Research Article

Developing Writers' Engagement in Academic Genres: Insights from Linguistically Informed Instruction

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Scopus Abstract

Through a comparative analysis of 90 student writing samples, this study explores how instruction informed by Systemic Functional Linguistics (SFL) affects developing undergraduate writers' use of linguistic resources valued in academic argumentation. This linguistically informed instruction made explicit the connections between conventional language-level features and the socio-rhetorical practices of academic discourse and provided students with a functional "metalanguage" for analyzing and producing academic arguments (Moore, 2021; Schleppegrell, 2013). To examine the influence of this instruction, I designed two specialized corpora of writing by students placed into developmental first-year writing (FYW) courses: one corpus consists of writing samples by students who received the linguistically informed instruction while the comparison corpus includes writing from students who received conventional rhetorical instruction without an explicit linguistic focus. Drawing on Martin and White's (2005) Engagement framework and using corpus analysis software, I analyzed students' use of interpersonal linguistic resources, particularly those that manage dialogic space, and applied statistical tests to examine whether observed differences between the corpora were significant. My analysis suggests that despite the differences in the prompts to which the writing samples were responding, students who received linguistically informed instruction were more likely to construe a writerly stance aligned with a novice academic persona by using language in academically valued ways (Barton, 1993; Lancaster, 2014, 2016). These findings suggest that explicit, linguistically informed instruction supports students' rhetorical awareness and ability to construct dialogically rich academic prose.

Structured Abstract

- **Background**: Research has emphasized the role of interpersonal engagement in academic writing, particularly in how novice writers manage dialogic space (Barton,

1993, 1995; Lancaster, 2014, 2016; Miller et al., 2014; Peele, 2018; Yoon & Römer, 2020). This study contributes to this research by examining how linguistically informed instruction may influence developmental undergraduates' use of engagement resources for projecting stance and creating dialogic space for entertaining alternative viewpoints.

- **Literature Review**: Prior studies have found that higher-rated undergraduate writing tends to employ stance features that project a novice academic persona, balancing contrastiveness and civility through engagement resources (Aull & Lancaster, 2014; Barton, 1993, 1995; Gere et al., 2013; Lancaster, 2014; Miller et al., 2014). In contrast, lower-rated and developmental writing often exhibits personalized stance features and less dialogic engagement. Research also suggests that prompt design and genre expectations mediate students' uptake of linguistic features for expressing stance and engaging alternative viewpoints (Aull, 2017, 2019, 2020; Gere et al., 2013). Despite this, few studies examine how linguistically informed instruction can influence first-year developmental students' engagement strategies across writing tasks.
- **Research Questions**: By investigating how direct, language-based instruction may shape underprepared students' discourse practices, this study addresses the following questions:
    1. Does linguistically informed instruction help developmental undergraduates use interpersonal linguistic resources of engagement—particularly those that expand or contract dialogic space—in academically valued ways?
    2. In what ways, if any, do patterns of engagement differ between the writing of developmental undergraduates who received linguistically informed writing instruction and developmental undergraduates who did not receive this instruction?
    3. To what extent might variation in prompt design influence students' uptake of engagement strategies and their use of interpersonal linguistic resources?
- **Methods**: This study analyzes 90 writing samples by students enrolled in developmental first-year writing classes with half these students receiving linguistically informed instruction over a sixteen-week term. Samples were divided into two corpora—one from sections with linguistically informed instruction and one without this direct language-focused instruction. A functional linguistic coding scheme was used to identify and compare the frequency and rhetorical function of engagement features, including contrastive connectives, self-mentions, epistemic markers, and reporting verbs, and statistical tests were applied to examine differences between corpora. The analysis also considered how prompt design influenced students' use of engagement resources.
- **Results**: Students in sections that received linguistically informed instruction approximated the stance of a novice academic more closely than students who did not receive this instruction. The features contributing to this stance included the frequent use of contrastive connectives to execute concede-counter moves. These students also relied less on self-mentions and intensifying language, instead favoring

reporting verbs in an academic register and hedging strategies that conveyed greater rhetorical awareness of academic conventions. In contrast, students in sections without direct language-based instruction exhibited more personalized stance features and fewer dialogically engaged structures. Patterns of engagement also varied by prompt design, underscoring that task design influences students' use of linguistic resources (Aull, 2017, 2020; Crossley, 2020).

- **Discussion**: Findings suggest that linguistically informed writing instruction can help students construct a rhetorically effective academic stance by increasing their metalinguistic awareness of engagement resources. The study illustrates how a particular instructional approach may help developmental writers approximate the valued stance of a novice academic more closely, which suggests a way to narrow performance gaps between students placed in different levels of first-year writing. The observed variation across prompts further suggests that engagement is constructed through both instruction and task design, illustrating how writing pedagogy should address linguistic form in relation to contextual factors.
- **Conclusions**: This study demonstrates the potential for linguistically informed instruction to support developmental writers in adopting a more rhetorically effective academic stance; however, the findings also complicate assumptions about prompt design and its influence on students' use of engagement strategies. While prompts in the corpus representing students who received traditional, rhetoric-based instruction (RFC) more frequently encouraged counterargument, students who received linguistically informed instruction (LBC) were more likely to employ concede-counter moves in rhetorically strategic ways. Conversely, although RFC prompts more often invited personal experience, LBC students used self-mentions in ways more closely aligned with academic conventions. These patterns suggest that instructional support can mediate how students respond to academic conventions even when prompt features vary. Future research should examine how specific prompt features interact with instructional approaches to guide students' uptake of academic genres.

Keywords: *developmental writing, engagement strategies, first-year writing, linguistically informed instruction, Systemic Functional Linguistics, writing analytics*

1.0 Background

Calls for greater linguistic attention in postsecondary writing instruction have gained momentum, especially in efforts to develop students' "critical language awareness" (Gere et al., 2021; Shapiro, 2022). Yet writing instruction often remains focused on macro-level rhetorical concerns, with relatively little attention to the sentence- and clause-level language features that shape meaning in academic genres (Aull, 2015, 2020; Crossley, 2020, pp. 416-417; Moore, 2021). This gap is particularly consequential for students placed in developmental writing courses, who may benefit from more explicit instruction in the discourse practices and linguistic choices valued in academic argumentation (Aull, 2015, pp. 173-174; Ferris & Eckstein, 2020, pp. 336-337; Moore, 2021, p. 178; Peele, 2018).

Responding to this gap, this study explores how instruction informed by Systemic Functional Linguistics (SFL) supports students in analyzing how language choices function rhetorically. In particular, I examined whether this instruction helps students engage source viewpoints—a key discourse practice of academic argumentation—by drawing on the Engagement system from Martin and White's (2005) Appraisal framework. The study compares writing from two groups of first-year undergraduates placed into developmental sections of first-year writing (FYW): one group received linguistically informed instruction, and the other received conventional rhetorical instruction without an explicit language-level focus. To investigate the influence of this instruction, I designed two specialized corpora of student writing and analyzed the interpersonal linguistic features associated with the dialogic positioning and writerly stance of a novice academic persona, found to be characteristic in higher-rated, upper-level undergraduate writing (Aull & Lancaster, 2014; Aull et al., 2017; Barton, 1993, 1995; Brown & Aull, 2017; Gere et al., 2013; Lancaster, 2014, 2016; Yoon & Römer, 2020). My analysis suggests that despite the role of prompt design in shaping linguistic choices, students who received the linguistically informed instruction were more likely to use sentence- and clause-level features in rhetorically strategic ways, aligning their prose with the expectations of academic argumentation by creating dialogic space. These findings support the view that linguistically informed instruction can cultivate students' rhetorical awareness and facility with academic discourse by explicitly linking linguistic features to the rhetorical purposes they serve in academic argumentation.

2.0 Literature Review

2.1 Functional Analyses of Students' Writing

Research on undergraduate writing consistently highlights how students position themselves in relation to other voices by using linguistic resources of engagement. Informed by Martin and White's (2005) Engagement framework, these patterns can be understood in terms of heteroglossia, or openness to alternative or competing viewpoints, and monoglossia, or the closing of these dialogic alternatives. Higher-rated undergraduate papers typically manage dialogic space by balancing expressions of "solidarity" with competing perspectives and a "contrastiveness" or "adversarial" position that foreground the writer's own assertions (Barton, 1993, p. 754; see also Aull, 2015, p. 173; Aull, 2020, pp. 6-7). Lower-rated papers often construe a more monoglossic stance by foregrounding personal assertions and infrequently engaging competing positions (Aull, 2015; Aull & Lancaster, 2014; Barton, 1993; Gere et al., 2013; Lancaster, 2016; Peele, 2018). The functional linguistic resources of engagement central to the construction of these positionalities, which inform the coding scheme for the current study, include self-mentions, reporting verbs, and contrastive connectives. Based on these engagement resources found in higher-rated papers, researchers have suggested a generally valued stance, or "persona" across a range of disciplinary discourses, one that positions the student writer as a "novice academic" who demonstrates facility in their "assimilation" of the valued discourse and epistemology of academia (e.g., Aull, 2015, pp. 97, 174; Aull, 2020, p. 33; Barton, 1993, p. 754; Lancaster, 2014, pp. 45-46; Miller et al., 2014, p. 108). Lower-rated student writing, in contrast, more often construes a "student" stance characterized by personalized assertion (self-mentions) and reduced engagement with competing views (Aull, 2015; Barton, 1993, p. 765; Lancaster, 2016, p. 26).

Contrastive connectives (e.g., *however*, *while*, *but* etc.) often create dialogic space by functioning to perform concede-counter structures, which are common rhetorical moves found in higher-rated undergraduate writing. More specifically, they often signal concessions and disclaim moves (e.g., *it is not*

(...) and function to address counter arguments (Barton, 1993, p. 765, 1995, p. 235; Lancaster 2016, p. 22; cf. Aull & Lancaster, 2014, pp. 167-168; Gere et al, 2013, pp. 621-622; Peele, 2018, p. 80). Rhetorically, these linguistic resources often function to problematize a topic by, for instance, "underscoring points of disagreement," which illustrates "critical thinking" in addition to contributing to an overall "adversarial style" (Lancaster, 2014, p. 40; Lancaster, 2016, p. 27; cf. Aull, 2015, p. 166; Gere et al., 2013, p. 616). This common stance of higher-rated papers often reflects a strategic management of dialogic space, in which writers first expand the space by acknowledging alternative perspectives and then contract it through concede-counter or disclaim moves (e.g., *it is not*, *however*) that position their claims within a "heteroglossic backdrop of other voices and alternative viewpoints" (Martin & White, 2005, p. 8). In this way, higher-rated writing creates dialogic space by invoking other voices and anticipating potential objections. Lower-rated student writing, meanwhile, often avoids these moves, producing instead a monoglossic discourse characterized by patterns that reveal writers' personal opinions, often signaled by self-mentions (e.g., *I agree*, *I think*) (Gere et al., 2013, pp. 619-621; Lancaster, 2014, p. 37; Lancaster, 2016, p. 26; see also Martin & White, pp. 35-37).

Self-mentions (e.g., *I*, *we*, *in my opinion*) often signal the personalization characteristic of the positionality construed in lower-rated undergraduate writing. Studies of first-year and developmental writers show that these forms frequently mark affective stance rather than analytic engagement, contributing to this monoglossic positioning (Gere et al., 2013; Hyland & Milton, 1997; Lancaster, 2016). Rather than expanding dialogic space to entertain alternative viewpoints, in other words, these writers often adopt a singular voice, which limits the dialogic positioning conventional to academic argumentation. Higher-rated papers, in contrast, tend to minimize overt self-reference. When closing dialogic space, students of higher-rated writing rely instead on creating "critical distance" by using objectively phrased moves that function to entertain "dialogic alternatives" (e.g., *it is possible*, *it appears*) (Lancaster, 2014, p. 39; see also Gere et al., 2013, p. 622; Martin & White, 2005, p. 98). The differences in these positionalities reflect a broader developmental trajectory in which novice writers shift from personalized expression to heteroglossic positioning.

Contributing to heteroglossic positioning, reporting verbs (e.g., *explains, points out, suggests*) function as engagement resources that allow writers to attribute propositions to sources in addition to aligning and evaluating their assertations in relation to these propositions. While the use of reporting verbs contributes to dialogic expansion, developmental writers often rely on verbs associated with spoken registers (e.g., *says*, *thinks*), which obscures the stance-taking functions of these engagement resources (Gere et al., 2013). Using multidimensional analysis, Doolan (2023) identified linguistic features associated with source-based writing quality, including reporting verbs, and similarly found that essays that scored highly on this dimension demonstrated more consistent attribution of source material and greater integration of reporting verbs. Like similar analyses of writing quality, Doolan's findings suggest that functional linguistic features of engagement, and reporting verbs specifically, are central to constructing a rhetorically appropriate academic stance; however, he also observed limitations in how even higher-quality essays made their arguments dialogic through source attributions, thus emphasizing a need for explicit instruction in reporting structures.

These findings point to a common developmental pattern whereby first-year students often rely on familiar registers that are socially accessible but less rhetorically effective. This register mismatch illustrates one common challenge in first-year writing instruction: students must not only gain fluency with academic ideation but also learn to adjust their linguistic choices to align with the expectations of academic discourse communities. Reporting verbs exemplify this challenge, as they simultaneously encode evidential stance and affective alignment. Whereas spoken registers may prefer neutral or

conversational attributions (e.g., *says*, *talks about*), academic registers demand more selective verbs (e.g., *argues*, *claims*, *asserts*) that reflect both rhetorical positioning and epistemic evaluation (Aull, 2015 pp. 165-166; Barton, 1995, pp. 226-227; Chafe, 1986, p. 265; Hyland, 2000). Transitioning from conversational to academically appropriate reporting verbs involves not merely eliminating informal language but developing an awareness of register variation and the rhetorical function of lexical and syntactic choices (Aull, 2015; Brown, 2011; Gere et al., 2013; Hardy et al., 2015).

While these discourse patterns have been observed to differentiate higher-rated and lower-rated undergraduate writing, less is known about how students, particularly those placed in developmental writing courses, take up these features in response to varying instructional contexts. For instance, several studies highlight the role that linguistically informed writing instruction can play in developing students' awareness of how language-level features function rhetorically (Hardy et al., 2015; Moore, 2021; Myhill & Newman, 2016; Slagle, 2023). At the same time, research has shown that students' stance-taking is also shaped by the writing context itself, including the language and framing of writing prompts (Aull, 2015, 2017, 2019, 2020; Bawarshi, 2006, p. 108; Brown & Aull, 2017, p. 407; Crossley, 2020). That is, students' uptake of engagement features may be mediated not only by what they have been taught but by the rhetorical and linguistic affordances of the task.

2.2 Contextual and Prompt-based Influences on Stance and Engagement

Research has shown that patterns of stance and engagement in student writing are shaped not only by students' rhetorical awareness or linguistic control but also by contextual factors such as assignment prompts. Aull (2015), for example, shows that prompt design significantly influences how students construct stance—particularly whether prompts elicit personal belief or open-ended questions as students' point of departure—while Aull (2017) shows how macro-genre affects the sociocognitive habits of students' discourse practices (see also Aull 2020). Taking the prompts from seven directed self-placement assessments at the University of Michigan and Wake Forest University, Aull (2015) found that prompts that solicited evidence from source texts as opposed to personal experience provoked linguistic features more comparable to professional-academic writing (p. 63). Similarly, Aull (2015) found that prompts that provided open-ended questions as students' "point of departure" also provoked more self-mentions than prompts that asked students to respond to the claims of a source text (pp. 62-66; see also Brown & Aull, 2017, p. 407). Open-ended questions, moreover, according to Aull (2020), often result in topic-oriented discourse as opposed to discourse with a narrower argumentative scope (p. 15); prompts that use a source text as the point of departure minimize students' use of self-mentions in addition to resulting in more frequent references to the source text (pp. 76-78).

Contextual factors such as the genre and task type implied by prompts can also affect students' use of linguistic resources of engagement. In particular, argumentative task types often invite more epistemic stance markers, including adverbials and pronouns, compared to explanatory, analytic genres (Aull, 2019, 2020; Staples et al., 2016). In an examination of argumentative and explanatory macro-genres by upper-level students, for example, Aull (2019) found rhetorical analyses are typically within the macro-genre of explanatory writing (p. 274; Aull, 2020, pp. 68-69). The explanatory, analytical macro-genre is more "informational" and less "interpersonal" in that the sociocognitive habits associated with this macro-genre typically "prioritize demonstration of knowledge" (Aull, 2017, p. 7). In this way, the functional linguistic features salient to explanatory, analytical text types include condensed noun phrases, such as nominalizations, in addition to prepositions and dependent clauses, all of which allow for the "modification of nominal elements" (Aull, 2017, p. 28; Aull, 2020, p. 71; Brown & Aull 2017, p.

407; see also Staples et al., 2016). In a similar study, Aull (2017) found the argumentative, explanatory macro-genre solicited by prompts influenced students' use of evaluative and contrastive features, suggesting implications for the sociocognitive habits students develop in their discourse practices (see also Aull, 2019, 2020). These findings align with Crossley's (2020) overview of research demonstrating that topic familiarity and prompt framing affect students' lexical sophistication as well as their use of cohesive devices and syntactic complexity (pp. 431-432; see also Crossley & Kim, 2022). Collectively, these studies point to the importance of considering the impact of task design when analyzing student writing.

3.0 Research Questions

Although calls for greater linguistic attention in postsecondary writing instruction imply a focus on developing students' socio-rhetorical awareness of discourse practices, such direct language-level attention has waned in recent decades (Aull, 2015, 2020; Butler, 2008; Connors, 2000; Kolln & Hancock, 2005; MacDonald, 2007). Possible factors contributing to this lack of "attention to language," as some suggest, range from an inadequate "knowledge of linguistics" (Gere et al., 2021, p. 391; cf. Aull, 2020, p. 22; Brown, 2011, p. 110; Butler, 2008; Crossley, 2020, p. 417; Moore, 2021, p. 181) and the "grammatical taint" of any language-focused pedagogy (Rhodes, 2019, pp. 243-244; see also Fearn & Farnan, 2007, p. 77; Ferris & Eckstein, 2020, p. 325) to the socio-rhetorical focus of instruction as reflected in the field's threshold concepts (Aull, 2015, pp. 18-19; Gere, 2019, pp. 9-10; Moore, 2021, p. 181). The lack of attention to language-level features presents a significant gap in instruction, particularly for students who are underprepared for college-level writing given that these students often struggle to navigate and employ the discourse practices valued in academic argumentation (Aull, 2015, pp. 173-174; Ferris & Eckstein, 2020, pp. 336-337; Moore, 2021, p. 178; Peele, 2018).

While studies suggest that students' ability manage dialogic space—to invoke, entertain, or challenge alternative viewpoints—may be an indicator of their rhetorical awareness and the quality of their academic writing, less is known about how this awareness can be developed through linguistically informed instruction. This study explores students' use of engagement resources in writing produced in courses with and without such instruction, focusing on how students' choices contract or expand dialogic space and how these patterns support the construction of a writerly stance as found in previous functional analyses of undergraduate writing (Barton, 1993; Lancaster, 2014, 2016; Miller et al., 2014; Yoon & Römer, 2020). By investigating how direct, language-based instruction may shape underprepared students' discourse practices, this study addresses the following questions:

1. Does linguistically informed instruction help developmental undergraduates use interpersonal linguistic resources of engagement—particularly those that expand or contract dialogic space—in academically valued ways?

    2. In what ways, if any, do patterns of engagement differ between the writing of developmental undergraduates who received linguistically informed writing instruction and developmental undergraduates who did not receive this instruction?

    3. To what extent might variation in prompt design influence students' uptake of engagement strategies and their use of interpersonal linguistic resources?

4.0 Methods

4.1 Data Collection Overview

Data collection involved (a) integrating linguistically informed lessons into developmental sections of first-year writing at two four-year public universities in Northeast Ohio and (b) collecting student writing samples from both participating and non-participating instructors' courses, which comprise the language-based corpus (LBC) and the rhetoric-focused corpus (RFC), respectively. Writing samples were collected via Qualtrics from students enrolled in these developmental first-year writing courses with each submission accompanied by the assignment prompt. Toward the end of the semester in which the linguistically informed curriculum was taught, I emailed participating and non-participating instructors at both institutions to ask them to share a Qualtrics survey link with their students inviting them to anonymously submit a writing sample. Separate Qualtrics surveys links were shared with students, depending on the instruction they received, with one link for those whose samples comprise the RFC and the other for those whose samples comprise the LBC.[1]

The learning outcomes for the general education writing courses at both institutions that served as research sites are informed by the Ohio Department of Higher Education's Transfer Module ("Ohio Transfer 36: English Composition," n.d.). These outcomes include developing students' rhetorical knowledge, knowledge of conventions, knowledge of composing processes, in addition to critical thinking, reading, and writing. This ensures comparable constructs of writing at the different institutions despite differences in curricular models for the programs' developmental writing courses. At one institution, developmental writing is offered through a corequisite model in which students receive additional instructional support while enrolled in a credit-bearing composition course; the other employs a stretch model that extends the first college-level writing course over two semesters.

Instructors were recruited from those who regularly teach these developmental courses. My selection of instructors to recruit considered their willingness to integrate language-focused lessons and their views on language-level instruction more generally. Five instructors ultimately participated, teaching seven developmental writing course sections. To support consistent implementation of the linguistically informed instruction, I collaborated with these five instructors to integrate the lessons into their existing curricula. Before the semester began, I reviewed syllabi and assignment materials and offered recommendations for how the linguistically informed lessons could scaffold toward the major writing tasks within the instructors' existing course plans. The instructors and I met several times both individually and once as a group to map the sequencing of instruction. During the semester, I worked with each instructor by observing or in some cases co-teaching the class sessions in which the lessons were delivered. Table 1 summarizes the participating sections, including the design of the developmental instruction, enrollment, the number of sessions I observed or co-taught, and the number of student writing samples collected.

[1] This study was conducted with approval from the Institutional Review Board at Kent State University (Protocol #21-309).

Table 1

Language-based Instructional Sections

Section	Enrollment	Observed/Co-taught Sessions	Writing Samples Collected
Stretch A	14	6	10
Stretch B	10	3	4
Stretch C	10	1	5
Section	**Enrollment**	**Observed/Co-taught Sessions**	**Writing Samples Collected**
Stretch D	9	1	7
Co-req A	20	4	10
Co-req B	18	0	6
Co-req C	9	24	3

4.2 Design of Instructional Interventions

Informed by linguistic frameworks including SFL and Engagement theory (Martin & White, 2005), the lessons taught to students whose samples comprise the LBC emphasized the rhetorical functions of linguistic resources including contrastive connectives, reporting verbs, and self-mentions—language features associated with anticipating alternative views, attributing claims to sources, and expressing personal attitudes. In all, there were a total of seven lessons informed by this functional view of language.[2] Each lesson typically required at least two class sessions, and they were taught over a sixteen-week semester. The materials provided for the lessons included first an explanation of how the typical language patterns of academic discourse reflect valued social practices by connecting specific language-level features to macro-rhetorical concepts, such as genre and discourse communities. Students reviewed these materials before the class session in which they were taught; in class, the instructor or I explicated examples from published and successful undergraduate writing. The second part of each lesson provided instructions for guiding discussions on the concepts and analyses of the examples. These collaborative activities were designed to prompt students to use metalanguage informed by a functional view of grammar and, in turn, facilitate students' development of a shared vocabulary to articulate the socio-rhetorical purpose of

[2] Examples of the lessons in functional grammar that were used for the study are available at https://bit.ly/48QsWlx.

these conventional language patterns. The third part of each lesson provided tasks and activities for students to apply their understanding of the concepts to their own writing.[3]

An early lesson in the curriculum introduced students to the distinction between functional grammar and traditional grammar. This lesson emphasized that unlike traditional grammar, which centers on prescriptive rules and correctness, functional grammar focuses on how language operates as a system of choices shaped by context. Students learned that this perspective foregrounds meaning-making, rhetorical patterns, and the social purposes of language use across contexts. By drawing attention to how linguistic forms enable writers to achieve communicative goals, the lesson established a foundation for the shared terminology, or metalanguage, used throughout the curriculum. It also familiarized students with key terms from functional grammar by highlighting how these differ from the terminology associated with traditional, rule-based approaches (Moore, 2021, p. 180). Building on this foundation, subsequent lessons highlighted the dialogic character of academic argumentation, focusing on how writers acknowledge and respond to alternative perspectives. One lesson, for instance, explicated how contrastive connectives (e.g., *however, on the contrary*) signal key rhetorical moves such as introducing objections, concessions, or counterarguments. Students also explored how reporting verbs position writers in relation to the ideas of others, shaping alignment and stance toward viewpoints from sources (Slagle, 2023, pp. 80-82).

While the linguistically informed lessons were implemented in addition to the standard developmental writing curriculum, this instruction contrasts what students whose writing samples comprise the RFC received. Students in the LBC completed the same major assignments and met the same course outcomes as those in the RFC, with the language-focused lessons incorporated as supplementary instruction. Students whose samples comprise the RFC, while also enrolled in developmental sections of FYW, did not receive linguistically informed instruction but were otherwise taught a standard curriculum that aimed to develop students' rhetorical knowledge by engaging them in argumentative and analytical writing. These courses emphasized thesis-driven essays, rhetorical strategies at a macro level, and writing process strategies.

4.3 The Corpora and Prompts

The study compares writing samples from two corpora: the LBC, composed of writing from developmental first-year writing courses using either a corequisite or stretch design and implementing linguistically informed instruction, and the RFC, drawn from comparable first-year writing courses that did not include such instruction. Each corpus contains 45 writing samples, matched by course type (stretch and corequisite models) across two institutions. The LBC totals 61,785 words, and the RFC totals 56,049 words. Given the differing sizes of the corpora, all frequencies of engagement-related linguistic features were normalized per 10,000 words: (total number of coded tokens / total number of words) x 10,000. In addition to normalized frequencies, I conducted two-sided Fisher's Exact Tests in IBM SPSS Statistics (Version 30 for macOS) to compare the distribution of coded tokens between the two corpora (LBC vs. RFC). These tests assessed

[3] The concepts and overall instructional approach for each lesson were drawn from existing applications and pedagogical materials developed from corpus analysis research, particularly those described above for analyzing upper-level students' writing, as well as pedagogical materials developed for use in the context of English for Academic Purposes, with the latter significantly informed by SFL research. See, for example, Aull (2015, 2020), Hardy et al. (2015), Helberg et al. (2018), among others.

whether the occurrence of linguistic features functioning as engagement resources differed significantly between corpora. The design and composition of both corpora are detailed in Table 2.

Table 2

Corpora Design and Composition

Corpus	*Number of Samples*	*Number of Word Tokens*
LBC	45	61,785
RFC	45	56,049

Given that methods from applied linguistics are often critiqued for lacking paradigms that consider the socially situated rhetorical contexts of texts (Aull, 2015, pp. 50-51; Aull, 2020), my approach to analyzing students' writing samples accounts for social context by analyzing the linguistic patterns of engagement in both corpora in light of the prompts to which students' writing samples were responding. By accounting for this contextual factor that potentially influenced students' use of linguistic resources within the Engagement system, I follow similar studies informed by SFL frameworks (Aull, 2017; Lancaster, 2014; Miller et al., 2014).

Prompts were coded by macro-genre, source use, and solicitation of counterarguments to account for contextual variation. In total, there were 19 prompts. Eleven of these prompts are associated with the writing samples contained in the RFC, and eight prompts are associated with the writing samples comprising the LBC. The requirements of these prompts varied according to (a) the type of writing that students were tasked with, that is, the macro-genre; (b) their point of departure, which I define, following Aull (2015), as whether students were guided to respond to a source text or a general, open-ended question (p. 62; see also Bawarshi, 2006, p. 108; Brown & Aull, 2017, p. 407); and (c) the evidence solicited, ranging from students' use of personal experience to the integration of primary and secondary sources.[4]

To systematize the analysis of students' writing samples with consideration of the prompts, I coded the prompts based on each of these categories—that is, based on the type of writing, specifically the macro-genre; the point of departure; and the evidence solicited. I also coded for whether the prompt explicitly guided students to engage counterarguments considering that such guidance might influence students' use of functional linguistic resources, specifically their engagement of alternative viewpoints to create dialogic space. The attributes I coded for when examining the prompts can be seen in Tables 3 and 4 below. These tables outline the codes for the prompts associated with the samples comprising the LBC and RFC, respectively.

[4] Macro-genres ranged from expository, analytical writing to argumentative text types. In most cases, as is the nature of macro-genres (e.g., Rose & Martin, 2012, p. 178), the prompts solicited multiple text types from students. For the most part, however, the most common macro-genres were analytical and argumentative.

Table 3

Codes for Prompts of Samples in LBC

Prompt	*Macro-genre*	*Point of Departure*	*Evidence Solicited*	*Counter Argument Solicited*	*Number of Samples*
6	argumentative	open-ended question	textual evidence (secondary sources optional)	optional	6
8	argumentative	open-ended question, source texts	textual evidence, secondary sources	no	2
9	analytical	source texts	textual evidence, secondary sources	no	11
Prompt	**Macro-genre**	**Point of Departure**	**Evidence Solicited**	**Counter Argument Solicited**	**Number of Samples**
10	argumentative	open-ended question	personal experience, secondary sources	yes	4
12	argumentative	open-ended question, source text	secondary sources	no	2
13	argumentative	open-ended question, source text	secondary sources	no	8
15	argumentative	open-ended question	secondary sources	yes	1
16	argumentative	open-ended question	Textual evidence, secondary sources	yes	11

Table 4

Codes for Prompts *of Samples in RFC*

Prompt	*Macro-genre*	*Point of Departure*	*Evidence Solicited*	*Counter Argument Solicited*	*Number of Samples*
1	narrative, argumentative	open-ended question	personal experience	no	3
2	narrative, argumentative	open-ended question	personal experience, secondary sources	yes	6
3	argumentative	open-ended question	personal experience, secondary sources	no	4
4	analysis	open-ended question	textual evidence (primary sources)	no	2
Prompt	**Macro-genre**	**Point of Departure**	**Evidence Solicited**	**Counter Argument Solicited**	**Number of Samples**
5	analysis	source texts	textual evidence, secondary sources	no	10
7	narrative, argumentative	open-ended question	personal experience, secondary sources	yes	3
11	narrative, argumentative	open-ended question	personal experience, secondary sources	yes	2
14	argumentative	open-ended question, source texts	personal experience, secondary sources	no	1
17	problem-solution (argumentative)	open-ended question	secondary sources	yes	5
18	analysis, argumentative	open-ended question	textual evidence, secondary sources	no	4
19	analysis, argumentative	open-ended question	secondary sources	yes	5

Accounting for the prompt instructions that served as the exigency for students' writing samples, I operationalize the "contextualist paradigm" common to research that combines methodologies for textual analysis in applied linguistics and the consideration of social context common to research in Rhetorical Genre Studies (RGS) (Aull, 2017, p. 7; Aull, 2020, p. 4). By combining these two approaches, my examination of the discourse patterns in the corpora offers a fuller understanding of the contextual factors that might have influenced the interpersonal linguistic features of the Engagement system therein. In this way, I aim to provide a fuller description of the potential influence that linguistically informed instruction had on the ability of students whose samples comprise the LBC to use language in academically valued ways. As illustrated in Tables 3 and 4, these primary factors include the macro-genre implied by the instructions of the prompts, the types of evidence solicited, and students' point of departure. Secondary factors include the prompts' instructions for engaging alternative viewpoints, which could affect the contraction or expansion of dialogic space.

4.4 Coding Engagement

My coding drew on the Engagement system within the Appraisal framework (Martin & White, 2005), a strand of SFL that emphasizes the interpersonal metafunction of language (Halliday, 1978). From this perspective, language is a resource for managing dialogic space: writers may expand dialogic space by entertaining or acknowledging alternative viewpoints, or contract it by aligning with or rejecting them. Features such as contrastive connectives, self-mentions, reporting verbs, and epistemic markers are key resources for expanding or contracting dialogic space, and prior studies have shown that these features differentiate the stance of novice academic in students' writing from more personalized or monoglossic positions that construe the "role of student" (Aull & Lancaster, 2014; Barton, 1993; Gere et al., 2013; Lancaster, 2014, 2016, p. 26).

To characterize the writerly persona typically construed in the two specialized corpora, I searched for the functional linguistic elements of the Engagement system, using the concordance software AntConc (Anthony, 2019). I first searched the corpora for typical linguistic cues of Engagement focusing specifically on features that expand or contract dialogic space and correlate to judged quality as found in the functional analyses of higher-rated undergraduate writing. The lists of linguistic features were synthesized from prior studies employing the Engagement system (e.g., Aull & Lancaster, 2014; Lancaster, 2014; Miller et al., 2014). These features range from reporting verbs (*states*, *explains*, *argues*, etc.) and epistemic markers to self-mentions (*I*, *me*, *my*, etc.) and contrastive connectives (*however*, *but*, etc.) as they function to open dialogic space by entertaining alternative viewpoints. (For a complete list of the tokens searched in the corpora, see Appendix A.)

Table 5

Coding Scheme for Engagement Features

Feature	Codes / Subcategories	Function and Writerly Persona
Contrastive Connectives (but, however)	Concede-counter moves; stance coded as diplomatic or assertive	Signal engagement with alternative viewpoints. Balance solidarity and conviction = diplomatic (novice academic). Emphasize conviction over solidarity = assertive (student).
Self-mentions (I, me, in my	Exophoric vs. endophoric; stance coded as affective or	Construe personal evidence and experiential stance = exophoric/affective (student). Mark analytic scope and textual engagement = endophoric/objective (novice

Feature	Codes / Subcategories	Function and Writerly Persona
opinion)	objective	academic).
Reporting Verbs (say, explain, argue)	Academic vs. spoken register; factive, nonfactive, counterfactive; stance coded as conventional or less aligned	Attribute propositions and index alignment. Academic + factive/nonfactive forms = conventional (novice academic). Spoken/counterfactive forms = less aligned (student).
Epistemic Markers (may, must, certainly)	Expansive (hedging) vs. contractive (certainty, intensification); stance coded as open or conviction-heavy	Expand or contract dialogic space. Expansive hedges = open stance (novice academic). Contractive/intensifiers = conviction-heavy stance (student).

After finding instances of these linguistic features of the Engagement system in the two corpora, I entered excerpts of each instance into an Excel spreadsheet to then analyze, qualitatively examining their rhetorical function and stance. From this analysis, I developed codes informed by the Engagement system to examine how these resources functioned in context and to characterize the writerly personas construed therein. In sum, I coded features both for their linguistic form and for the writerly stance they indexed, and Table 5 summarizes this coding scheme. After coding, I quantified their occurrence in two ways: (a) normalized frequency per 10,000 words to account for corpus size differences, calculated in Microsoft Excel, and hereafter abbreviated in the text as NF, and (b) two-sided Fisher's Exact Tests, conducted in IBM SPSS Statistics (Version 30 for macOS), to assess whether distributions of coded tokens differed significantly between the two corpora.

In some cases, contrastive connectives such as *but* and *however* were used to acknowledge and then counter alternative viewpoints. These instances were coded as *concede-counter moves* and then further categorized as indexing either a *diplomatic* stance (balancing open-mindedness and conviction and associated with the novice academic persona) or a more *assertive* stance (emphasizing conviction over solidarity and associated with the student persona). In example 1 below from the LBC, for instance, a student intensifies their concession before countering with *but*, a move I coded as *diplomatic* given its balance of endorsement and contrast. In the example, the linguistic features of Engagement used to address alternative viewpoints, including the contrastive connective *but* and linguistic cues of stance (e.g., *very*, *may*), are bolded and italicized.

1. It can also be said that choosing to attend college is a significant life choice ***solely*** under ***very*** young adults' discretion. In the article, Should Everyone Go To College, the authors ***explain*** a ground rule for issues that individuals ***may*** face, "What we can do is lay out several key dimensions that seem to significantly affect the return to a college degree. These include school type, school selectivity level, school cost and financial aid, college major, later occupation, and perhaps most importantly, the probability of completing a degree" (Owen & Sawhill, 2013). These dimensions laid out by Owen and Sawhill are ***very*** beneficial to choosing a college, **but** a student **still** may face uncertainties.

The student sets up a two-part oppositional structure, as described by Barton (1995), by essentially problematizing the topic their argument addresses (see also Gere et al., 2013, p. 616). This two-part structure illustrates how contrastive connectives can simultaneously maintain solidarity with the viewpoint of a source text while also advancing a counter position.

In addition to identifying the presence of concede-counter structures, I analyzed how students executed these moves using sentence-initial contrastive connectives (e.g., *but*, *however*, *yet*, *still*, *nevertheless*) to mark a rhetorical pivot. Following Lancaster (2014), I treated these contrastive connectives as indicators of dialogic expansion, particularly when they occurred at the beginning of independent clauses introducing a counterclaim and thus giving more "informational weight" to alternative viewpoints (p. 39). This distinction became important in the analysis given that the use of sentence-initial contrastive connectives to execute concede-counter moves was statistically significant in the comparison of the two corpora. I recorded not only the frequency but also the positioning and function of these connectives as part of a broader pattern that revealed how thoroughly students engaged with other viewpoints. This allowed me to assess whether students simply acknowledged alternatives or strategically structured their arguments to create dialogic space.

The codes I developed for analyzing self-mentions in the corpora considered students' use of personal pronouns to construe their presence in writing (Aull, 2015, p. 135; Aull & Lancaster, 2014, pp. 177-178; Hyland, 2000, p. 118). The tokens of self-mentions I analyzed included personalized stance markers (e.g., *I agree*, *I disagree*, *I believe*), which, on the one hand, function to construe personalized attitudes particularly when collocating with cognitive verbs such as *feel* and *believe* as these collocations often construe a more subjective, affective stance, one that typically situates the discourse in the purview of personal experience (Aull, 2015, pp. 71-72; Hyland & Jiang, 2016, p. 260). On the other hand, personalized stance markers that construe a more objective, impersonal writerly position include self-mentions that collocate with discourse verbs such as *agree* or *disagree* (i.e., *I agree*, *I disagree*). These formulations of self-mentions often index engagement with the ideations of a source text and subsequently situate discourse in textual—as opposed to experiential—argumentation (Aull, 2015, pp. 71-72). As Lancaster (2014) suggests, these objective expressions framed by such formulations of self-mentions occur specifically when they function to situate discourse endophorically and engage alternative viewpoints (pp. 41-43; see also Aull, 2015, p. 71). These forms of expression as realized by self-mentions typically function to expand discourse dialogically, that is, to acknowledge various viewpoints. Such forms of self-mentions can affect reader positioning or, in other words, the social context construed by discourse patterns, which SFL frameworks theorize within the dimension of register (Halliday, 1978, pp. 108-109; Martin, 2015, pp. 37-39).[5]

I also coded self-mentions based on their use as text-external (i.e., exophoric) markers (e.g., *from my own experience*, *in my own experience*), which function to situate discourse "in the world outside the text" (Aull, 2015, p. 71). This positioning makes for a more affective stance, one more aligned with the writerly persona of student, construing the subjective, personalized stance common of lower-rated papers, according to previous functional analyses (Gere et al., 2013, p. 622; Lancaster, 2014, p. 37; Lancaster, 2016, p. 26; see also Martin & White, pp. 35-37). In contrast, the text-internal (i.e., endophoric) tokens of self-mentions I coded conveyed an objective stance position, one aligned with the writerly persona of novice academic, functioning to "draw attention to surrounding reasons, passages, or examples" (e.g., *I will argue*, *I will discuss*) (Aull, 2015, p. 71). Following Aull (2015), I refer to the exophoric functions of self-mentions to situate discourse externally from the text as "personal evidence

[5] According to Lancaster (2014), personalized moves as indexed by subjective self-mentions work to "negotiate meaning with a readership of peers who are persuaded by judgments backed by empirical research," while personalized forms that situate discourse exophorically typically "work to negotiate meanings with readers constructed as more authoritative than the writer" (p. 45).

markers" given that they often index ideations within the scope of personal experience (p. 84); I refer to internal functions of self-mentions as endophoric scope markers (Aull, 2015, p. 84).

Example 2 from the RFC below illustrates how I applied codes to analyze self-mentions, particularly in terms of their stance-taking function as either endophoric scope markers or personal evidence markers. In the example, personalized stance markers are bolded and italicized, while epistemic markers, connectives, and other linguistic features of engagement appear in bold to show how these linguistic choices co-construct distinct writerly personas.

2. **So, *I feel*** like technology as [sic] both affected **me** in a positive and a negative way at the same time**,** because on the positive side it is **very** easy to communicate with professors and fellow classmates off campus **but** on the negative side of things as someone who uses technology **a lot** to communicate with others it forms **a lot** of bad habits when it comes to writing in a college or a professional setting.

The use of *I feel* situates the student's proposition in personal experience, functioning exophorically as a personal evidence marker and conveying an affective stance typical of a student persona. Given this construal of stance, I coded this and similar instances of self-mentions as *affective personal stance* expression in addition to *text external*. In contrast, endophoric uses of self-mentions such as *I will argue* were coded as *text external* scope markers that structure textual argumentation and align with the novice academic persona.

To analyze students' engagement with source texts, I analyzed their use of reporting verbs which, as studies have found, are linguistic features that often index the integration of source ideations (Doolan, 2023, p. 726; Gere et al., 2013). During the initial round of analyzing the functional elements of reporting verbs in the corpora, I considered whether these tokens were reporting ideations from source texts. After determining if the verb functioned to report ideations from attributed sources and not hearsay, I then considered whether the tokens of reporting verbs were conventional to a spoken register (e.g., *says*, *talks about*, *point out*, etc.) or a written, academic register (e.g., *explains*, *claims*, *argues*, etc.) and coded these tokens accordingly. Informing the codes for reporting verbs were functional theories conceptualizing how linguistic features index the "situation type" or social context of the discourse (Halliday, 1978, p. 111).

After analyzing the register of the reporting verbs, I then analyzed in a second round the reporting verbs by examining the stance position conveyed in relation to source texts' ideations. To determine the stance position, I considered the rhetorical functions of reporting verbs as they express alignment or disalignment to reported ideations by distinguishing between two of the three main types: factive, nonfactive, and counterfactive verbs.[6] The interpersonal elements of reporting verbs function rhetorically to recontextualize ideational content from sources, with factive verbs (e.g., *prove*, *show)* indicating agreement / alignment; counter-factive verbs (e.g., *overlooks*, *fails)* indicating disagreement / disalignment; and nonfactive verbs (e.g., *discuss*, *state*), indicating no explicit evaluation of the reported ideation, thus construing a more hedged, uncertain epistemic stance (Aull, 2015, pp. 165-166; Hyland, 2000, pp. 28-29; see also Bloch, 2010, pp. 221-222; Martin & White, 2005, pp. 103, 126). Among the quantitative results related to reporting verbs, I did not include instances where students were reporting

[6] Focusing my analysis on patterns of factive and nonfactive verbs in the corpora, I excluded counterfactive verbs from the results finding that, while students used counterfactive verbs to report hearsay (Martin & White, 2005, p. 112; cf. Barton, 1993, p. 746; Chafe, 1986, p. 268), such verbs did not report information from attributed sources.

hearsay because such cases do not constitute legitimate engagement with source viewpoints (Martin & White, 2005, p. 112; see also Barton, 1993, p. 746; Chafe, 1986, p. 268).

By analyzing these linguistic resources of engagement, I aimed to characterize the stance-taking qualities the students used to expand or contract dialogic space and the writerly persona they construed within it. From these characterizations, I was able to compare the writerly persona typically construed in the two corpora of students' writing samples to examine the possible influence that linguistically informed instruction had on students' ability to construe a persona valued in academic macro-genres in their discourse practices.

5.0 Results

5.1 Self-mentions

My analysis of self-mentions in both corpora, as explained above, was two-fold. I analyzed these tokens by first examining how they functioned to situate the ideations of students' discourse. Functioning as text-external, exophoric markers, self-mentions, on the one hand, can index discourse situated "in the world outside the text" (Aull, 2015, p. 71). Text-internal (i.e., endophoric) functions of self-mentions, in contrast, "draw attention to surrounding reasons, passages, or examples" (e.g., *I will argue*, *I will discuss*) (Aull, 2015, p. 71). As illustrated in Table 6, the RFC contains a much higher frequency of self-mentions overall. This difference was statistically significant ($p < .001$). This finding suggests that students in the RFC relied more heavily on first-person references, projecting a more personalized and subjective stance; students in the LBC, meanwhile, used fewer self-mentions and generally constructed a more impersonal writerly persona.

Table 6

Self-mentions

Self-mentions	LBC	RFC
I	91	558
my	24	242
me	18	121
myself	0	27
TOTAL	133	948
Normalized Frequency	21.52	169.13

Note. Raw token counts are listed. The final row, normalized frequency per 10,000 words, presents normalized frequencies based on corpus size.

Tables 7 and 8 below illustrate the results of self-mentions by their endophoric and exophoric functions. Endophoric functions of self-mentions, which "draw attention to surrounding reasons, passages, or examples" (Aull, 2015, p. 71), occurred at similar levels in both corpora. However, exophoric self-mentions, which refer to experiences outside the text, were more frequent in the RFC, occurring approximately eight times per 10,000 words. In the LBC, they occurred just once per 10,000 words. Like the overall occurrences of self-mentions in both corpora, the difference in exophoric self-mentions was also statistically significant ($p < .001$). These results suggest that student writing samples comprising the LBC illustrated patterns of academically valued self-mention use compared to the samples comprising the RFC.

Table 7

Normalized Frequency of Exophoric Self-mentions

Exophoric Self-mentions	LBC	RFC
in my	6	21
from my	0	2
I agree	0	0
I disagree	0	0
I think	1	4
I believe	2	4
I feel	1	7
I will	0	8
Total tokens	10	46
Normalized Frequency	1.61	8.2

Note. Raw token counts are listed. The final row, normalized frequency, presents normalized frequencies per 10,000 words.

Table 8

Normalized Frequency of Endophoric Self-mentions

Endophoric Self-mentions	LBC	RFC
in my	**5**	**0**
from my	**0**	**1**
I agree	**1**	**1**
I disagree	**0**	**0**
I think	**8**	**2**
I believe	**3**	**0**
I feel	**3**	**1**
I will	**0**	**5**
Total tokens	**20**	**10**
Normalized Frequency	**3.23**	**1.78**

Note. Raw token counts are listed. The final row, normalized frequency, presents normalized frequencies per 10,000 words.

In both corpora, the most common collocate of *in my* phrases that functioned exophorically was "opinion" making the trigram in my opinion. This pattern confirms previous functional analyses of first-year undergraduate students' writing in which the trigram *in my opinion* was found to be a typical phrasal self-mention functioning exophorically (Aull, 2015, pp. 65-66). In the LBC, specifically, of the seven total instances of the phrasal self-mention *in my opinion*, two functioned exophorically while five functioned endophorically. In the RFC, all four instances of the trigram *in my opinion* functioned exophorically.

The second component of my self-mention analysis examined the stance expressions conveyed when students made their presence explicit in their texts. I coded these expressions as functioning to frame ideations either *objectively impersonal* or *subjectively affective*. Tables 9 and 10 below illustrate the results of this analysis and, specifically, how patterns of self-mentions construe students' stance positions in both corpora. As Table 9 indicates, the students whose samples comprise the RFC conveyed personalized attitudes more objectively through their use of personalized stance markers. That is, self-mentions that function to index more objectively framed expressions were slightly more frequent for the patterns of self-mentions in the RFC (NF = 0.89) compared to in the LBC (NF = 0.32). This difference, however, was not statistically significant (p = .269). At the same time, students whose samples comprise the LBC used self-mentions to frame expressions in a subjectively affective manner with less frequency (NF = approx. 3) than students whose samples comprise the RFC (NF = approx. 5), as illustrated in Table 10. Again, however, this difference was not statistically significant (p = .071).

Table 9

Normalized Frequency of Objective Personalized Stance Markers

Personalized Stance Markers	LBC	RFC
I agree	0	1
I disagree	0	0
I think	1	1
I believe	1	0
I feel	0	0
I will	0	3
Total tokens	2	5
Normalized Frequency	.32	.89

Note. Raw token counts are listed. The final row, normalized frequency, presents normalized frequencies per 10,000 words.

Table 10

Normalized Frequency of Affective Personalized Stance Markers

Personalized Stance Markers	LBC	RFC
I agree	1	0
I disagree	0	0
I think	8	5
I believe	4	4
I feel	4	8
I will	0	10
Total tokens	17	27
Normalized Frequency	2.75	4.81

Note. Raw token counts are listed. The final row, normalized frequency, presents normalized frequencies per 10,000 words.

5.2 Reporting Verbs

As illustrated in Table 11 below, writing samples in the LBC exhibited discourse conventions more aligned to academically valued ones for reporting ideations from sources at a higher frequency (NF = 30) compared to the frequency of samples comprising the RFC (NF = 21). This difference was statistically significant (p = .002), suggesting that students who received linguistically informed, language-based instruction were more likely to use reporting verbs characteristic of an academic register. (See Tables A1 and A2 in Appendix A for a complete list of the total reporting-verb tokens indexing an academic or spoken register analyzed in both corpora.)

Table 11

Normalized Frequency of Reporting Verbs Based on Register

Reporting Verbs	LBC	RFC
Academic register (e.g., *argue claim*, *discuss*)	30.26	21.05
Spoken register (e.g., *believe*, *think*, *talk about*)	11.81	14.45
Total	42.08	35.5

Note. Values represent normalized frequencies (per 10,000 words) for each reporting-verb subcategory (academic register and spoken register) and for the total in the final row.

In addition to using reporting verbs more conventional for academic argumentation, overall students whose samples comprise the LBC made more references to ideations from sources generally (NF = 42.08), with the total normalized frequency of reporting verbs exceeding the total normalized frequency of reporting information from source texts via reporting verbs in the RFC (NF = 35.5). This comparison is illustrated in Table 11. The overall difference between these frequencies, however, was not statistically significant (p = .075).

While students whose samples comprise the LBC used reporting verbs conventional for academic discourse, when disaggregating these results based on the epistemic stance students conveyed toward reported information, the corpora illustrate equal patterns for using these engagement resources (see Table 12 below). Specifically, the samples comprising the LBC show patterns of using factive reporting verbs (e.g., *show*, *prove*), which function to express alignment or agreement toward the reported information (NF = 9), and nonfactive reporting verbs, which function to display neutrality toward reported ideations from sources (NF = 21) (Aull, 2015, pp. 165-166; Hyland, 2000, pp. 28-29; cf. Martin & White, 2005, pp. 103, 126). These frequency patterns of reporting verbs, as they function to convey epistemic stance, were comparable in the RFC (NF for factive verbs = approx. 8; NF for nonfactive verbs = 19). Neither difference was statically significant (p = .480 for factive verbs; p = .474 for nonfactive). (See Tables A3 and A4 in Appendix A for a complete list of the factive and nonfactive reporting-verb tokens analyzed in both corpora.)

The most common pattern for introducing source texts in both corpora was the phrase “according to” (LBC NF = 8.57; RFC NF = 7.13). In the RFC, the reporting verbs *show* and *say* followed (30 total tokens, NF = approx. 5). The reporting verb *show* was also the second most common in the LBC (49 tokens, NF = 7.9). The third most common reporting verb in the LBC was *explain* (30 total tokens, NF = approx. 5). This was followed by *say*, the fourth most common reporting verb in the LBC (24 total tokens, NF = 3.88). Confirming the aggregated results of academic reporting verbs in the LBC, the top three most

common reporting verbs—*according to*, *show*, and *explain*—are each more conventional for academic argumentation than the second and fourth most frequent reporting verbs in the RFC, with the fourth most common reporting verb following *show* in the RFC being *talk about* (27 total tokens, NF = 4.81). In the LBC, *talk about* and its derivatives (i.e., *talking about*, *talks about*, etc.) was the eighth most common reporting verb (13 total tokens, NF = 2.10 per 10,000 words). (See Table A5 in Appendix A for a complete list of the total reporting-verb tokens analyzed in both corpora.)

These trends in the most frequently used reporting verbs also suggest that the patterns of expanding dialogic space when engaging source text ideations in the LBC were more aligned to the conventions of academic argumentation. That is, although most differences did not reach statistical significance, the patterns of reporting verbs that convey epistemic stance when engaging the ideations of source texts in some ways confirm that students whose writing samples comprise the LBC were more likely to use the reporting verbs of a written, academic register. Table 12 below, for example, illustrates the normalized frequencies of factive and nonfactive reporting verbs in both corpora, illustrating that students whose samples comprise the LBC used both factive and nonfactive reporting verbs in slightly higher frequencies than students whose samples comprise the RFC.

Table 12

Normalized Frequency of Reporting Verbs Based on Stance

Reporting Verbs	LBC	RFC
Factive (e.g., prove, point out)	8.9	7.67
Nonfactive (e.g., argue, claim)	21.04	19.09
Total	42.08	35.5

Note. Values represent normalized frequencies (per 10,000 words) for each reporting-verb type (factive and nonfactive) and for the total in the final row.

These quantitative results reflect the overall frequency of reporting verbs. Disaggregating the overall frequency by reporting verb type further confirms the broader pattern of engagement resources, as student writing in the LBC shows greater alignment with academic discourse conventions. For example, the most frequent nonfactive reporting verb in the LBC was *explain* (30 total tokens, NF = 4.85), a verb more conventional of academic discourse. In the RFC, the most common nonfactive reporting verb was one conventional of a spoken register, *say* (30 total tokens, NF = 5.35).

The LBC also showed a greater variety of reporting verb use with students whose samples comprise this corpus seeming to not favor one type of verb over another. This variety suggests that students whose samples comprise the corpus had a greater range of linguistic resources to draw on to engage ideations from source texts. The variety of reporting verbs can be seen in Table 13, which shows the percentages of the reporting verbs examined in both corpora.

Table 13

Percentage of Reporting Verbs in RFC and LBC

Reporting Verb	LBC	RFC
argu*	1.5	3.01
claim*	3.07	1.5
demonstrate*	0	0

Reporting Verb	LBC	RFC
discuss*	6.15	5.76
explain*	11.5	3.5
prove*	1.92	4.02
show*	18.8	15.07
suggest*	0	.5
mention*	3.8	1
according to	20.38	20.1
describe*	4.6	3.01
point* out	.38	2.51
talk* about	5	13.56
say*	9.2	15.07
believe*	6.53	1
said	6.92	8.5

5.3 Contrastive Connectives and Concede-counter Moves

As Tables 3 and 4 above illustrate, 22 of the 45 samples in the LBC were either implicitly or explicitly prompted to engage a counterargument while 21 of 45 samples comprising the RFC were either explicitly or implicitly prompted to execute this move. As indicated in Table 14, which shows the frequencies of concede-counter moves signaled by contrastive connectives, students whose samples comprise the LBC (NF = 11.81) used contrastive connectives to execute concede-counter moves more frequently than students whose samples comprise the RFC (NF = 8.56). Although the LBC contained a higher frequency of concede-counter moves indexed by contrastive connectives, this difference was not statistically significant (p = .085). The most common contrastive connective used to execute this move in both corpora was *but*. The second most common contrastive connective executing this move in the LBC was *however*, and in the RFC the second most common contrastive connective executing the move was *although*. (See Tables A6 and A7 in Appendix A for a complete list of the contrastive-connective tokens indexing concede-counter moves analyzed in both corpora.)

Table 14

Normalized Frequency of Concede-Counter Moves

Concede: Counter	LBC	RFC
Total tokens	73	48
Normalized Frequency	**11.81**	**8.56**

Note: The final row, normalized frequency, presents normalized frequencies per 10,000 words.

Although the overall frequency differences were modest, the results suggest subtle contrasts in how students from the two groups engaged alternative viewpoints. Specifically, as shown in Table 15, which presents both the normalized frequencies and the percentages of sentence-initial contrastive connectives relative to the total occurrences of concede-counter moves, students whose samples

comprise the RFC were less likely to use sentence-initial contrastive connectives to execute these moves (NF = 1.78); in contrast, students in the LBC used these connectives more frequently (NF = 5.01), a difference that was statistically significant (p = .003). This finding suggests that LBC writers, influenced by language-based instruction emphasizing dialogic engagement, structured their arguments in ways that more explicitly introduced contrast and concession through sentence-initial connectives.

Table 15

Concede-Counter Moves: Sentence-initial Contrastive Connectives

Concede: Counter	*LBC*	*RFC*
Normalized frequency of concede-counter moves per 10,000 words	11.81	8.56
Normalized frequency of sentence-initial contrastive connectives per 10,000 words	5.01	1.78
Percentage of Sentence-initial Contrastive-connectives per Total Concede-counter Moves	~42%	~20%

Further illustrating the patterns of deeper engagement with alternative viewpoints in the LBC are the results of my analysis examining the frequency with which contrastive connectives collocated with directly attributed sources texts. The results of this analysis can be seen in Table 16 below, which shows both the total normalized frequency of patterns of contrastive connectives functioning to execute concede-counter moves and the percentage of how often students executed this move when directly engaging ideations from sources in both corpora. According to the results from this analysis, while the differences in frequency were not substantial, students whose samples comprise the RFC were less likely to indicate concessions in direct response to source texts. In other words, students whose samples comprise the LBC used contrastive connectives more frequently to directly engage ideations from source texts while the students whose samples comprise the RFC were more likely to engage hearsay (Martin & White, 2005, p. 112; see also Barton, 1993, p. 746; Chafe, 1986, p. 268).

Table 16

Concede-Counter Moves: Response to Attributed Source Texts

Concede: Counter	**LBC**	**RFC**
Normalized frequency of concede-counter moves per 10,000 words	11.81	8.56
Normalized frequency of source text engagement per 10,000 words	3.88	1.96
Percentage of Contrastive-connectives Engaging Source Texts per Total Concede-counter Moves	~33%	~23%

In addition to the level of engagement with alternative viewpoints illustrated in these results, they also reflect the differences in the stance being construed in the corpora when examining the execution of concede-counter moves through contrastive connectives. That is, as explained above, my analysis of

patterns of contrastive connectives in the corpora was multi-tiered and involved examining the frequency of contrastive connectives to execute concede-counter moves and also the stance position conveyed when students executed these moves. Informed by the findings of the functional analysis of higher-rated upper-level undergraduate writing, the codes I developed for this dimension of the analysis included *diplomatic* and *assertive*, with the former used to code instances of concede-counter moves that are executed in a way that balances "open-mindedness and conviction" (Aull, 2020, pp. 6-7; Barton, 1995, p. 234; Lancaster, 2014, p. 40; see also Martin & White, 2005, p. 93) and the latter code being applied to instances of concede-counter moves that index a more affective, less dialogically expansive stance position, one that emphasizes conviction over solidarity. As seen in Tables 17 and 18, students whose samples comprise the LBC more often conveyed a diplomatic stance as opposed to an assertive one; in the RFC, the opposite occurs: students more often conveyed an assertive stance when executing concede-counter moves using contrastive connectives.

Table 17

Concede-Counter Moves: Indexing Assertive Stance

Concede: Counter	**LBC**	**RFC**
Normalized frequency of concede-counter moves per 10,000 words	11.81	8.56
Normalized frequency of assertive stance construal per 10,000 words	5.66	4.63
Percentage of Contrastive-connectives Indexing Assertive Stance per Total Concede-counter Moves	47.90%	54.08%

As Table 17 illustrates, students whose samples comprise the LBC had a slightly higher normalized frequency of concede-counter moves indexing an assertive stance (NF = 5.66) compared to students whose samples comprise the RFC (NF = 4.63). However, this difference was not statistically significant (p = .521). The percentage of concede-counter moves indexing an assertive stance within the total instances of the move in the LBC was approximately 48% while in the RFC it was more than half the total instances of concede-counter moves at approximately 54%. In comparison, as illustrated in Table 18, a diplomatic stance was construed in slightly more than half the instances of the total concede-counter moves in the LBC while a diplomatic stance was construed in approximately 46% of the total concede-counter moves in the RFC, a difference that likewise did not reach statistical significance (p = .095).

Table 18

Concede-Counter Moves: Indexing Diplomatic Stance

Concede: Counter	**LBC**	**RFC**
Normalized frequency of concede-counter moves per 10,000 words	11.81	8.56
Normalized frequency of diplomatic stance construal per 10,000 words	6.15	3.92
Percentage of Contrastive-	52.07%	45.79%

connectives Indexing Diplomatic Stance per Total Concede-counter Moves

6.0 Discussion

My analysis of the two corpora of students' writing samples suggests that linguistically informed instruction is associated with more frequent and rhetorically strategic use of discourse patterns that reflect the sociocognitive habits valued in academic argumentation. Specifically, students whose samples comprise the LBC used linguistic resources of engagement and stance in ways more conventional of academic discourse compared to students who did not receive this language-based instruction and whose samples comprise the RFC. The linguistic patterns of engagement valued in academic argumentation and analyzed in both corpora were, with few exceptions, more frequent in the LBC according to my analysis. These included engagement resources for opening and closing dialogic space, ranging from the use of self-mentions to convey personalized stance positions to the use of contrastive connectives to execute concede-counter moves and the use of reporting verbs to integrate ideations from sources. Among these features, four differences reached statistical significance including (a) sentence-initial concede-counter moves ($\chi^2 = 8.83$, $p = .003$), (b) reporting verbs in an academic register ($\chi^2 = 9.66$, $p = .002$), (c) total self-mentions ($\chi^2 = 704.48$, $p < .001$), and (d) exophoric self-mentions ($\chi^2 = 26.86$, $p < .001$). These results quantitatively confirm the broader pattern that students in the LBC used linguistically valued engagement features more frequently while students in the RFC relied more heavily on personalized, self-referential expressions. By using these linguistic resources of engagement and stance in ways more aligned to the patterns valued in academic discourse, students who received linguistically informed instruction, and whose samples comprise the LBC, construe a writerly persona more typical of a novice academic compared to students whose samples comprise the RFC (Barton, 1993, p. 754; Lancaster, 2014, pp. 45–46).

6.1 Stance in Concede-counter Moves

The linguistic patterns of engagement and stance that occurred more frequently in the LBC included the use of contrastive connectives to execute concede-counter moves. The stance construed in the execution of these moves was, for the most part, "rhetorically balanced" (Martin & White, 2005, pp. 125-126), conveying both "contrastiveness" and "solidarity" (Barton, 1993, p. 754; see also Aull, 2015, p. 173; Aull, 2020, pp. 6-7). Specifically, as illustrated in Table 18, of the total occurrences of concede-counter moves in the LBC, approximately 52% executed this move with a diplomatic rather than an assertive stance. In contrast, patterns of the concede-counter move, as realized by contrastive connectives in the RFC, more frequently realized an assertive stance, one that can be possibly described as "more aggressive than academic readers expect" (Aull, 2015, p. 141) with approximately 46% of the concede-counter moves in the corpus conveying a diplomatic stance and approximately 54% conveying an assertive stance (a difference that did not reach statistical significance, $p = .095$).

These different patterns of construing stance when executing concede-counter moves can be seen in examples 3 and 4 below from the corpora. The first example 3 from the LBC illustrates the characteristic pattern of conveying a diplomatic stance, one that attempts to be critical and express "contrastiveness" while simultaneously maintaining solidarity with alternative viewpoints (Barton, 1993, p. 754; see also Aull, 2015, p. 173; Aull, 2020, pp. 6-7). The contrastive connective indexing the concede-counter move

appears in bold and italics while other engagement resources construing this diplomatic stance position are bolded.

3. Shameless captures mental health and the impact it has on children and a family in a **very** realistic manner that can be **very** relatable to the public. **For example**, a hardworking father named Danny and his daughter Lily have a similar yet different relationship and experience. Danny is a divorced father who works very hard, so when he gets home from a hard day at work, he **tends** to be on edge and wants to unwind with a crisp glass of bubbling coke and whiskey, or a few. **Of course**, casually drinking can be healthy, ***however,*** her father had a dependency on the substance. For his daughter Lily, seeing her father rely heavily on a substance made her feel as though the dependency was acceptable and what to expect for herself when she becomes older.

In this example, the student acknowledges an alternative viewpoint regarding the general topic of alcoholism, conceding to this point with the emphatic *of course*, which functions to maintain solidarity although responding to hearsay. While the student uses the intensifier *very* throughout the first part of the excerpt, this concession as intensified by the emphatic *of course* functions to construe a stance position less assertive than the patterns of engagement used in collocation with the concede-counter moves in the RFC, which more frequently construed an assertive stance.

The assertive stance typical of the patterns of engagement in the RFC can be seen in example 4 below from the corpus, where contrastive connective indexing the concede-counter move appears in bold and italics while other engagement resources construing this stance are bolded.

4. There have been **many serious** underlying consequences regarding the impact visual violence has on children. There has been evidence that children who play violent games are **statistically proven** to have more aggression and anger. **According to Harvard Health Publishing article**, psychologists have conducted studies and **proven** that children are left with concerning traits after playing or watching violent video games. The traits included were neuroticism, disagreeableness, and low levels of conscientiousness. These traits are the reason why people, **most importantly** parents, **should** be concerned about the unrestrained internet access their child has. The internet does not have **many** restrictions **so anyone** of **any** age can be exposed to violent inappropriate things with just the search of a button. There have been **many** ideas from the past to solve this problem that have **failed**, ***but*** now there is a way this problem can **finally** be fixed.

Conveying an assertive, seemingly "aggressive" stance, the student addresses the problem of media exposure's effect on adolescents. The student supports their description of the problem, which they intensify at the outset with the intensifier *many* and the attitude marker *serious*. Expressing this position with conviction, the student conveys their alignment to a source using the factive verb *proven* which leads to the student's proposition about the reasons why "people, most importantly parents should be concerned." Like the stance construed at the beginning of the paragraph, by using the intensifier *most* and the attitudinal marker *importantly*, the student maintains this conviction throughout the paragraph before acknowledging the "*many* ideas from the past to solve this problem" (emphasis added). Without conceding to these ideas and in conjunction with the intensifier *many*, the student further expresses conviction for their proposition by using the counterfactive verb *failed* to describe these alternative solutions before countering them as indexed by the contrastive connective *but*.

The use of contrastive connectives by students whose samples comprise the LBC suggests that these students are developing a more dialogic view of academic argumentation. That is, as their use of these

engagement resources suggest, they are more likely to express their viewpoints with consideration of the "heteroglossic backdrop" inherent to academic discourse (Martin & White, 2005, pp. 97-99; cf. Miller et al., 2014, p. 109). Situating their viewpoints in this backdrop, these students demonstrate an ability to formulate diplomatic expressions when directly engaging alternative viewpoints via source texts as illustrated, for instance, by their use of sentence-initial contrastive connectives. According to Lancaster (2014), the use of sentence-initial contrastive connectives contributes to a novice academic stance by indicating a deeper engagement with the alternative viewpoint being conceded to and countered and, in turn, giving more "informational weight" to the ideational content of the alternative proposition (p. 39). Giving more "informational weight" creates a "critically distant stance," according to Lancaster (2014), "by suggesting that the alternative viewpoint should be taken seriously" (p. 39). In a comparative analysis of the engagement resources used by students who placed into preparatory, developmental writing courses and standard, college-level writing courses, Gere et al. (2013) similarly found that the latter group of students more frequently used sentence-initial contrastive connectives in their introductions to signal "the onset of a 'countering' move" (p. 629; see also ft. 8; Aull & Lancaster, 2014, p. 178). As illustrated in Table 15, the students whose samples comprise the LBC more frequently used sentence-initial contrastive connectives to execute concede-counter moves, a difference that was statistically significant (p = .003). This analysis suggests that these students used linguistic resources to execute concede-counter moves by giving more informational weight to the alternative viewpoints they were engaging. This quantitative difference supports the qualitative evidence that LBC students structured their arguments in ways that more explicitly introduced contrast and concession, a pattern associated with the stance of a novice academic (Lancaster, 2014). By contrast, the overall rate of concede-counter moves between the corpora did not reach significance (p = .085). This suggests that the two groups engaged alternative viewpoints at similar frequencies but differed in their level of engagement and the stance they conveyed while engaging.

These differences in the students' level of engagement with sources are illustrated in examples 5 and 6 from the LBC and RFC, respectively, in which the engagement resources the students use to address alternative viewpoints are bolded and italicized and linguistic cues of stance, such as epistemic markers, reporting verbs, and reformulation markers, appear in bold.

5. STEM jobs are in demand. Xue and Larson (2014) **show** that the "U.S Bureau of Labor Statistics 2019-29 will have 8.0% growth for STEM jobs by 2029 versus 3,7% for non-STEM jobs". ***However,*** this figure does not cover all STEM areas, and **some** fields have high unemployment. The unemployment rate for Architectures is high due to the decline in the building industry. Xue and Larson (2014) **state** that "it expects the demand for architects to grow by 1% between 2019 and 2029. Architect job growth is somewhat slower than other fields, but it's still growing in a positive direction." **Additionally**, not much study has been done on the overall STEM job market concerning those with a STEM degree that do not require a higher level of learning. These **would** be considered blue collar workers. In Ohio, **for example**, the Lordstown automobile manufacturing plant closed and put 1,500 workers on the unemployment line.

6. **Every** generation of people have had a different outlook on how easy or hard it is to build and maintain a good life. Right now the millennial generation is being questioned because they are doing things differently than previous generations such as Gen X and baby boomers. ***But*** what other **people fail** to see is the tragedies that the M generation has had to live through. Millennials have fought **countless** battles that **no other** generation has had to bear. **Unfortunately** they are **still** behind in life's successes and **no matter** how hard they work to turn things around the blame for it **all** lands in their lap. They had to deal with the aftermath of

generations before them as well as the nation wide crises that continue to happen in their lifetime.

As illustrated in these examples, which come from the introductions of students' writing samples, both students engage alternative viewpoints using contrastive connectives. In example 5 from the LBC, the student begins with a generalization about the "demand" of "STEM jobs." The student then attributes this generalization to a source text specifically, using the factive reporting verb *show* to describe the source's validity which, in turn, implies the student's alignment to the ideation of the source text (Martin & White, 2005, p. 126). Conveying a diplomatic stance, the student then qualifies the ideation and signals this qualification with the sentence-initial contrastive connective *however*. Contributing to this diplomatic stance further, the student uses a combination of epistemic markers and reporting verbs in their response to the source.

Example 6 from the RFC similarly begins with a general description about the "outlook" for "every generation" without attributing this viewpoint to a specific source (i.e., hearsay). Using the intensifier *every*, the student not only conveys a high level of conviction about the unattributed proposition but in doing so construes an assertive stance unlike the stance construal of the first example. The stance construed further contrasts the one construed in example 5 given that the student maintains this generalized description without narrowing the argumentative scope by explicitly attributing this position to a source. After acknowledging this proposition about generational outlooks, the student counters this unattributed viewpoint by identifying what they believe "people" generally "fail to see" using the counterfactive verb *fail* to report hearsay, which further contributes to the construal of an assertive stance. The pattern of situating arguments in a "world of discourse" by directly attributing alternative viewpoints to the ideations of a source rather than hearsay was reflected in the LBC students' more endophoric use of self-mentions, which tended to orient readers to their developing arguments rather than to personal experience.

6.2 Reporting Verbs and Dialogic Space

Further illustrating facility with engagement patterns of academic argumentation, students whose samples comprise the LBC were also more likely to use reporting verbs in ways that align with the persona of the novice academic. Specifically, reporting verbs in a written, academic register occurred more frequently in the LBC than in the RFC, a statistically significant difference (p = .002). This quantitative pattern complements the qualitative finding that LBC writers drew on verbs such as *explain*, *argue*, and *show*, while RFC writers favored more conversational verbs such as *say* and *talk about*. Together, these trends suggest that linguistically informed instruction supported students' awareness of how lexical choice in reporting verbs indexes alignment and evidential stance, key aspects of the novice academic persona.

The use of reporting verbs by students who received linguistically informed instruction also suggests that their ability to engage sources more closely resembles that of students prepared for college-level writing. This interpretation is consistent with Gere et al. (2013), who found that students placed into developmental writing courses were less likely than their college-ready peers to use reporting verbs conventional of academic discourse, verbs typical of written, academic registers (e.g., *explains*, *claims*, *argues*); instead, these students rely more on verbs typical of spoken registers (e.g., *says*, *believes*, *thinks*) (pp. 619-620). Moreover, Gere et al. (2013) found that students prepared for college-level writing not only used these academically conventional reporting verbs but also made "frequent references to the source text" (p. 622). The pattern in the LBC parallels this distinction with students

whose samples comprise the LBC also making their texts dialogic through these engagement patterns as suggested by the total reporting verbs occurring in the LBC compared to in the RFC (see Tables 11 and 12). The overall higher frequency of reporting verbs in the LBC, in other words, suggests that students who received linguistically informed instruction were more likely to make their texts dialogic by frequently referencing the ideations of source texts.

This higher frequency of reporting verbs in aggregate is noteworthy when considering the prompt instructions to which students' samples were responding. As illustrated in Tables 3 and 4, seven of the eight prompts to which writing samples comprising the LBC responded required source use, whether primary or secondary sources. In sum, a total of 39 samples were responding to a prompt requiring source use of some form. In contrast, 10 of the 11 prompts to which the samples in the RFC responded required the use of sources, making for a total of 42 samples. Therefore, although more samples in the RFC were required to use sources, students whose samples comprise the LBC more often made their texts dialogic by using reporting verbs to engage ideations from source texts.

Reflecting the variety of reporting verbs used in the corpora as illustrated in Table 13, example 7 from the LBC shows the student drawing on a range of nonfactive reporting verbs to engage the ideations of sources including *say*, *states*, and *explained*, which appear in bold and italics. Additional functional elements such as epistemic markers, reformulations, and contrastive connectives, which the student uses to negotiate a stance position in relation to the source's ideations, appear in bold.

7. Another struggle that **some** students are not prepared to take on is the financial hardships that they can incur. An article outlining the annual costs associated with various types of colleges ***states*** that "the average cost of in-state tuition alone is $9,349" (Hanson, 2022, para.4). The article goes on to ***say*** that "additional expenses will add another $16,138 for a total of $25,487" (Hanson, 2022, Para.8). To a young adult fresh out of high school, those numbers **may seem** affordable. Another resource that gives information on the costs of higher education, is the College Scorecard. Students and their families can find information on the net price, loan default rates, and median borrowing defaults for their prospective colleges. **However**, Owen & Sawhill (2013), ***explained*** that the "College Scorecard is an admirable effort to help students and parents navigate the complicated process of choosing a college" (p.7), **but** then went on to add that it "may not go far enough in improving transparency and helping students make the best possible decisions" (Owen, & Sawhill, 2013, p.7). Referring to the previously mentioned resources, the loss of wages from taking time from work to attend school or study and complete assignments, and the incurred interest on student loans, were not factored into the estimates. There are more costs than what is presented to the potential students, which **could** lead to financial despair. **In other words**, there is adequate room left for improvements and clarifications to the information that these systems give.

As expressed in the topic sentence, the student argues that there are various reasons that students should not be encouraged to attend college. To argue this position, the student uses source texts to both support their claim—with this claim qualified through the hedge token *some* as stated in the topic sentence—and to highlight various competing viewpoints on the topic, a conventional move as found in higher-rated papers by upper-level undergraduates. Through the use of various reporting verbs, the student demonstrates a repertoire of linguistic resources to engage source ideations. The student, likewise, demonstrates facility in "underscoring points of disagreement" which, as some studies of engagement resources in students' writing suggest, illustrates "critical thinking" in addition to contributing to an overall "adversarial style" (Lancaster, 2014, p. 40; Lancaster, 2016, p. 27; see also Aull, 2015, p. 166). In conjunction with the use of reporting verbs, the student also demonstrates an

awareness to clarify their intended meaning by using the reformulation marker *in other words* to reinterpret the ideations they presented throughout the paragraph.

6.3 Self-mentions and Academic Stance

Reflecting the stance construed by concede-counter moves, students whose samples comprise the RFC were more likely to convey an affective, personalized stance through their use of self-mentions by, for example, using these engagement resources to situate discourse in "the world outside the text," that is, exophorically in the context of personal experience (Aull, 2015, p. 71). In comparison, the pattern of self-mentions in the LBC typically functioned endophorically by "draw[ing] attention to surrounding reasons, passages, or examples" (Aull, 2015, p. 71). Exophoric self-mentions, which refer to experiences outside the text, were likewise significantly more likely to occur in the RFC ($p < .001$). These quantitative findings support my qualitative analysis that students whose samples comprise the RFC more often projected a personalized, affective stance, whereas students who received linguistically informed instruction (LBC) used self-mentions more sparingly and typically endophorically by integrating them into their arguments and analyses rather than in personal narratives.

These functions can be seen below in examples 8 and 9 from the LBC and RFC, respectively, in which the most common trigram in both corpora, *in my opinion*, functions endophorically in example 8 from the LBC while the trigram functions exophorically in example 9 from the RFC. The trigram appears in bold and italics while other engagement features, including epistemic markers, attitude markers, other instances of self-mentions, and contrastive connectives appear in bold.

8. **My** counter argument is that the one thing that is **better** than Age of Extinction in Transformers is the character development and Sam as a character ***in my opinion***. Because it's about the main character Sam growing up throughout the entire Transformers serious [sic]. Sam develops overtime getting to understand more about responsibility and life itself. Sam had to find out the **hard** why [sic] by seeing it through **all** the chaos that was happening between both the Autobots and Deceptions.

9. **But** when it comes to college writing. **I** had to write some 1000-word essays, which is not **too bad** for **me** now, **but** when I started, I was scared, not going to lie. **My** college writing teacher is professor […]. **I will** be referencing the second writing assignment that I worked on; we started the project on writing with an in-class writing prompt on how we communicate to our peers or friends to get a general idea of what the assignments will be about. After the in-class work, he would tell us that we would have to sign up for a conference, and that would give us around a week to come up with a rough draft and to take to the forum for him to look over and give his feedback which ***in my opinion*** was **super helpful** genially [sic] speaking because when it explained to **me** face-to-face **I** can get a better grasp of what **I** need to fix and what areas **I** need to improve where my high school teacher didn't do that she would send me back a marked-up document sense [sic] I was schooled online.

In example 8, the student uses the trigram *in my opinion* endophorically, specifically to respond to a counterargument. Although the counterargument is not explicated, that is, attributed to a specific source, the student's use of the self-mention *in my opinion* is situated not only as a response to potential alternative viewpoints but also in the student's analysis of a primary source. By situating the self-mention within textual ideations, as opposed to experiential ones, the student uses the engagement resource in a more academically valued form. In fact, the trigram *in my opinion* as it functions to open

dialogic space by responding to a counterargument could be said to be also functioning to engage the counterargument diplomatically or, in other words, to maintain solidarity with an opposing viewpoint. In example 9, the trigram *in my opinion* could, likewise, be seen to function as a means of mitigating a critical proposition, specifically a critical judgment about the student's high school teacher. While this function lends itself to a more academically valued form of the self-mention, the additional function of the trigram, along with other self-mentions such as *I*, situates the student's ideations within their personal experience. In this way, the student construes a writerly persona more typical of lower-rated writing.

6.4 Implications for Language-based Instruction

This study contributes to calls for more intentional language-based instruction in postsecondary writing pedagogy, particularly instruction that develops students' "critical language awareness" (Gere et al., 2021; Shapiro, 2022). Despite these calls, college-level writing instruction still tends to prioritize macro-level rhetorical concerns while overlooking the sentence- and clause-level linguistic choices that shape meaning in academic genres (Aull, 2015, 2020; Crossley, 2020; Moore, 2021). This instructional gap can disproportionately affect students placed in developmental writing courses, who often benefit from more explicit guidance in navigating the language of academic argumentation (Aull, 2015; Ferris & Eckstein, 2020; Moore, 2021; Peele, 2018; Slagle, 2023).

Engagement patterns in the LBC suggest that the linguistically informed instruction served, to some extent, as a mediational means for supporting students' development of an academic writerly stance, one approximating a novice academic. The instruction seemed to help students adopt the valued forms of academic argumentation and to internalize some of the sociocognitive habits for "thoughtful dialogue" and "civil discourse" (Aull, 2017, p. 4; Aull, 2020, p. 5). The engagement patterns found in the LBC, in this way, suggest that students who are underprepared for college-level writing can benefit from direct language-based instruction, specifically instruction that connects language-level linguistic patterns to the socio-rhetorical moves valued in academic argumentation. Patterns including the significantly higher frequency of sentence-initial concede-counter moves and academic reporting verbs in the LBC illustrate that such instruction may foster students' awareness of how linguistic choices enact the rhetorical moves valued in academic discourse.

Research in applied linguistics likewise shows that both students who are English Language Learners and developmental writers who are native speakers of English encounter similar challenges when using engagement resources effectively in academic contexts. These difficulties include expressing epistemic certainty as both groups tend to intensify their claims (Aull & Lancaster, 2014, p. 178; see also Aull, 2015, pp. 89-90; Candari et al., 2015, p. 196; Gere et al., 2013, pp. 619-620; Hyland & Milton, 1997, pp. 192-193; Li & Wharton, 2012, p. 353; Ringbom, 1998, p. 50). Other notable similarities include using features characteristic of a spoken register in their writing, such as phrasal reporting verbs (Gere et al., 2013, pp. 619-620; Hyland & Milton, 1997, p. 192, 198). The results of the current research extend this work by suggesting that students who received direct language-based instruction wrote in ways that more often aligned with the socio-rhetorical norms of academic argumentation—not only through their more frequent use of contrastive connectives to execute concede-counter moves but also through their use of reporting verbs characteristic of a formal, written academic register—compared to the writing of students who did not receive this instruction.

The language-based instruction described for the current research, informed by SFL and the Engagement system, appears to have supported students in shifting toward a more heteroglossic,

rhetorically attuned mode of argumentation. That is, they more frequently acknowledged and positioned themselves in relation to other viewpoints, a characteristic of the novice academic stance valued in higher-rated undergraduate writing. While the findings do not demonstrate a causal effect of direct language-based instruction, they highlight the potential affordances for helping students access and practice the linguistic resources that "demystify" academic genres, making the conventions for argumentation visible and teachable (Aull, 2015, p. 10; Hardy et al., 2015, p. 3; Schleppegrell, 2013). For students placed in developmental writing courses, such instruction may be especially important, providing access to the discourse patterns and metalanguage necessary for success in academic contexts.

Accordingly, this study adds to prior research by demonstrating the promise that functionally informed language instruction has on helping students designated as developmental use language in academically valued ways, specifically in ways found to be common in highly rated writing by upper-level students. In doing so, it also highlights the benefits of pedagogies drawn from applied linguistics, such as English for Academic Purposes (EAP) and the Sydney School, for developing the linguistic repertoire of students who are native speakers of English (see, for example, Aull, 2015, pp. 43-44).

6.5 Implications for Task and Prompt Design

By integrating methodologies from applied linguistics with the "contextualist paradigms" typical of writing studies, this research adds to existing understandings of how assignment and task design shape students' uptake of linguistic resources for engagement (Aull, 2020, p. 21; see also Aull, 2015, 2019; Crossley, 2020, p. 417). Prior studies have found that task design significantly influences the rhetorical and linguistic features of student writing. For instance, Aull (2015) shows that prompts requiring students to respond to a source—rather than an open-ended question—lead to less generalized claims and fewer instances of self-mentions, features associated with more advanced academic discourse (pp. 62-63). Similarly, Gere et al. (2013) found that source-based prompts used for placement at the University of Michigan elicited more references to source texts and fewer appeals to personal experience.

Research in applied linguistics further suggests that tasks inviting explanatory macro-genres are more likely to prompt linguistic patterns aligned with the conventions of academic writing than those soliciting argumentative responses. In her analysis of student writing across multiple macro-genres, Aull (2017) found that explanatory genres, such as annotated bibliographies and visual analyses, elicited more elaborate and informational discourse while argumentative genres prompted generalized and interpersonal language. These findings suggest that explanatory tasks often encourage linguistic patterns more typical of upper-level academic writing (Aull, 2019, 2020; cf. Nesi & Gardner, 2012; Staples et al., 2016).

Building on this research, the present study extends these findings by illustrating how task design influenced students' use of engagement resources, especially in relation to self-mentions. In the RFC, 19 samples (~42%) responded to prompts that explicitly encouraged personal experience—accounting in part for the higher frequency of self-mentions, a difference that was statistically significant ($p < .001$). This pattern was particularly evident for exophoric self-mentions, or references to experiences outside the text, which also occurred significantly more often in the RFC ($p < .001$). In contrast, only four samples (~9%) in the LBC responded to such prompts. A less likely explanation, given the distribution of macro-genres across the corpora, is that argumentative tasks inherently prompted the increased use of self-mentions in the RFC. As Tables 3 and 4 show, 34 LBC samples and 33 RFC samples responded to

argumentative prompts. The higher frequency of self-mentions in the RFC, then, appears more related to the explicit solicitation of personal experience than to the macro-genre alone. More importantly, however, the functions of self-mentions differed meaningfully across corpora. Students in the LBC used self-mentions in rhetorically appropriate ways, that is, frequently endophorically to refer to their textual discourse. In contrast, students whose samples comprise the RFC more often used self-mentions to convey personal attitudes or judgments. This contrast illustrates the value of linguistically informed instruction in helping students align their writing with academic expectations.

The patterns associated with concede-counter moves and contrastive connectives also suggest a more complex relationship between prompt design and engagement strategies. As shown in Tables 14, 15, and 16, LBC students were more likely to use contrastive connectives to execute concede-counter moves in rhetorically strategic ways, even though 22 LBC and 21 RFC samples were written in response to prompts explicitly inviting counterarguments. Given this similarity in task design, one would expect the overall frequency and distribution of concede-counter moves to be comparable between the corpora; however, students whose samples comprise the LBC more frequently used sentence-initial contrastive connectives to execute concede-counter moves, a statistically significant difference (p = .003). This finding complicates the expectation that prompts alone determine uptake. Instead, it appears that linguistically informed instruction supported students in making more diplomatically nuanced and source-aware concessions and counters.

Taken together, these findings illustrate that task and prompt design shape students' rhetorical and linguistic choices in nuanced ways. These include both enabling and constraining opportunities to engage alternative viewpoints. They also suggest that language-based instruction can support students in making those choices more effectively. By explicitly teaching the linguistic resources that facilitate the conventional rhetorical move of addressing counterarguments, ranging from contrastive connectives to stance markers, writing instruction may help cultivate the habits of openness, metacognition, and rhetorical awareness identified as goals in the *Framework for Success in Postsecondary Writing* (Council of Writing Program Administrators et al., 2011, pp. 4-5). As Aull (2017) notes, genres and tasks not only prompt particular discursive patterns of discourse but also cultivate sociocognitive habits. Explicit instruction that demystifies how language features enact rhetorical functions can thus help students understand the meaning-making possibilities within genres and move them toward meeting the Writing Program Administration outcomes for rhetorical knowledge and knowledge of conventions.

7.0 Conclusion and Directions for Future Research

Linguistically informed instruction appears to support students in developmental writing courses as they learn to engage more effectively with academic discourse, helping them to construct stance in ways that more closely reflect the values of argumentation in higher education. By attending to the interpersonal dimensions of language via direct instruction, this study suggests that such instruction may foster underprepared students' linguistic competence and rhetorical awareness. Various limitations, however, qualify these findings.

While this study illustrates several discourse features valued in academic macro-genres, it does not fully account for the broader range of textual features commonly associated with writing quality, such as cohesion, lexical diversity, and syntactic complexity. These features are frequently used in writing assessment research to explain variation in holistic scores and perceived quality (Brown & Aull, 2017; Crossley & Kim, 2022; Witte & Faigley, 1981). Future research might build on these studies by examining how explicit instruction in cohesion, phrasal density, and lexical precision influences students' uptake. At

the same time, this study partially addressed register-related features, which previous studies also suggest is a key dimension of writing quality (Doolan, 2023). The interpersonal features of reporting verbs and self-mentions, for example, were coded for their rhetorical functions, including whether self-mentions were used endophorically to situate ideas within the text or exophorically to reference personal experience. Similarly, the register of source attribution was analyzed through students' use of reporting verbs more typical of academic contexts. These register-sensitive analyses provide insight into how students' linguistic choices reflect and construct academic stance, but future work could expand on this by integrating additional lexico-grammatical and discourse-level variables to more comprehensively model quality in developmental students' writing after students receive linguistically informed instruction.

Methodologically, the study employed normalized frequency measures and two-sided Fisher's Exact Tests to compare the distribution of engagement features between the corpora. Normalized frequency is a common approach to calculating differences in corpus linguistics, particularly when analyzing smaller-sized corpora (see, for example, Aull, 2015; Gries, 2010, p. 5; Römer & Wulff, 2010, pp. 119-120). Fisher's Exact Test is also well suited for smaller corpora because it does not assume normally distributed data and provides a probability of association between categorical variables (Gries, 2010, pp. 12-14). Within this study's limited sized corpora, the test provided a means to examine whether the distributional differences in key engagement features corresponded with the patterns I identified qualitatively. The features that the test found to be statistically significant included sentence-initial concede-counter moves, reporting verbs in an academic register, and exophoric self-mentions. At the same time, several other engagement features, including diplomatic and assertive stance types and the subcategories of reporting verbs, did not reach statistical significance, suggesting that not all linguistic differences observed qualitatively were supported by the statistically quantitative results. This, in addition to the small size of the corpora, limits the generalizability of the study's findings. The results therefore should be interpreted as indicating patterns that complement, rather than confirm, the qualitative analysis. In other words, quantitative data including normalized frequencies and tests of statistical significance serve to support the descriptive claims of my qualitative analysis and should be understood within the study's exploratory design.

While the present study draws correlations between linguistically informed instruction and students' use of engagement features, it does not fully disentangle these effects from the influence of prompt design. Future research could build on the current study by more precisely parsing the effects of instruction from those of prompt and task features. One promising approach comes from Black's (2024) use of visual network projections and Exponential Random Graph Modeling (ERGM) to analyze how students cited sources across assignments. This method would assist in mapping patterns of language as networks, and then statistically test whether variables such as prompt design or instruction explain the structure of those networks. Applying similar methods to patterns of stance and engagement would allow researchers to model how instructional factors and prompt features interact to shape students' linguistic and rhetorical choices. Such modeling could offer more nuanced insight into the influences of instruction and prompt design on students' uptake of engagement resources.

Author Biography

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References

Anthony L. (2019). *AntConc* (Version 3.2.4mac). Waseda University. https://www.laurenceanthony.net/software/antconc/

Aull, L. (2015). *First-year university writing: A corpus-based study with implications for pedagogy*. Palgrave Macmillan. https://doi.org/10.1057/9781137350466

Aull, L. (2017). Corpus analysis of argumentative versus explanatory discourse in writing task genre. *Journal of Writing Analytics, 1*, 1-47. http://dx.doi.org/10.37514/JWA-J.2017.1.1.03

Aull, L. (2019). Linguistic markers of stance and genre in upper-level student writing. *Written Communication*, *36*(2), 267-295. http://dx.doi.org/10.1177/0741088318819472

Aull, L. (2020). *How students write: A linguistic analysis.* Modern Language Association of America.

Aull, L. L., & Lancaster, Z. (2014). Linguistic markers of stance in early and advanced academic writing: A corpus-based comparison. *Written Communication*, *31*(2), 151-183. http://dx.doi.org/10.1177/0741088314527055

Aull, L. L., Bandarage, D., & Miller, M. R. (2017). Generality in student and expert epistemic stance: A corpus analysis of first-year, upper-level, and published academic writing. *Journal of English for Academic Purposes*, *26*, 29-41. http://dx.doi.org/10.1016/j.jeap.2017.01.005

Barton, E. L. (1993). Evidentials, argumentation, and epistemological stance. *College English, 55*(7), 745-769. https://doi.org/10.2307/378428

Barton, E. L. (1995). Contrastive and non-contrastive connectives. *Written Communication, 12*(2), 219-239. https://doi.org/10.1177/0741088395012002003

Bawarshi, A. (2006). Sites of invention: Genre and the enactment of first-year writing. In P. Vandenberg, S. Hum, & J. Clary-Lemon (Eds.), *Relations, Locations, Positions: Composition Theory for Writing Teachers* (pp. 103-37). National Council of Teachers of English.

Black, K. (2024). Mapping the conversation: A social network perspective on intertextual reading and writing. *The Journal of Writing Analytics, 7*, 1-48. http://dx.doi.org/10.37514/JWA-J.2024.7.1.01

Bloch, J. (2010). A concordance-based study of the use of reporting verbs as rhetorical devices in academic papers. *Journal of Writing Research, 2*(2), 219-244. http://dx.doi.org/10.17239/jowr-2010.02.02.7

Brown, D. W., & Aull, L. L. (2017). Elaborated specificity versus emphatic generality: A corpus-based comparison of higher- and lower-scoring advanced placement exams in English. *Research in the Teaching of English, 51*(4), 394-417. http://dx.doi.org/10.58680/rte201729118

Brown, D. W. (2011). Dialect and register hybridity: A case from schools. *Journal of English Linguistics, 39*(2), 109-134. https://doi:10.1177/0075424211398659

Butler, P. (2008). *Out of style: Reanimating stylistic study in composition and rhetoric*. Utah State University Press.

Candari, D., Bayyurt, Y., & Marti, L. (2015). Authorial presence in L1 and L2 novice academic writing: Cross-linguistic and cross-cultural perspectives. *Journal of English for Academic Purposes, 20*, 192-202.

Chafe, W. (1986). Evidentiality in English conversation and academic writing. In W. Chafe, & J. Nichols (Eds.), *Evidentiality: The linguistic coding of epistemology* (pp. 261-272). Ablex Publishing Corporation.

Connors, R. (2000). The erasure of the sentence. *College Composition and Communication, (52)*1, 96-128.

Crossley, S. A. (2020). Linguistic features in writing quality and development: An overview. *Journal of Writing Research, 11*(3), 415-443. http://dx.doi.org/10.17239/jowr-2020.11.03.01

Crossley, S. A., & Kim, M. (2022). Linguistic features in writing quality and development: Longitudinal approach. *Journal of Writing Analytics, 6*(1), 59-93. http://dx.doi.org/10.37514/JWA-J.2022.6.1.04

Doolan, S. M. (2023). Source-based L1 student writing development: Analyzing the relationships among functional dimensions of source use and the quality of source use. *Written Communication*, *40*(2), 720-753.

Fearn, L., & Farnan, N. (2007). When is a verb? Using functional grammar to teach writing. *Journal of Basic Writing, 26*, 63-87. https://doi.org/10.37514/JBW-J.2007.26.1.05

Ferris, D., & Eckstein, G. (2020). Language matters: Examining the language-related needs and wants of writers in a first-year university writing course. *Journal of Writing Research, 12*(2), 321-364. https://doi.org/10.17239/jowr-2020.12.02.02

Council of Writing Program Administrators, National Council of Teachers of English, & National Writing Project. (2011). *Framework for success in postsecondary writing*. U.S. Department of Education. https://files.eric.ed.gov/fulltext/ED516360.pdf

Gere, A. R., Aull, L. L., Lancaster, Z., Perales Escudero, M., & Vander Lei, E. (2013). Local assessment: Using genre analysis to validate directed self-placement. *College Composition and Communication, 64*(4), 605-633.

Gere, A. R. (2019). *Developing writers in higher Education: A longitudinal study*. University of Michigan Press. https://doi.org/10.3998/mpub.10079890

Gere, A. R., Curzan, A., Hammond, J. W., Hughes, S., Li, R., Moos, A., Smith, K., Van Zanen, K., Wheeler, K. L., & Zanders, C. J. (2021). Communal justicing: Writing assessment, disciplinary infrastructure, and the case for critical language awareness. *College Composition and Communication, 72*(3), 384-412.

Gries, S. (2010). Useful statistics for corpus linguistics. In A. S. Pérez, & M. A. Sánchez (Eds.), *A Mosaic of Corpus Linguistics: Selected Approaches* (pp. 269-91). Peter Lang.

Halliday, M. (1978). *Language as social semiotic*. Edward Arnold.

Hardy, J. A., Römer, U., & Roberson, A. (2015). The power of relevant models: Using a corpus of student writing to introduce disciplinary practices in a first year composition course. *Across the Disciplines, 12*(1). https://doi.org/10.37514/atd-j.2015.12.1.01

Helberg, A., Poznahovska, M., Ishizaki, S., Kaufer, D., Werner, N., & Wetzel, D. (2018). Teaching textual awareness with DocuScope: Using corpus-driven tools and reflection to support students' written decision-making. *Assessing Writing, 38*, 40-45.

Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. Longman Publishers.

Hyland, K., & Jiang, F. (2016). Change of attitude? A diachronic study of stance. *Written Communication, 33*(3), 251-274.

Hyland, K., & Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing, 6*(2), 183-205.

Kolln, M., & Hancock, C. (2005). The story of English grammar in United States schools. *English Teaching: Practice & Critique, 4*(3), 11-31.

Lancaster, Z. (2014). Exploring valued patterns of stance in upper-level student writing in the disciplines. *Written Communication, 31*(1), 27-57. http://dx.doi.org/10.1177/0741088313515170

Lancaster, Z. (2016). Expressing stance in undergraduate writing: Discipline-specific and general qualities. *Journal of English for Academic Purposes, 23*, 16-30.

Li, T., & Wharton, S. (2012). Metadiscourse repertoire of L1 Mandarin undergraduates writing in English: A cross-contextual, cross-disciplinary study. *Journal of English for Academic Purposes*, *11*(4), 345-356.

MacDonald, S. P. (2007). The erasure of language. *College Composition and Communication*, *(58)*4, 585-625.

Martin, J. R. (2015). One of three traditions: Genre, functional linguistics, and the Sydney School. In N. Artemeva, & A. Freedman (Eds.), *Genre Studies Around the Globe: Beyond Three Traditions* (pp. 31-79). Inkshed.

Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English.* Palgrave Macmillan.

Miller, R. T., Mitchell, T. D., & Pessoa, S. (2014). Valued voices: Students' use of engagement in argumentative history writing. *Linguistics & Education, 28*, 107-120.

Moore, M. (2021). Grammatical concepts and metalinguistic awareness in first-year college writers: A study of reading journals. *Journal of College Reading and Learning*, *51*(3), 178-202. https://doi.org/10.1080/10790195.2020.1867670

Myhill, D., & Newman, R. (2016). Metatalk: Enabling metalinguistic discussion about writing. *International Journal of Educational Research, 80*, 177-187. https://doi.org/10.1016/j.ijer.2016.07.007

Nesi, H., & Gardner, S. (2012). *Genres across the disciplines: Student writing in higher education*. Cambridge University Press.

Ohio Department of Higher Education. (n.d.). *Ohio Transfer 36: English composition*. https://transfercredit.ohio.gov/educational-partners/educational-partner-initiatives/ohio-transfer-36/learning-outcomes

Peele, T. (2018). Is this too polite? The limited use of rhetorical moves in a first-year corpus. *Journal of Writing Analytics, 2*, 78-95. http://dx.doi.org/10.37514/JWA-J.2018.2.1.04

Rhodes, K. (2019). Feeling it: Toward style as culturally structured intuition. *College Composition and Communication*, *71*(2), 241-267. http://dx.doi.org/10.58680/ccc201930422

Ringbom, H. (1998). Vocabulary frequencies in advanced learner English: A cross-linguistic approach. In S. Granger (Ed.), *Learner English on computer* (pp. 41-52). Longman. http://dx.doi.org/10.4324/9781315841342-3

Römer, U., & Wulff, S. (2010). Applying corpus methods to written academic texts: Explorations of MICUSP. *Journal of Writing Research*, *2*(2), 99–127. https://doi.org/10.17239/jowr-2010.02.02.2

Rose, D. & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney School*. Equinox Publishing.

Schleppegrell, M. J. (2013). The role of metalanguage in supporting academic language development. *Language Learning, 63*, 153-170. https://doi.org/10.1111/j.1467-9922.2012.00742.x

Shapiro, S. (2022). A kairotic moment for CLA? Response to Anne Ruggles Gere et al.'s "Communal Justicing: Writing assessment, disciplinary infrastructure, and the case for critical language awareness." *College Composition & Communication, 74*(2), 373-79. https://doi.org/10.58680/ccc202232280

Slagle, T. (2023). Explicit language instruction: Developing writers' metalinguistic awareness to facilitate transfer. *Journal of Basic Writing*, *42*(2), 6-34. https://doi.org/10.37514/JBW-J.2023.42.2.04

Staples, S., Egbert, J., Biber, D., & Gray, B. (2016). Academic writing development at the university level: Phrasal and clausal complexity across level of study, discipline, and genre. *Written Communication, 33*(2), 149-183. http://dx.doi.org/10.1177/0741088316631527

Yoon, H.-J., & Römer, U. (2020). Quantifying disciplinary voices: An automated approach to interactional metadiscourse in successful student writing. *Written Communication*, *37*(2), 208-244. http://dx.doi.org/10.1177/0741088319898672

Witte, S., & Faigley, L. (1981). Coherence, cohesion, and writing quality. *College Composition and Communication*, *32*, 189-204. http://dx.doi.org/10.58680/ccc198115912

Appendix A

Functional Linguistic Tokens in LBC and RFC

Table A1

Reporting-verb Tokens in LBC and RFC: Academic Register

Tokens	LBC	RFC
according to	53	40
argu*	4	6
claim*	8	3
demonstrate*	0	0
describe*	12	6
discuss*	16	15
explain*	30	7
mention*	10	2
prove*	5	8
show*	49	30
suggest*	0	1
Total (raw tokens)	**187**	**118**
Normalized Frequency (per 10,000 words)	**30.26**	**21.05**

Table A2

Reporting-verb Tokens in LBC and RFC: Spoken Register

Tokens	LBC	RFC
believe*	17	2
point* out	1	5
said	18	17
say*	24	30
talk* about	13	27
Total (raw tokens)	**73**	**81**
Normalized Frequency (per 10,000 words)	**11.81**	**14.45**

Table A3

Factive Reporting-verb Tokens in LBC and RFC

Tokens	LBC	RFC
prove*	5	8
point* out	1	5
show*	49	30
Total (raw tokens)	**55**	**43**
Normalized Frequency (per 10,000 words)	**8.9**	**7.67**

Table A4

Nonfactive Reporting-verb Tokens in LBC and RFC

Tokens	LBC	RFC
argu*	4	6
believe*	17	2
claim*	8	3
demonstrate*	0	0
discuss*	16	15
explain*	30	7
said	18	17
say*	24	30
talk* about	13	27
Total (raw tokens)	**130**	**107**
Normalized Frequency (per 10,000 words)	**21.04**	**19.09**

Table A5

Total Reporting-verb Tokens in LBC and RFC

Tokens	LBC	RFC
according to	53	40
argu*	4	6
believe*	17	2
claim*	8	3
demonstrate*	0	0

Tokens	LBC	RFC
describe*	12	6
discuss*	16	15
explain*	30	7
mention*	10	2
point* out	1	5
prove*	5	8
said	18	17
say*	24	30
show*	49	30
suggest*	0	1
talk* about	13	27
Total (raw tokens)	**260**	**199**
Normalized Frequency (per 10,000 words)	**42.08**	**35.5**

Table A6

LBC: Contrastive Connectives Indexing Concede-counters

Contrastive Connectives	Total Concede-counters	Sentence-initial Concede-counters	Direct Attribution of Source Text	Indexing Assertive Stance	Indexing Diplomatic Stance
although	4	3	0	3	1
but	40	5	15	18	22
however	23	19	7	1	11
while	6	4	2	2	4
Total (raw tokens)	**73**	**31**	**24**	**35**	**38**
Normalized Frequency (per 10,000 words)	**11.81**	**5.01**	**3.88**	**5.66**	**6.15**
Percentage of Total Concede-counters	**N/A**	**42.42%**	**32.85%**	**47.90%**	**52.07%**

Table A7

RBC: Contrastive Connectives Indexing Concede-counters

Contrastive Connectives	Total Concede-counters	Sentence-initial Concede-counters	Direct Attribution of Source Text	Indexing Assertive Stance	Indexing Diplomatic Stance
although	6	3	1	1	5
but	34	2	7	23	11
however	5	3	1	1	4
while	3	2	2	1	2
Total (raw tokens)	**48**	**10**	**11**	**26**	**22**
Normalized Frequency (per 10,000 words)	**8.56**	**1.78**	**1.96**	**4.63**	**3.92**
Percentage of Total Concede-counters	**N/A**	**20.79%**	**22.89%**	**54.08%**	**45.79%**