implementation of radical innovation. As we discussed in the workshop, front (place at the beginning) your evaluation (your claim) and then provide evidence to support the evaluation. So, you might want to say 'LEGO was successful in its implementation of innovation because'
Comment 2	Make sure you do not lose track of the concept of innovation, which is the concept that should drive your analysis. In the paragraph that starts "Finally, in the Galidor experiment" you do not refer to any form of innovation. What type of innovation does this example represent?

these products had two flaws. Firstly, they were only popular for a short period of time. Secondly, [...]. In addition, the changes in the products that LEGO introduced resulted in the loss of one of the main features of the basic LEGO brick, which is [...]. An example of such products is the computerized LEGO toys. Unlike the previous products, these products [...].

Although Samya's final draft is still organized in terms of temporal phases, she succeeds in making an explicit evaluation at the beginning of the analysis section (LEGO's use of incremental innovation in the first phase of its decline was unsuccessful) and then proceeds to give two reasons (expressed explicitly through the linguistic form because) of her evaluation in the form of abstract nouns (because it only led to an increase in the number of products produced, and to an increase in the costs of production). The second paragraph starts with a circumstantial adjunct followed by an explicit evaluation (LEGO was partly successful in its use of radical innovation) that makes use of the disciplinary framework of innovation. The evaluation is followed by a reason to support the claim. To address her claim that LEGO was partially successful in its use of radical innovation, Samya introduces a concede move (However, these products had two flaws) to provide further support for her claim. The description is now used within the disciplinary framework and in the service of the evaluation. Samya's analysis could have been further improved if she had used a phrase such as This shows that or This confirms to show how the descriptions or evidence presented supported her claim. However, this point was not addressed in the feedback.

Samya's case analysis in course 2 shows great improvement in her development as a writer of analytical argumentative texts. Although students in course 2 were not required to write a first draft of their SmoothPay case analysis, Samya sought the

Comment Number	Comment
Comment 1	Samya, make sure you define each element of the disciplinary framework you use to evaluate SmoothPay (i.e., each of Porter's Five Forces). What does 'threat of new competitors,' 'buyer power,' etc. mean? Once you have defined the elements, state your evaluation. Is the threat of new entrants high, moderate or low? Devote one paragraph to each of Porter's Five Forces and provide evidence to support your evaluation.

Table 3 Feedback provided by the writing specialist

assistance of the writing specialist before submitting her assignment to the professor and successfully integrated the feedback received from the writing specialist. Table 3 shows the comments provided by the writing specialist.

Samya's attention to the writing specialist's comments resulted in a case analysis for course 2 that is quite strong, as shown in (3).

(3) Samya's draft of SmoothPay case analysis in course 2

Threat of new competitors refers to the degree of likelihood that customers might switch to new companies that open in the industry. In the case of SmoothPay, the threat of new competitors is low. Even though the entry barriers are low since no substantial infrastructure is needed to start a mobile payment service, SmoothPay has loyalty programs so customers will face switching costs. Also, SmoothPay uses [...] SmoothPay could turn the threat of new market entrants to very low if they increased the entry barrier by offering even more features or differentiated services to their customers. This will increase the customers' expectation and would make it more difficult for new startups to compete with SmoothPay. An example of such features would be [...].

Intensity of existing rivalry refers to the company's position in the market in relation to its competitors. In the case of SmoothPay, the intensity of existing rivalry is high. Even though it is difficult for startups to effectively compete in the industry, the current competitors are strong and offer similar or even better services than SmoothPay. For example, [...] SmoothPay could innovate in certain ways so that users of similar services would want to switch to SmoothPay. For example, SmoothPay could combine the loyalty program, payment, and order-ahead functionality in a single transaction to gain customers that value time.

Power of suppliers refers to [...] Threat of substitutes refers to [...]

Samya uses an effective approach to each paragraph. She starts each paragraph with a definition of each component of the disciplinary framework, then locates it in the case of Smoothpay (*In the case of SmoothPay*), and evaluates whether each force is high, medium, or low (only two paragraphs are shown as examples). In the first two paragraphs, Samya follows her evaluation with a concede-counter move (i.e., *Even though the entry barriers are low*) to back up the evaluation, and to further demonstrate that she fully understands the disciplinary framework and that her assessment is correct. She ends each paragraph providing recommendations (through the use of modal verbs) for how information systems can help the company gain a competitive advantage. Overall, Samya's case analysis for course 2 shows good evaluative patterning, good use of concrete details to support her evaluations, and good use of modals to provide recommendations. To achieve this, Samya met with the writing specialist several times. Clearly, the writing workshops, the boundary crossing

achieved by incorporating feedback in the form of negotiated construction with the writing specialist within the consultative cycle of the TLC, and her constant use of the workshop materials helped Samya meet genre expectations.

Case 2: Yousra: Boundary crossing: Moving from descriptive to analytical argumentative writing through cycles of drafting, feedback, and negotiated construction with the writing specialist

Yousra sent a draft of her assignment to the writing specialist before she submitted the first draft of the LEGO case analysis to her IS professor (course 1). In the email, Yousra explicitly stated that she was worried about using too much description and about her case analysis not being "enough analytical." Therefore, the writing specialist mostly focused on the analysis section of the assignment. Table 4 shows comments the writing specialist made on Yousra's draft.

Yousra attended to these comments and submitted a case analysis for course 1 that succeeds in using description in the service of analysis, as shown in (4).

(4) Yousra's final draft of the LEGO case in course 1

LEGO's case can be analyzed by examining two types of innovation used by LEGO to put an end to the decline in their sales. Innovation involves [...]. The products, technologies or services that result from implementing these new ideas can be completely different from previous existing versions or can involve minor improvements. In LEGO's case, some approaches and strategies involved incremental innovation while others involved complementary innovation. Incremental innovation is [...]. In LEGO's case, this approach was unsuccessful. LEGO abandoned their original plastic blocks to come up with toys that were designed for kids who don't like building blocks. To illustrate this point, [...]. These toys were a complete failure because [...]. This shows that incremental innovation was not the right approach for LEGO as the new features they came up with didn't suit their consumers.

Despite the fact that incremental innovation wasn't successful, my analysis shows that LEGO was, overall, successful in its approaches to innovation since LEGO eventually realized what they had done wrong and they used complementary innovation to solve the issue they were facing. Complementary innovation is [...]. In LEGO's case, this successful approach involved taking the risk to merge new technologies with LEGO's building and creating concept [...]. This approach was successful because it had a unique aspect to it [...]

Comment	
Number	Comment
Comment 1	Yousra, your analysis section is shaping up well. I think you can make it stronger, though. In your first paragraph, you state that LEGO was unsuccessful in its use of incremental innovation. Can you briefly state what incremental innovation is? Likewise, in the second paragraph you do not state what complementary innovation is. Remember that it is important to define the concepts that guide your analysis. You should also provide more evidence to show that LEGO was not successful in its use of incremental innovation. You state: "LEGO abandoned their original plastic blocks to come up with toys that were designed for kids who don't like building blocks." Can you give some examples of such toys?
Comment 2	Conclude your paragraph by showing how the evidence you provide supports the claim/evaluation you have made using phrases such as <i>This shows that, This confirms that</i>

Table 4 Feedback provided by the writing specialist

In addition to uniqueness, this approach allows more creativity [...] Another reason this approach was successful is that recently, children are not the only LEGO fans since more adults started re-engaging with building and creating LEGO robots and structures. This benefited LEGO since [...]. Thus, this shows that the complementary innovation approach of joining technology with basic LEGO blocks has set the stage for future generation of builders, designers and innovators. Also, it helped LEGO, business wise, by strengthening the bond between LEGO and LEGO fans which in the long run increased sales.

Yousra succeeds in defining the elements of the disciplinary framework (incremental innovation and complementary innovation), in making explicit evaluations (e.g., In LEGO's case, this approach was unsuccessful), and in providing her own claim-reasons framework to support her asserted evaluations of LEGO's. For example, in the second paragraph, Yousra signals her overall evaluation of LEGO's success and her intention to apply one of the specific elements of the disciplinary framework (i.e., complementary innovation). She then contextualizes her analysis by accurately defining this element of the disciplinary framework according to the established knowledge of the field. Then, she shows how complementary innovation was implemented by LEGO, demonstrating that she understands this element of the disciplinary framework by applying it to information from the case.

In this stretch of text, she uses description (e.g., LEGO used technology, LEGO transformed) in service of her analysis that technology was the "something" that LEGO associated with its original product. Yousra moves from this analysis to supporting her asserted evaluation (this approach was successful). She condenses her analysis of LEGO's use of complementary innovation into a single phrase (this approach), and then proceeds to give three reasons for her evaluation, namely that the use of technology had unique aspects, it allowed for creativity, and was engaging to adults as well as children. Within each element of the framework she establishes, Yousra provides a claim and reason for LEGO's success (e.g., In addition to uniqueness, this approach allows more creativity; the technology emerged with LEGO's new toys allows more space for hacking, tinkering and finding new ways of creating), provides details from the case to support that reason, and establishes a causal link between these details and an increase in sales (e.g., These features are great selling points, so they helped in increasing sales for LEGO). With these causal links, she effectively uses technical language from the definition of complementary innovation to remind the reader that she is illustrating the company's successful implementation of this strategy.

Throughout this entire stretch of text, she uses explicit positive evaluations that are specifically focused on LEGO's use of technology; in other words, her evaluative position remains consistent and focused. Overall, Yousra is very effective in weaving together analytical and argumentative writing to meet genre expectations. She combines analysis using the disciplinary framework of innovation with argument using her own claims-reasons framework to support her asserted evaluation of LEGO's success/failure.

Before submitting her assignment for course 2, Yousra emailed the assignment to the writing specialist (who provided feedback) and subsequently met with the

Comment Number	Comment
Comment 1	Yousra, you are making effective use of Porter's Five Forces to analyze
	SmoothPay and to present and organize your information. You have fronted your evaluation of each element of the framework and you have provided evidence to support it. However, I think your analysis could be stronger if you focused more on recommendations. What can SmoothPay do to reduce industry rivalry? What can SmoothPay do to make sure the threat of new entries remains moderate/low? You can use modal verbs to do this (e.g., SmoothPay could, should)

Table 5 Feedback provided by the writing specialist

writing specialist. The comment provided by the writing specialist is displayed in Table 5.

Yousra attended to these comments and submitted a case analysis for course 2 that is displayed in (5).

(5) Yousra's draft of the SmoothPay case analysis in course 2

By applying Porter's Five Forces model on SmoothPay, it can be seen that industry rivalry has a high pressure on SmoothPay. This is because the mobile payment industry is filled with different options for customers, being merchants and consumers. SmoothPay has many competitors like [...]. All these competitors serve similar, if not the same, features and services as SmoothPay [...]. Even though not all of SmoothPay's competitors offer loyalty rewards, most like LevelUp and Suretap do (Halliday & Dong, 2016). This makes it hard for SmoothPay to differentiate its service and products leading to fierce competition in the industry and a high pressure of industry rivalry force on SmoothPay. For SmoothPay to overcome this force, SmoothPay should widen its options by partnering with big clothes, furniture, cosmetics and sport retailers. This will encourage [...]. If SmoothPay includes other categories, customers can pay for many things at once. This will also allow more merchants to join which means SmoothPay can take advantage of the new merchants' customer base [...]

The force of new entries is moderate to low on SmoothPay since huge capital is needed for developing, or purchasing a fully functional information system, or systems, to support the mobile payment application, or website, needed to enter this industry. Similarly, new entrants need years to establish customer trust and build a positive brand image. This is because mobile payment [...]. One-way SmoothPay can maintain the force of new entrants as low is by [...]

The buyer's power force on SmoothPay is moderate since customers have a range of mobile payment applications to choose from. SmoothPay and its competitors offer [...]

Once again, Yousra is very effective in weaving together descriptive, analytical and argumentative writing to meet genre expectations. She combines analysis using the disciplinary framework of Porter's Five Forces with argument (explicit evaluation) using her own claim-reasons framework to support that evaluation. She also uses modals to give recommendations at the end of each paragraph. Once again, the writing workshops and the boundary crossing achieved by incorporating feedback in the form of negotiated construction with the writing specialist within the consultative cycle of the TLC helped Yousra meet the expectations of the case analysis genre.

5 Implications for the Inclusion of Feedback and Negotiated Construction in the Teaching and Learning Cycle

In this paper, we documented the writing development of the case analysis genre among two high-performing students who made effective use of explicit instruction and written feedback on drafts and consulted with the writing specialist on multiple occasions to receive and incorporate further feedback into their texts. We examined the students' texts across time and contextualized the students' development examining changes in their drafts based on the written feedback and one-on-one consultations with the writing specialist. These case studies and their writing development provide evidence for the valuable role of feedback and negotiated construction in the TLC in helping students meet genre and assignment expectations.

Although the students' development was not always linear, these students were able to meet genre expectations due to their diligent time and effort spent on the task and their use of the resources available to them. While the former is mostly under the control of the student, the way teachers actively and systematically engage students in the writing process through cycles of drafting, feedback, and consultations is something that teachers using the TLC should strive for to enhance student writing development, as shown in this study.

Thus, like other SFL researchers (e.g., Drury, 2004; Feez, 2002; Mahboob & Devrim, 2013; So, 2005), we argue for the inclusion of feedback and negotiated construction within the independent construction cycle of the TLC. The inclusion of cycles of feedback and negotiated construction within independent construction is particularly important as explicit instruction through the deconstruction of texts does not seem to be enough for students to meet genre expectations. In higher education (where there is little time to engage in joint construction of texts), negotiated construction after the teacher has provided feedback on students' first drafts may be more feasible and beneficial than joint construction. In negotiated construction, the students are working with their own texts which is likely to generate more investment and buy-in from the students. Thus, fruitful time can be spent in the class by using examples from the students' first drafts in whole-class negotiated construction sessions, in addition to meeting with students individually if necessary.

In order to enhance this process, we understand that feedback needs to be cohesive, strategically focus on the relevant linguistic features of the target genre (Dreyfus et al., 2016; Mahboob, 2014; Mahboob & Devrim, 2013), and go beyond syntactic and other surface-level errors (e.g., spelling, vocabulary, punctuation). To make our feedback cohesive with our assignment instructions and scaffolding material, we have developed rubrics that focus on purpose, structure (stages), and development (emphasizing the use of language to develop the ideas) using the same metalanguage from our scaffolding materials. Following Mahboob's model for giving feedback, at the end of our rubric, we summarize what students are doing well in their writing and what they need to work on using the metalanguage from the rubric. Most importantly, we have argued our case with the disciplinary faculty to make time in the class schedule to engage students in negotiated construction by

working through examples of the students' first drafts. This whole-class work, in addition to individual consultations, has improved the quality of student writing. We will continue to collect and analyze student writing, our feedback, and our students' incorporation of the feedback to provide further evidence for the importance of feedback and negotiated construction in the TLC.

Finally, this study would not have been possible without engaging in a boundarycrossing interdisciplinary collaboration with the IS faculty at our institution. Despite their learning potential, such boundary-crossing interdisciplinary collaborations that bring together the English faculty's linguistic knowledge and the disciplinary faculty's content knowledge are "rare and quite demanding" (Engeström et al., 1995, p. 321) and require extensive commitment, evaluation, and continued refinement of materials and methods from all parties involved. The starting point for such boundary-crossing interdisciplinary collaborations is having an engaged and committed disciplinary faculty member interested in addressing student needs through a focus on language. Then, the language specialists need to become familiar with the demands and challenges of the professor's writing assignments, and of the discipline's linguistic and genre demands. This can be achieved by analyzing course materials and student writing (e.g., comparing high- and low-graded essays to identify valued features of the genre); conducting interviews and think-aloud protocols with the professor about student writing; and reviewing the available academic literature. These data and background knowledge form the basis for the development of the materials for an intervention. After implementing an intervention, it is important to sustain an iterative process of data collection, analysis, and reimplementation to continue refining the materials. This constant reflection might lead to "profound changes in practices" and even to the creation of a new "boundary practice" (Akkerman & Bakker, 2011, p. 146).

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