# J of W Analytics

### Corpus Analysis of Argumentative Versus Explanatory Discourse in Writing Task Genres

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#### **Structured Abstract**

**Background**: Contemporary research in composition studies emphasizes the constitutive power of genres. It also highlights the prevalence of the most common genre in students' transition into advanced college writing, the argumentative essay. Consistent with most research in composition, and therefore most studies of general, first-year college writing, such research has primarily emphasized genre context. Other research, in international applied linguistics research and particularly English for Academic Purposes (EAP), has focused less on first-year writers but has likewise shown the frequent use of argumentative essays in undergraduate writing. Together, these studies suggest that the argumentative essay is represented more than other genres in early college writing development, and that any given genre favors particular discourse features in contrast with other genres students might write. A productive next step, but one not yet realized, is to bring these discussions together, in research that uses contextinformed corpus analysis that investigates students' assignment contexts and analyzes the discourse that characterizes the tasks and genres students write. This study offers an exploratory, contextinformed analysis of argumentative and explanatory writing by first-year college writers. Based on the corpus findings, the article underscores discourse as an integral part of the sociocognitive practices embedded in genres, and accordingly considers new ways to conceptualize student writing genres and to inform instruction and assignment design.



- **Research questions:** Four questions guided the inquiry:
  - (1) What are the key discursive practices associated with annotated bibliographies and argumentative essays written by the same students in the same course?
  - (2) What are the key discursive practices associated with visual analyses and argumentative essays written by the same students in the same course?
  - (3) What are the key discursive practices associated with the two argumentative tasks in comparison with the two explanatory tasks?
  - (4) Finally, how might corpus-based findings inform the design of particular assignment tasks and genres in light of a range of writing goals?
- **Methodology**: The article outlines a context-informed corpus analysis of lexical and grammatical keywords in part-of-speech tagged writing by first-year college students across courses at a U.S. institution. Using information from assignment descriptions and rubrics, the study considers four projects that also represent two macro-genres: an annotated bibliography and a visual analysis, both part of the explanatory macro-genre, and two argumentative essays, both part of the argumentative macro-genre.
- **Results**: The corpus analysis identifies lexical and grammatical keywords in each of the four tasks as well as in the macro-genres of argumentative versus explanatory writing. These include generalized, interpersonal, and persuasive discourse in argumentative essays versus more specified, informational, and elaborated discourse in explanatory writing, regardless of course or task. Based on these findings, the article discusses the discursive practices prioritized in each task and each macro-genre.
- **Conclusions**: The findings, based on key discourse patterns in tasks within the same course and in macro-genres across courses, pose important questions regarding writing task design and students' adaptation to different genres. The macro-genre keywords specifically inform exploratory sociocognitive "profiles" of argumentative and explanatory tasks, offered in the final section. These argument and explanation profiles strive to account for discourse patterns, genre networks, and purposes and



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processes—in other words, multiple aspects of habituated thinking and writing practices entailed in each one relative to the other. As discussed in the conclusion, the profiles aim to (1) underscore discourse patterns as integral to the work of genres, (2) highlight adaptive discourse strategies as part of students' meta-language for writing, and (3) identify multiple, macro-level (e.g., audience), meso-level (paragraph- and section-level), and micro-level (e.g., discourse patterns) aspects of genres to help instructors identify and specify multiple goals for writing assignments.

*Keywords:* argument, corpus linguistics, first-year composition, genre, genre transfer, keyword analysis, macro-genre, student writing, writing analytics

#### **1.0 Introduction**

#### 1.1 Writing Analytics, Corpus Analysis, and School Genres

The genres students write shape the rhetorical citizens they become, of academic, professional, and other discourse communities. Using particular genres means becoming socialized into producing "not only certain kinds of texts, but also certain kinds of contexts, practices, and identities—ways of being and acting in the world, socially and rhetorically" (Bawarshi, 2000, p. 78). This "genre effect" is a significant consideration for students' transition into higher education, because academic genres are typified realizations of often-tacit expectations. Accordingly, genre is a key consideration for first-year college writing curriculum (Russell, 1995; Wardle, 2009), learning (Bawarshi, 2003; Miller, 1984), and assessment (Beck & Jeffery, 2007; Burstein, Elliot, & Molloy, 2016; Gere, Aull, Lancaster, Perales Escudero, & Vander Lei, 2013). As this research makes clear, the argumentative essay is by far the most common genre, prior to, as well as during the transitional first year. For over a century, it has remained "the gatekeeping mechanism within individual courses as well as at critical stages of passage through secondary schools and into college" (Heath, 1993, p. 105).

Consistent with most research in composition, and therefore most studies of general, first-year college writing, research on argumentative essay writing has primarily emphasized genre context. It has examined, for instance, the history of writing assessment, student writing performance visà-vis task topic, and whether the argumentative essay genre is among the genres students subsequently encounter (Burstein et al., 2016; DeStigter, 2015; Haefner, 1992; Heath, 1993). Other research, in international applied linguistics research and particularly English for Academic Purposes (EAP), has focused less on first-year writers but has likewise shown the frequent use



of argumentative essays in undergraduate writing tasks. Rather than primarily emphasizing context, this research focuses on discourse, showing, for instance, that the undergraduate argumentative essay genre includes more interpersonal language, while the report genre includes more informational language (Hardy & Römer, 2013; Nesi & Gardner, 2012).

Together, these studies suggest that the argumentative essay is represented more than other genres in early college writing development, and that any given genre favors particular discourse features in contrast with other genres students might write. A productive next step, but one not yet realized, is to bring these discussions together, in research that both considers students' assignment contexts and also systematically analyzes the discourse that characterizes the tasks and genres they write. In turn, related findings can be used to illuminate the sociocognitive habits privileged in particular tasks and to inform writing assignment design.

#### **1.2 The Current Study**

This article offers an initial attempt at such research. To do so, it outlines a context-informed corpus analysis of lexical and grammatical keywords in writing by first-year college students across courses at the same U.S. institution. Using information from assignment descriptions and rubrics, the study considers four projects that also represent two macro-genres: an annotated bibliography and a visual analysis, both part of the explanatory macro-genre, and two argumentative essays, both part of the argumentative macro-genre. Based on lexical and grammatical keywords, I consider the patterned discursive practices prioritized in tasks within the same course, and in macro-genres across courses. In light of the macro-genre keywords, I also create sociocognitive "profiles" of argumentative and explanatory tasks that account for discourse patterns, genre networks, and purposes and processes—in other words, the habituated steps, thinking, and writing entailed in each one relative to the other.

Four questions guided the inquiry:

- (1) What are the key discursive practices associated with annotated bibliographies and argumentative essays written by the same students in the same course?
- (2) What are the key discursive practices associated with visual analyses and argumentative essays written by the same students in the same course?
- (3) What are the key discursive practices associated with the two argumentative tasks in comparison with the two explanatory tasks?



(4) Finally, how might the corpus-based findings from this study inform the design of particular assignment tasks and genres in light of a range of writing goals?

Five sections follow. The next section reviews insights from corpus analysis of student writing and highlights the need for more research that (a) analyzes argumentative and explanatory writing by first-year college writers, and that (b) connects corpus findings and writing task genre to inform instruction and assignment design. The subsequent section outlines the context, methods, and tools informing the context-informed corpus analysis. The third section presents findings based on key features of each writing task and of the explanatory versus argumentative macro-genres, and the fourth section discusses these findings. The fifth and final section offers sociocognitive profiles for argumentative and explanatory writing and closes by discussing implications for writing research, pedagogy, and task design.

#### 2.0 Literature Review

#### 2.1 The Genre(s) of Writing Tasks

Contemporary writing tasks are commonly understood as constructed responses: tasks that ask students to respond to a given set of requirements in order to demonstrate specific abilities directly related to those expectations (Bennett, 1991). In other words, writing tasks are never "neutral" vehicles for observing or assessing student writing, but rather, student writing is irrevocably shaped by the requirements of the task. In particular, task requirements are dictated by genre, or the semiotic structures and resulting social actions that make texts recognizable across tasks and contexts. Accordingly, genre serves as an important lens for analyzing writing assignments. As Melzer writes, genre analysis facilitates a look at "not just the rhetorical situation of individual assignments but also assignment genres: groups of assignments that respond to similar, recurring rhetorical situations" (2009, p. 243). Burstein, Elliot, and Molloy (2016) suggest that "disaggregation of information according to genre allows us to learn more about student writing in naturalistic settings (i.e., coursework in the disciplines) that is relevant to broad academic and specific disciplinary practices" (p. 118).

Of course, the terms "genre families" and "genres" are not rigid or stable categories: they have "fuzzy" boundaries or borders (Medway, 2002). Genres are created, and they persist, not because of standardization without any variation (Devitt, 2015), but due to recognizable "family resemblances" or "macro genres" that include prototypical moves and discourse that are meaningful for particular communities (Grabe, 2002; Martin, 2002; Miller, 1984; Nesi & Gardner, 2012;



Swales, 1990). Thus, while "the differences among disciplines—and even among instructors within the same discipline and subdiscipline—in terms of the purposes and audiences...make it difficult to generalize" (Melzer, 2009, p. 255), studying patterns in genre examples is valuable. It can shed light on writing expectations that are privileged and recognizable across individual student texts. In this way, genre provides a lens for considering the discursive practices commonly prioritized in one genre or macro-genre versus another-discursive practices that help constitute communities both big and small, such as developing writers or disciplinary fields. Understanding the expectations that characterize the genres most common in first-year (FY) constructed response tasks is especially important, since those genres often determine student access to and success in higher education. Along these lines, genre research poses two under-examined questions related to FY writing genres: (1) How are assignment genres constructed discursively? (Or, what discourse patterns are associated with successful student writing in particular genres?) (2) How do we design writing assignments that are consistent with the kind of discourse expected from students?

#### 2.2 Argumentative Essays in Student Writing

Different instructors may use different terms for the essay and other genres. Johns writes, "What is an essay? This is a very difficult question for us to answer; and because student essays do not really matter to disciplinary experts, they do not consider the question" (2008, p. 240). Instructors may use the term "research report," for instance, and still expect an argument for a solution (Melzer, 2009). Yet the argumentative essay, varied though it is, is sufficiently recognizable to be conceptualized and critiqued as a genre or macro-genre in numerous studies. It is by far the most common educational task during the transition between secondary and advanced college writing. Particularly for U.S. institutions, but also beyond them, students write argumentative essays to demonstrate secondary learning and writing proficiency (Moore & Morton, 2005; Wilcox & Jeffery, 2014), to determine placement in college composition courses (Aull, 2015b; Gere et al., 2013), and to show writing development within said courses (Crossley, Roscoe, & McNamara, 2014; Dryer, 2013; Wingate, 2012).<sup>1</sup>

Composition scholars have critiqued the argumentative essay as an inauthentic "school genre" that does not match the genres students will be expected to write in upper-level courses and workplaces (Johns, 2002; Russell, 1995). Instructional research has furthermore emphasized that the argumentative essay is used at the expense of other genres that students are less prepared to write, such as annotated bibliographies and research proposals (Burstein et al., 2016). Scholars have also questioned the kind of thinking and writing privileged



in argumentative essays, suggesting they rely only on individualistic perspectives (Heath, 1993), and falsely assume a direct relationship between democracy and rational argumentation, and between argument and critical thinking (DeStigter, 2015, p. 23). DeStigter shows that "nearly all of the extensive scholarship on argumentation is driven by the same essential question, which is, "How can students be taught to write better argumentative essays?'," rather than whether argument should be so widely used in the first place (p. 13). Reports, which prioritize demonstration of knowledge rather than argument, appear less common in early college courses (Burstein et al., 2016; Nesi & Gardner, 2012; Wingate, 2012).

#### 2.3 Corpus Analysis and Studying FY Writers

Corpus linguistic analysis has been used since the mid-20<sup>th</sup> century in the service of exposing the persistent, but often tacit, patterns that characterize different kinds of language use. Today, corpus analysis includes increasinglysophisticated, computer-aided tools to parse and sort texts in ways traditional reading cannot (Barlow, 2004). To determine what is unique about genres or registers analyzed, corpus analysis is often used comparatively, revealing lexical and grammatical patterns that persist across one corpus, in contrast to more varied choices or to patterned uses in other corpora (Bowker & Pearson, 2002, p. 9; Hunston & Francis, 2000, p. 15; McEnery & Wilson, 1996). Corpus analysis of academic writing, for instance, has been used to identify key patterns in humanistic writing versus scientific writing or in early versus advanced learner writing, ultimately in order to inform the teaching of writing in different fields and levels. These aims espouse the notion that "an understanding of the linguistic properties of successful (or unsuccessful) writing could help instructors" teaching discipline-specific writing to novices (Hardy & Römer, 2013, p. 205) and support the idea that new college writers benefit from understanding linguistic resources often used by academic experts (Aull & Lancaster, 2014, p. 25).

Because composition studies tends to be "contextualist" rather than "linguistic" in its approach to texts (Crusius, 1999; Flowerdew, 2002), corpus analysis is more rare in composition. This also means that the primary field that focuses on FY college students in general writing courses has traditionally not used corpus analysis. Instead, composition research tends to focus on individual texts and contexts—e.g., by beginning with ethnographic observations on a class of writers (Bawarshi, 2003; Beaufort, 2007; Wardle, 2009)—rather than beginning with analysis of patterns across texts, as do EAP studies (Hyland, 2012; Nesi & Gardner, 2012; Römer & Wulff, 2010). But corpus analysis can offer additional methodological and ontological possibilities for studying student writing as a supplement to context-rich approaches (Aull, 2015b, 2015c). In both



composition and EAP, relatively rare corpus-based research on FY student writing has explored common institutional tasks as well as native and non-native FY writing patterns (Aull & Lancaster, 2014; Dryer, 2013; Hyland & Milton, 1997; Lancaster, 2016). Such research has highlighted the widespread use of argumentative essays in student writing and has shown the potential for corpus analysis to not only describe FY discourse but to inform the genres and design of FY writing tasks.

#### 2.4 Corpus Analysis of Professional Academic Writing

Corpus analysis of professional writing reveals values embedded in the lexical and grammatical patterns of academic registers, genres, and disciplines. For instance, Swales' corpus-based investigation of research article introductions identifies three rhetorical moves used across academic disciplines to "create a research space." One move introduces the "territory" or topic, another identifies a gap or "niche" in that territory, and another "occupies" that niche or clarifies how the given article will contribute (Swales, 1990, 2004). These moves are signaled through common discursive cues in the text (e.g., however and yet help show the move between showing existing research and showing a gap in that research), and they show two clear expectations of the research article genre: (1) attention to existing views, and (2) proof of the novelty of new ideas. In another example, Myers' analysis of writing about molecular genetics shows discourse-based differences in academic versus popular scientific texts. Myers argues that popular writers must use a fuller range of cohesive devices to build bridges between everyday and specialized vocabulary, while scientific writers can depend upon specialized readers' lexical knowledge (1991). In another example, Myers shows that discourse in academic articles "follow[s] the argument of the scientist" and emphasizes "the conceptual structure of the discipline" in a narrative of science. The discourse of popular science articles, on the other hand, presents "a sequential *narrative of nature* in which the plant or animal, not the scientific activity, is the subject" (Myers, 1990, p. 142).

Corpus analysis of professional academic writing also shows variation in discourse patterns across different fields. For instance, Hyland shows that through patterned pronoun use, academic writing in the natural sciences conveys an empiricist ideology by foregrounding evidence or phenomena rather than the writers' reasoning (Hyland, 2005, p. 181). By contrast, academic writing in social sciences and humanities includes more first person pronouns as well as more attitude markers in order to foreground the writers' own reasoning and perspective. Because interpretative variation increases in these disciplines, "writers must rely to a greater extent on a personal projection into the text," that aims to "invoke an intelligent reader and a credible, collegial writer" (p. 188).



Though varied, the above studies help showcase how identifying patterned discourse in academic writing can help make writing expectations and ontological orientations more transparent.

#### 2.5 Corpus Analysis of FY Writing

Corpus analysis has also been used increasingly to study writers in or entering U.S. college composition. Building on Swales' move analysis, Gere et al. (2013) show three moves in the introductions of FY argumentative essays: a "background" move, in which writers establish a topic; a "review" move, in which writers give an overview of a given source text or view; and a "stand" move, in which writers take a position. Other studies use a range of corpus tools to show the concurrent effect of multiple linguistic features. For instance, Jarvis et al. (2003) show that in timed, highly-scored English language learner writing, various combinations of linguistic features, rather than the presence or absence of particular features, contribute to the success of the writing; e.g., more nouns but fewer pronouns, or vice versa. Likewise, analyzing writing by secondary and FY college students evaluated according to the Scholastic Aptitude Test (SAT) rubric, Crossley et al. (2014) identify four different linguistic "profiles" for student essays—e.g., more to less formal, more to less verbal, and more to less personal all of which are successful combinations according to essay scores. These studies help expand linear models of writing quality and highlight possibilities for quantitative text analysis beyond limited versions of automated writing evaluation that have been critiqued for measuring a restricted writing construct and assessing text quality according to surface linguistic features (cf. Deane, 2013; Sparks, Song, Brantley, & Liu, 2014).

Studies of untimed FY writing also suggest that linguistic features combine to create an overall rhetorical effect. Aull shows that over the course of a text, several n-grams using first person pronouns and the determiner *this* (e.g., *I will discuss, in this section*), FY students build a *narrative of topic* that is textexternal, or focused on issues outside of the text, whereas advanced academic writers construct a *narrative of arguments* with a text-internal focus on the unfolding argument and surrounding evidence (2015b). Analysis of untimed writing at three levels—incoming college student, advanced student, and published academic—furthermore indicates that several stance features, including qualifying epistemic stance features (e.g., *may, perhaps*), code glosses that frame or reformulate (e.g., *for instance* and *this means*), and few adversative/contrast connectors (e.g., *but* and *however*), help advanced academic writers to balance their stance alongside others' views (Aull & Lancaster, 2014). Analysis of writing at the same levels additionally shows that the more advanced the writer, the lower



the level of epistemic generality as well as certainty (Aull, Bandarage, & Miller, 2017).<sup>2</sup>

Importantly, corpus research on undergraduate student writing underscores that lexical and grammatical patterns can persist beneath writers' conscious awareness, even as teachers and students respond to them (Lancaster, 2012, 2016). A common goal, therefore, is to support "learners' awareness of the textual features of their own writing relative to target (i.e., successful) models" (Hardy & Römer, 2013, p. 205). This goal focuses on making expectations and patterned choices more transparent for students and instructors, rather than necessarily changing those expectations. At the same time, corpus research highlights possibilities for using corpus research to more directly inform writing task design, in that it helps expose the discursive practices privileged and recurring in a range of genres and tasks.

#### 2.6 Writing Task Design

To date, most research on English writing assessment design has focused on the relationship between student performance and task type or content. In education, for instance, research has examined the performance of particular student demographic groups vis-à-vis whether or not students have a choice of task topic (Gabrielson, Gordon, & Engelhard Jr, 1995). In composition studies, research has explored the relationship between assessment prompts and students' overall writing scores (see Huot, 1990), and how the relationship between tasks and scores relates to assessment validity (Huot, 2002; Yancey, 1999). In applied linguistics, assessment research has focused on the relationship between student performance and writing task type or content, for instance, how English language learners respond to independent versus integrated tasks (Cumming et al., 2005), or to unfamiliar versus more familiar topics (Tedick, 1990).

Assessment scholars in both applied linguistics and composition have encouraged assessment designers to pay close attention to assumptions and constructs embedded in particular tasks, as task design directly influences students' ability to perform (Gere, Aull, Green, & Porter, 2010; Hamp-Lyons & Mathias, 1994). In addition, corpus researchers have indicated the need for "new indices [of patterned textual features] that take into consideration contextual factors such as the writing prompt" (Crossley & McNamara, 2011, p. 189) and have suggested we know little about the impact of different rhetorical cues on writing tasks of the same genre (Aull, 2015c).

#### 2.7 Corpus Analysis and Writing Task Design

A few studies have more directly examined connections between corpus patterns and writing task design in FY writing. Puma's (1986) linguistic analysis



of 100 FY essays from the same college indicates that FY students who know and feel close to a specified audience in a writing assignment are more likely to draw from a spoken register. Gere et al. (2013) additionally find that less prepared FY writers employ a more informal register in FY writing placement tasks. Beck and Jeffery (2007) examine high-stakes secondary writing assessments vis-à-vis language use across interpretation, narrative, and argument task types, and they conclude that of these, argument may be best for these secondary assessments because it "serves an important function as an organizing macrostructure for the presentation of one's interpretive position" (p. 75). Aull (2015b, 2015c) demonstrates a correlation between, on the one hand, metadiscourse patterns related to evidence and the scope of claims, and on the other hand, two cues of constructed response tasks: the point of departure for student writing (either an open-ended question or part(s) of a source text) and the kind of evidence solicited (personal and/or source text evidence). In fact, relative to published academic writing in the Corpus of Contemporary American English (COCA) the differences map onto a kind of spectrum that corresponds to both discourse and to task parameters.<sup>3</sup> This spectrum suggests that within the same genre of the argumentative essay, the cues of the writing task lead to important differences in the nature of the claims FY students make, and that such distinctions are discoverable at the level of discourse.

These studies underscore that we have much more to learn about the relationship between discourse and task design during students' transition into college-level writing. Research that explores this relationship is rare not only because of the aforesaid priorities of composition research, but also because it requires corpus compilation that is not always easy or possible. Sizable corpora comprised of writing in different genres from the same context and level may help identify the effects of particular genres, and corpora comprised of writing in response to different tasks from the same level and genre may help identify the effects of particular task cues, but few researchers have access to such corpora. Research that explores the relation between textual patterns and assignment genres and tasks can therefore help offer guidance on writing task design as well as future corpus compilation and research.

#### 3.0 Study Context, Corpora, and Tools

*Context-informed corpus linguistic analysis* of FY writing examines contextual details of FY rhetorical tasks alongside corpus linguistic patterns. In other words, it is "an approach that explores the discourse of FY writing as realizations of socio-rhetorical contexts and as patterns across them" (Aull, 2015b, p. 52). The socio-rhetorical context of the FY corpora in this analysis includes the writing tasks and related materials in the First Year Composition



Program at the University of South Florida (USF), which serves approximately 4,500 undergraduate students each year in two standardized courses: ENC 1101 and ENC 1102 (see http://fyc.usf.edu).<sup>4</sup> Excepting students who transfer or receive exemption through advanced placement (AP) credit, all USF students take both ENC 1101 and 1102 in sequence, meaning that students in both courses can be considered FY college writers, but the students in the 1102 course are arguably more advanced in FY writing. Analyzing projects within each of the courses, as well as across them, therefore enables a look at distinctions and similarities across FY tasks as well as courses. By analyzing keyword patterns specifically, the study approaches patterned discourse as an integral and revealing part of the responses constructed by particular tasks. In this case, this means discourse patterns that are key in student writing tasks, as well as the macro-genres or genre families of argument and explanation. Identifying patterned discourse in this way is not identifying "merely templates of format and format," but rather finding textual patterns that are key instantiations of "responses to rhetorical situations" (Melzer, 2009, p. 243).

#### 3.1 The Writing Tasks

In each course, FY students complete three projects. These constructed response tasks are discussed below in terms of purposes and parameters during the spring 2016 semester, during which the corpora were compiled. The first project in the ENC 1101 course is an annotated bibliography, a summary of six recent research sources on a topic or figure selected by the students. This genre is explanatory in nature, in that the end goal is to describe key ideas, rather than foreground an argument. Fitting under what Nesi and Gardner call the "literature survey," it shares the rhetorical goal of summarizing research with the "explanation genre family," which has the key goals of "demonstrate[ing]/ develop[ing] understanding of the object of study and the ability to describe and/ or account for its significance" (p. 37). It also emphasizes the practical goal of "building research skills" in that students need to identify the sources (2012, pp. 34-40). ENC 1101 project 2, entitled "What they say: tracing conversations over time," appears to be a blend of both summary and argument, one which builds on the annotated bibliography and asks students to both review a scholarly conversation and argue for how it has changed over time. ENC 1101 project 3 is an argumentative essay that prioritizes students' formulation and defense of their own evidence-based argument. Project 3 therefore fits into Gardner and Nesi's "essay" genre family, for which key social functions "to demonstrate/ develop the ability to construct coherent argument and employ critical thinking skills" in an individualized argument (p. 38).



The ENC 1101 rubrics for each project, specifically in the categories of analysis and evidence, reinforce these categories (the remaining rubric categories of organization, format, and style overlap across the three projects). According to the ENC 1101 annotated bibliography rubric, the task should provide an explanatory summary, with source summaries that show adequate "focus on topic/ issue." The ENC 1101 project 2 rubric suggests it should blend summary and argument, providing an explanatory thesis and a separate "arguable claim," along with relevant source text evidence. Finally, the ENC 1101 argumentative essay rubric emphasizes an "arguable claim" the most (15 times), vis-à-vis how well it is developed and supported.

In the ENC 1102 course, the projects follow a similar sequence. The first ENC 1102 project is an analysis of visual rhetoric, in which students are asked to identify and analyze how two images reflect an organization's goals. Like the ENC 1101 annotated bibliography, this task fits into Nesi and Gardner's "explanation genre family," which has the key goals of "demonstrate[ing]/ develop[ing] understanding of the object of study and the ability to describe and/ or account for its significance" (p. 37). The second ENC 1102 project, like ENC 1101 project two, appears to be a blend between summary and argument, in that both demonstrating knowledge and advancing an argument are goals. The description of this second ENC 1102 project, entitled "finding common ground," underscores both priorities: "you will learn how to present an unbiased analysis of two arguments created by stakeholders. ...Building on this common ground, students should then propose and clearly argue for a feasible, objective compromise." Finally, the third ENC 1102 project again returns to "arguable claims" in an argumentative essay, which has as a key goal of developing an individualized argument.

The ENC 1102 rubrics likewise reflect these respective goals in their analysis and evidence categories (as in the ENC 1101 rubrics, the categories of organization, format, and style stress similar aims across the three projects). The ENC 1102 visual analysis project rubric emphasizes explanatory rather than argumentative writing; it focuses on how well the project "explains the relationship between visual rhetoric in images and stakeholder's goals," with no mention of argument or "arguable claims." The ENC 1102 Project 2 rubric highlights a blend of explanation and argument, noting that the projects should include both "ideas and assertions": students should describe commonalities between stakeholder positions and offer supported, arguable claims. Finally, ENC 1102 Project 3, like ENC 1101 Project 3, focuses on arguable claims the most (mentioned 12 times), which should be persuasive and adequately supported with appropriate sources. (See appendix for additional information on each task.)



Among the six projects, then, the writing in two tasks, the ENC 1101 annotated bibliography and the ENC 1102 visual analysis, prioritize development and demonstration of knowledge and understanding. The second tasks in each course, ENC 1101 project 2 and ENC 1102 project 2, seem to blend summary and argument, prioritizing both demonstration of knowledge as well as the construction of an argument; in this way, they appear more locally-specific than more common genres like the annotated bibliography and argumentative essay, which are especially common across undergraduate institutions (Burstein et al., 2016; Nesi & Gardner, 2012). The two final projects, the ENC 1101 argumentative essay and the ENC 1102 argumentative essay, prioritize construction of individualized arguments. In these, students are "expected to develop ideas, make connections between arguments and evidence, and develop an individualized thesis" (Nesi & Gardner, 2012, pp. 37-38); furthermore, as the final projects in both courses, they intimate that individualized argument is the summative goal for writing in both courses.

Four of the projects therefore enable analysis of key discourse in argumentative essay versus explanatory writing tasks. Because the second projects in each course blend argument and explanation, they were excluded from this study. The remaining four tasks were included in two sets of keyword analyses. The first keyword analyses focus on one course at a time-the ENC 1101 annotated bibliography versus the ENC 1101 argumentative essay and vice versa; and the ENC 1102 visual analysis versus the ENC 1102 argumentative essay, and vice versa-to allow for comparison of explanatory and argumentative tasks written by students within the same course. These keyword analyses show interestingly parallel findings between the annotated bibliography and visual analysis, and between the two argumentative essays, thus pointing to macro-genre affiliations of explanatory and argumentative writing. The second set of keyword analyses focuses on the two explanatory writing tasks, the ENC 1101 annotated bibliography and ENC 1102 visual analysis, in comparison with the two argumentative essay writing tasks, ENC 1101 project 3 and ENC 1102 project 3, in order to consider macro-genre patterns across courses.

#### 3.2 First-year Corpora

The University of South Florida is a test site for *MyReviewers* (MyR) a web-based learning environment that includes digital platforms for written draft submission, peer review, and instructor feedback. Through the MyR platform, the ENC students submit the final drafts for all course projects, and their instructors use MyR to submit evaluations. For this study, the instructor evaluations were used to identify all final drafts in the ENC 1101 and ENC 1102 sections during the Spring of 2016 that instructors graded as A level texts (receiving an A-, A, or



A+). The files were extracted for the study according to these parameters with project-specific file names, and the files were then sorted into project-specific corpora by the author. The resulting corpora can be said to represent exemplary writing for each of the tasks in the USF FYC context. Of course, restricting to only high-graded, final drafts limits what can be said about the tasks and a wider range of student writers; as table 1 shows, only about 34-47% of the final projects in each task match the exemplary criteria. But restricting in this way enables analysis of the discourse that appears positively associated with the genres and tasks.

Table 1 below shows the number of exemplary drafts as well as the percentage of total final drafts represented in each project included in the study.<sup>5</sup> The final column includes the word token counts in the corpora for each of the four corpora included in the study.

Table 1

| USF First-Year Composition Projects (2016)                         |             |  |     |                                 |                                       |
|--|-------------|--|-----|---------------------------------|---------------------------------------|
| Primary goal   | Proj<br>No. | Genre and Keywords   | N   | Percent<br>of total<br>projects | Corpus<br>word<br>tokens <sup>1</sup> |
| ENC 1101   |             |  |     |                                 |                                       |
| Summary of<br>sources and<br>explanation of<br>connection to topic | 1           | Annotated Bibliography: Researching<br>and summarizing sources on a topic  | 76  | 33.6%                           | 139828<br>(Types:<br>9983)            |
| Blend of summary<br>and argument                                   | 2           | What they say essay: Reviewing a topic and arguing how it has changed  |     | not inclue                      | led                                   |
| Crafting and<br>supporting a<br>written argument                   | 3           | Argumentative Essay: Joining the conversation with your own argument   | 101 | 46.8%                           | 128413<br>(Types:<br>10666)           |
| ENC 1102 Project   |             |  |     |                                 |                                       |
| Explanatory<br>analysis of visual<br>image                         | 1           | Visual Analysis: Identifying and<br>analyzing the strategies at work in two<br>images  | 229 | 38.1%                           | 328988<br>(Types:<br>15071)           |
| Blend of summary<br>and argument                                   | 2           | Argumentative Analysis: Analyzing<br>two opposing views and arguing for<br>solution  |     | not inclue                      | led                                   |
| Crafting and<br>supporting a<br>written argument                   | 3           | Argumentative Essay: Argumentative<br>essay that calls for action (formal essay<br>part of composing multimodal<br>argument) | 230 | 39.5%                           | 287015<br>(Types:<br>14795)           |

USF FYC Projects and Number of Texts in Exemplary Corpora by Project

<sup>&</sup>lt;sup>1</sup> Word tokens were calculated using non-part of speech-tagged corpora.



After the project-specific corpora were compiled, they were then part-ofspeech (POS) tagged using the CLAWS 7 tagset (the same tagset used by the BYU family of corpora), in order to facilitate analysis of both lexical and grammatical patterns.<sup>6</sup> In the POS-tagged corpora, the tags are embedded in the texts. For instance, this sentence from an ENC 1101 annotated bibliography appears in untagged form as the following:

> From gaining knowledge about the political candidates, to running for a position in the government, this organization believes that equality can be attained through a political standpoint.

The POS-tagged version of the same sentence follows:

From\_II gaining\_VVG knowledge\_NN1 about\_II the\_AT political\_JJ candidates\_NN2 ,\_, to\_II running\_VVG for\_IF a\_AT1 position\_NN1 in\_II the\_AT government\_NN1 ,\_, this\_DD1 organization\_NN1 believes\_VVZ that\_DD1 equality\_NN1 can\_VM be\_VBI attained\_VVN through\_II a\_AT1 political\_JJ standpoint\_NN1 .\_.

As this example shows, the POS-tags are descriptive and functional; they identify the function of the tagged words in their given textual context in that part of the corpus. The tags do not indicate prescriptive information (for instance, that the above sentence opens with what would be considered a dangling participle, or dangling modifier, according to prescriptive grammatical rules for standard edited English).

#### 3.3 Keyness

Keyness is a common measure in corpus analysis used to identify discourse patterns that are unique in one corpus (a target corpus) relative to those in another (a reference corpus). Keyness is calculated in this study using log-likelihood (LL), which compares observed versus expected frequencies and is useful because it does not assume normal distribution of words across a corpus (Baker, 2004; Oakes, 1998). The greater the LL value, the more evidence there is for the significance of a particular difference, and the higher the keyness value, the more evidence that a word or tag occurs more often in the target corpus than would be expected by chance in comparison with the reference corpus.<sup>7</sup> In this study, keyness is used to identify significant differences in frequencies of lexical items as well as POS tags. In both cases, the principle and the measure are the same, but rather than comparing counts of individual words, the calculations account for nouns, verbs, or other part-of-speech categories and subcategories that are surfaced though key POS-tags (see also Brown & Aull, 2017). Baker writes that keywords "direct the researcher to important concepts in a text (in relation to



other texts)" in ways that "highlight the existence of types of (embedded) discourse or ideology" (2004, p. 3). In this case, the keywords help direct attention to discourses and values embedded in lexical and grammatical patterns across FY tasks and macro-genres.

Log-likelihood and keyness were calculated using WordSmith Tools 6.0 (Scott, 2014) as well as an LL calculator in Excel created using the equations described in Rayson & Garside (2000). All keywords discussed in the analysis have a significant keyness value (p<.001) and appear in at least 90% of the files in each corpus, to avoid a keyword that is significant because it overpopulates many of the texts but is not representative of the majority of the corpus. For example, without accounting for distribution across the corpus, the second person pronoun *you* is highly key in the ENC 1102 argumentative essay project versus the ENC 1102 visual analysis project: The argumentative essay corpus contains 139% more uses of *you* and *your*, and so the corpus frequency differences are significantly different. However, a look at the distribution of *you* and *your* in the ENC 1102 argumentative essay corpus shows that they appear in only 55% of the texts, meaning that it is a successful feature in this project for many students but is not one that is associated with a clear majority of the successful texts.

I also used WordSmith concordance and collocation tools to identify representative behaviors of all key words and tags. This additional information is offered parenthetically in Tables 2 through 7 as well as in the analysis descriptions. To offer a simple example, Table 6 shows that articles are key in explanatory versus argumentative writing across the composition courses. Concordance and collocation tools show that 94% of the articles in the explanatory corpus are *the*, and that the most common collocations are two prepositions immediately to the left and four nouns immediately to the right: *of/ in the audience/ image/ article/ use*. This information is included in Table 6. As noted below, all parenthetical detail appears in the order of salience; i.e., the most salient cases appear first in the parenthesis, to the left and the right, for each keyword.

A more in depth example of how I used WordSmith Tools to elucidate usage is that of phrasal verbs. Phrasal verbs contain a lexical verb and a prepositional adverb (or particle); in the CLAWS tagged corpora, these prepositional adverbs are tagged\_RP. The keyword analysis shows that prepositional adverbs are key in the argumentative versus the explanatory writing across the courses, suggesting that phrasal verbs are comparatively salient in the argumentative writing in the study. WordSmith concordance and collocation tools enable more detailed exploration. Following studies of phrasal verbs in online corpora also POS-tagged using the CLAWS tagger (Brown & Palmer, 2015; Liu, 2011), I first used the WordSmith concordance tool to target lexical verbs



followed by prepositional adverbs in the argumentative writing, by looking for the lexical tag VV\* (for all tags beginning with VV), followed by the tag \_RP, with zero, one, or two words between the VV\* and RP tags; i.e., the query includes VV\* \*\_RP, VV\* \* \*\_RP, and VV\* \* \* \*\_RP and captures, e.g., *point out; point it out; point the example out*). Further separation between the verb and prepositional adverb was not targeted in searches, since this pattern is infrequent and prone to identify false phrasal verbs (Liu, 2011, p. 665).

This search helped remove the occurrences of prepositional adverbs tagged by the CLAWS 7 tagger that occur in other constructions, such as perfect aspect verbs plus adverb particle (e.g., has been *around* for a long time) or with to be verbs (e.g., she is up). Accordingly, the search indicated that the phrasal verbs in the corpora in this study tended to occur in several phrase structures: infinitive phrasal verbs (e.g., will end up on the streets; to join in the fun), present tense lexical verbs (e.g., the organization sets out to inform); past participle of lexical verb plus particle (*put down*); base form of lexical verb plus particle (such as in a list of verbs; e.g., and *reach out* to a sympathetic audience); and past tense lexical verb plus particle (e.g., the emphasis *put on* equality). There are also forms in which lexical verbs include an indirect object, appearing as a lexical verb form plus personal pronoun or noun plus particle (e.g., *putting* clothes *on*). The majority of the prepositional adverbs in the argumentative writing (83.7%) occurred in phrasal verbs, as evidenced in collocations with lexical verb forms like those noted above, and the most common iterations are noted in Table 7. Use of the same concordance and collocation tools likewise help reveal trends in use of general prepositions in the corpora (tagged as \_II), which occur pre- and postnominally and not in phrasal verbs; the most common examples of these appear in Tables 2, 4, and 6. These tools similarly confirm that lexical verbs followed by all prepositions, captured in the queries VV\* \* I\*, VV\* \* I\*, and VV\* \* I\*, tend to be verbs followed by prepositional phrases, including most often *lead(s)* to, associate with, based on, compared to, caused by, comes to, used in, and affected by.

At the same time, this approach includes caveats that bear mention. These steps identify and confirm trends, but they do not guarantee that exceptions are caught. For instance, there could be cases in which lexical verbs are followed by prepositional phrases that separate the lexical verb from the prepositional adverb but still constitute a phrasal verb. Consider an example introductory phrase from the first-year visual analysis corpus: By\_II bringing\_VVG this\_DD1 up\_RP in\_II their\_APPGE ad\_NN1... (*By bringing this up in their ad...*). Using this example, we can imagine a case in which the same phrase is written slightly differently, further separating the lexical verb participle from the prepositional adverb but conveying similar meaning, e.g., *By bringing this set of images up in their ad*...)



While research suggests that such an iteration is not frequent enough to indicate (or detract from) salient trends (Liu, 2011), such a case would be a phrasal verb but would not be caught in this study.<sup>8</sup> In this case, the salient phrasal verbs are noted in Table 7, because prepositional adverbs are key in the argumentative macro-genre relative to the explanatory macro-genre.

#### 4.0 Results

#### 4.1 Task-specific Keywords Within Each Course

The tables below show the findings from the within-course keyword analyses. In this case, this means the keywords in Tables 2 and 3 are significantly key (and in  $\geq$  90% of texts) in ENC 1101 project 1 versus ENC 1101 project 3, and vice versa; and those in Tables 4 and 5 compare ENC 1102 project 1 and ENC 1102 project 3. These comparisons, then, highlight the shared, key lexical and grammatical features in exemplary writing between an explanatory task and an argumentative essay task within the same course, by students within each course.

In more detail, Table 2 below presents the keywords in the explanatory ENC 1101 annotated bibliography project versus the ENC 1101 argumentative essay. Table 3 shows the opposite keyword analysis, of keywords in the ENC 1101 argumentative essay versus the ENC 1101 annotated bibliography. Table 4 shows the keywords in the ENC 1102 explanatory visual analysis versus the ENC 1102 argumentative essay, and Table 5 shows the opposite, the keywords in the ENC 1102 argumentative essay versus the ENC 1102 visual analysis. The parenthetical examples following keywords represent the most frequent iterations of a lexical or grammatical item, including collocations to the left and right, which were determined using the WordSmith concordance and collocation tools for a given keyword. When listed, the words appear in order of frequency, with the most frequent collocations appearing first (to the left or right); those words in brackets provide additional context but were not as frequent as the unbracketed collocates. Mean word length of each corpus is noted at the bottom of each table.



### 4.1.1 ENC 1101 annotated bibliography and argumentative essay keyword analysis.

Table 2

#### ENC 1101 Annotated Bibliography vs Argumentative Essay

| Corpus              | ENC 1101 Annotated bibliography vs ENC 1101 Ke  | yness         |
|---------------------|---|---------------|
| comparison          | Argumentative essay   | J 11000       |
| Keywords            | Article ([in] this article [is])  | 998.2         |
| lexical<br>tems and | Journal (the <b>journal</b> of)   | 326.7         |
| unctional<br>ags)   | Research (the research question)  | 201.9         |
| ags)                | University ([at] the <b>university</b> of)  | 199.1         |
|                     | This (as determiner; This article/ source/ study/ research)   | 196.8         |
|                     | Numbers (source text publication dates)   | 189.7         |
|                     | Articles (in the article/ at the university of)   | 143.7         |
|                     | Lexical verbs -s (focuses, discusses)   | 140.9         |
|                     | How (as adverb; and/ of how it)   | 128.2         |
|                     | Was (this/ the article was published in)  | 81.3          |
|                     | Of as preposition ([part] of the/ of this; the university of)                                       | 42.9          |
|                     | On (as preposition and prepositional adverb; the [impact] on; based<br>on the, focused/ focuses on) | <i>l</i> 32.6 |
|                     | Also (is <b>also</b> a, the article <b>also</b> )   | 31.0          |
|                     | And (and the, and how)  | 28.4          |
|                     | General prepositions ( <i>in the [United States]</i> , <i>at the university of</i> )                | 25.8          |
| Mean word length    |   | 3.89          |



#### Table 3

| Corpus<br>comparison             | <b>ENC 1101 Argumentative essay</b> vs ENC 1101 Annotated bibliography                                | Keyness |
|----------------------------------|---|---------|
| Keywords<br>(lexical             | Infinitive verbs ([to/ can/ not] help, make the/ to/ a)   | 386.0   |
| items and<br>functional<br>tags) | Modal verbs (of necessity and prediction; <i>can/ will/ should [be/ not/ have]</i> )                  | 232.8   |
|                                  | Infinitive to be verbs (to/ can/ should/ not be a/ the/ used)   | 92.4    |
|                                  | Negation (people should <b>not</b> )  | 89.9    |
|                                  | Adverbs (also, however, only, still)  | 78.8    |
|                                  | Common nouns (people, media to/ are/ who)   | 71.7    |
|                                  | Their (in/ of/ to their own/ children, lives)   | 70.8    |
|                                  | More (are/ and/ is more than/ likely/ people)   | 67.4    |
|                                  | Are (there/ they are not/ the/ more)  | 66.5    |
|                                  | That (noun + that are [not], verb [means] that the, the fact that)                                    | 65.9    |
|                                  | Determiner capable of pronominal function ( <i>some of the, there are some, some people believe</i> ) | 49.1    |
|                                  | Existential there (there is a, there are many, there is no)   | 45.5    |
|                                  | Subordinating conjunction ( <i>because they are/ it is, when it comes to</i> )                        | 42.7    |
|                                  | Present participle of lexical verb ( <i>focusing</i> on the, <i>living</i> in the)                    | 42.5    |
|                                  | For as preposition ([example] for the future, [responsible] for the)                                  | 39.0    |
|                                  | Or (whether <b>or</b> not)  | 37.7    |
|                                  | They ([because]/ that they are/ are not)  | 33.7    |
|                                  | Have ([students] have been; [countries] that have been)   | 32.2    |
| Mean word<br>length              |   | 3.86    |

ENC 1101 Argumentative Essay vs ENC 1101 Annotated Bibliography



### 4.1.2 ENC 1102 visual analysis and argumentative essay keyword analysis.

Table 4

#### ENC 1102 Visual Analysis Summary vs ENC 1102 Argumentative Essay

| Corpus comparison          | <b>ENC 1102 Visual analysis summary</b> vs ENC 1102<br>Argumentative essay   | Keyness |
|----------------------------|--|---------|
| Keywords (lexical          | Image ([in/ of] the/ this/ first <b>image</b> is)  | 3051.2  |
| items and functional tags) | Articles (96.6% the; of/ in/ to the audience/ image/ first)  | 1191.6  |
|                            | Pathos (use[s] of/ ethos/ and pathos and/ is/ in/ to)  | 1241.9  |
|                            | Lexical verbs -s (used as reporting verbs; <i>uses, shows, makes, gives [the audience]</i> )                                     | 876.5   |
|                            | <i>Is</i> ( <i>it/ this/ image/ there is a/ the/ to/ not</i> ; 14% are used in passive constructions; e.g., <i>is used by</i> )  | 273.3   |
|                            | This (in/ of this image/ is/ organization)   | 194.8   |
|                            | Their (in/ of/ to <b>their</b> own / message/ audience)  | 75.0    |
|                            | Wh-determiner (in/ of which/ what is/ the/ they)   | 73.2    |
|                            | Of as preposition (use/ one/ sense/ part of the/ a/ this)  | 73.0    |
|                            | General prepositions (occurring pre- and post-nominally;<br>[appeal/ pathos/ used] <b>in/ to/ by/ on</b> the/ they/ their/ this) | 55.2    |
|                            | Also (is/ but/ it/ image <b>also</b> the/ uses/ be/ a)   | 46.8    |
|                            | An (is/ in/ of/ as <b>an</b> appeal/ organization/ image/ emotional)   | 42.0    |
|                            | A (is/ of/ in/ as a sense/ way/ very/ child)   | 38.5    |
|                            | By (audience/used/effected/and by the/using/showing/a)   | 33.0    |
| Mean word length           |  | 3.73    |



#### Table 5

| Corpus<br>comparison                               | <b>ENC 1102 Argumentative essay</b> vs ENC 1102 Visual analysis summary   | Keyness |
|--|---|---------|
| Keywords (lexical<br>items and<br>functional tags) | Modal verb (can, will, should, would be/ not/ have/ help)   | 563.2   |
|  | Can (they/ you can be)  | 171.8   |
|  | Infinitive to be verbs (to / can/ should/ will <b>be</b> a/ able/ the/ done)  | 169.1   |
|  | Negation (is/ do/ are not/ n't only/ be/ have)  | 167.3   |
|  | <i>For</i> as preposition ( <i>up</i> / <i>order</i> / <i>used</i> <b>for</b> <i>the</i> / <i>a</i> / <i>their</i> / <i>example</i> ) | 166.8   |
|  | Have (to/ they/ not/ that <b>have</b> been/ a/ to/ the)   | 147.1   |
|  | Will ([noun]/ that/ they will be/ not/ have)  | 133.7   |
|  | Determiner capable of pronominal function ( <i>some/ any/ enough</i> [ <i>of</i> ]/ <i>other/ people</i> ])                           | 99.6    |
|  | Are (they/ there/ that are not/ the/ many)  | 95.1    |
|  | General adjective (other/ human/ important/ new and/ to/ in/ for)   | 84.0    |
|  | General adverb (also/ only/ even the/ a// be/ to)   | 77.6    |
|  | Many (many people/ of/ individuals/ organizations)  | 64.4    |
|  | Common nouns (people [69% of common nouns], media)  | 52.1    |
|  | Infinitive verb (to/ can/ will/ not [help/ make/ get/ take])  | 52.0    |
|  | Subordinating conjunction ( <i>because they are/ it is, when it comes to</i> )  | 65.8    |
|  | Past tense of lexical verb ( <i>said/ found/ started/ showed that/ the/ to</i> )  | 51.     |
|  | More (and/ are/ be/ a more than/ people/ likely)  | 48.     |
|  | People ([adjective]/ the/ many people are/ who/ to [not])   | 42.6    |
|  | Or ([noun]/ [adjective] or not/ even/ the)  | 33.3    |
|  | Degree adverb ( <i>it is very/ much/ many</i> )   | 30.5    |
|  | But as adversative connector (but also/ the/ it/ they)  | 26.7    |
| Mean word<br>length                                |   | 3.78    |

#### ENC 1102 Argumentative Essay vs ENC 1102 Visual Analysis Summary



#### 4.2 Macro-genre Keywords Across Courses

#### Table 6

#### Explanatory versus Argumentative Tasks

| Explanatory versus            | s Argumentative Tasks Keywords (p<.001), distribution $\ge 90\%$  |         |
|-------------------------------|---|---------|
| Corpus<br>comparison          | <b>ENC 1101 Annotated bibliography and ENC 1102 Visual</b><br><b>analysis summary</b> vs ENC 1101 Argumentative essay and ENC<br>1102 Argumentative essay | Keyness |
| Keywords (lexical             | The ([preposition]; of/ in the [noun]; audience/ image/ article)  | 1250.8  |
| items and<br>functional tags) | Articles (94% the: of/ in the audience/ image/ article/ use)  | 1196.1  |
|                               | Lexical reporting verbs (shows/uses/makes/gives/states)   | 956.0   |
|                               | This (as determiner; this article/image/is/source/study)  | 403.0   |
|                               | Is (it/ this/ there is a/ the/ an)  | 181.3   |
|                               | Numbers (dates, percentages, number of years/ images/ organizations)  | 130.3   |
|                               | Of as preposition (use/ one/ university of the/ a/ this)  | 129.1   |
|                               | General prepositions (occurring pre- and post-nominally;<br>[ <i>article/ image</i> ] <i>in/ to/ on/ by the/ a/ this/ their</i> )                         | 80.5    |
|                               | Also (is/but/they also the/be/a)  | 79.4    |
|                               | Wh- determiner (which/what the/ is/ they)   | 57.1    |
|                               | In (as preposition; [noun] in the/ their/ a)  | 40.0    |
|                               | On (as preposition; [noun] on the/ their/ a)  | 31.9    |
| Mean word length              |   | 3.86    |



#### Table 7

#### Argumentative versus Explanatory Tasks

| Argumentative ver                   | sus Explanatory Tasks Keywords (p<.001); distribution $\ge 90\%$   |         |
|-------------------------------------|--|---------|
| Corpus<br>comparison                | <b>ENC 1101 Argumentative essay and ENC 1102 Argumentative essay</b> vs ENC 1101 Annotated bibliography and ENC 1102 Visual analysis summary | Keyness |
| Keywords                            | Modal verbs (can/ will/ should/ would be/ not/ have)   | 814.3   |
| (lexical items and functional tags) | Infinitive verbs (to / can/ not help/ make/ get)   | 325.4   |
|                                     | Infinitive <i>to be</i> verbs ([modal verb; <i>can/ should/ will</i> ]/ <i>to</i> <b>be</b> <i>a/ the/ able</i> )                            | 259.4   |
|                                     | Negation (is/ do/ are not/ n't only/ be/ have)   | 258.8   |
|                                     | Can (as modal verb; can be/ not/ have/ help)   | 242.8   |
|                                     | <i>For</i> as preposition ([noun] <i>for the/ a/ their</i> )   | 214.8   |
|                                     | Are (they/ there are not/ the/ many)   | 170.8   |
|                                     | Have (to/ they/ not have been/ a/ to)  | 167.0   |
|                                     | General adverb (also/ only/ however/ even)   | 158.9   |
|                                     | Determiner capable of pronominal function ( <i>some/ any/ enough of/ people</i> )  | 144.2   |
|                                     | Common nouns ( <i>people</i> [67% of common nouns], <i>media</i> )   | 122.7   |
|                                     | Subordinating conjunction ( <i>if/ because/ when/ while/ since</i> )   | 112.4   |
|                                     | More (more than/ people/ likely)   | 105.5   |
|                                     | Or (whether or not, or even, his or her)   | 76.1    |
|                                     | These (of <b>these</b> animals/ are/ companies)  | 59.9    |
|                                     | General adjective ( <i>other/ social/ human/ new and/ the/ health/ people</i> )  | 51.1    |
|                                     | But (as adversative connector; [comma] but also/ the/ it/ they)  | 45.0    |
|                                     | Degree adverb ( <i>it is very/ as/ so / too</i> )  | 40.6    |
|                                     | Prepositional adverb (83.7% phrasal verb particles ([ <i>to/ can</i> ] <i>stand up/ out/ end up/ go on</i> )                                 | 24.2    |
| Mean word length                    |  | 3.81    |



#### **5.0 Discussion**

#### 5.1 Task-specific Keywords Within Each Course

5.1.1 The ENC 1101 annotated bibliography and ENC 1101

**argumentative essay.** In contrast with the argumentative essay in the same course, the annotated bibliography contains significantly more references to research, journals, and sources in noun phrases, including in attended *this* phrases that build cohesion (*This article/ source/ study/ research*). Other keywords likewise reveal the paramount goal of reporting and contextualizing research: cardinal numbers used in event and publication dates, the article *the* and lexical verbs such as *focuses on* and *discusses* that collocate with *article*, and the past tense *was* used in verb phrases such as *was published in*. Other keywords are used to elaborate on the content of sources as well; for example, the following statement contains almost all of the ENC 1101 annotated bibliography keywords; as with many examples in the corpus, the keywords are used to explain and elaborate on the content of a source.

The article reflects on the past success of the Medical Leave Act of 1993, and how the act was a groundbreaking step for the United States. Although the Medical Leave Act was a progressive step for the United States twenty years ago, this article calls into question its present day effectiveness on maternity and paternity leave in particular.

Finally, the mean word length, which tends to be longer with more informational language (and shorter with interpersonal language use), is slightly longer in the annotated bibliography than in the argumentative essay. Other annotated bibliography keywords, including prepositions and articles, are likewise associated with the complex noun phrases of informational language production (Biber, 1988; Biber, Conrad, Reppen, Byrd, & Helt, 2002).

The argumentative essay in the ENC 1101 course contains significantly more infinitive verbs and the modal verb of prediction (*will*), which are associated with overt features of persuasion (Biber, 1988; Biber et al., 2002). The argumentative essay projects also contain more adverbs, negation, modals of necessity (*should*), and causative subordination (e.g., *because there are not*), all of which are associated with language use that is interpersonal or affective versus more informational (Biber et al., 2002). These key verb forms in the ENC 1101 argumentative essay, which facilitate prediction, necessity, and persuasion, provide an interesting contrast with the key lexical verb form of the ENC 1101 annotated bibliography, which instead facilitates reporting observed and understood information. The argumentative essays also contain more common nouns, especially the notably frequent use of *people*, which constitutes 60.1% of



the common nouns used in the ENC 1101 argumentative essays. In contrast with the annotated bibliography example above, which focuses on describing the issues and position in the article, the following example captures the more persuasive, interpersonal features of the ENC 1101 argumentative essays. In the passage, examples of the ENC 1101 argumentative essay keywords, including the generic noun *people*, the modal verb *can*, and adverbs *seemingly* and *often*, appear in bold:

Most **people are** oblivious to the impact of **seemingly** harmless habits and behaviors. **For** instance, the way playtime **can promote or discourage** gender stereotypes during childhood is **often** overlooked.

#### 5.1.2 The ENC 1102 visual analysis and ENC 1102 argumentative

**essay.** Relative to the argumentative essay in the ENC 1102 course, the ENC 1102 visual analysis contains significantly more references to the project-specific noun *image*, in the subject position of clauses or sentences or the object position of prepositional phrases. Like *image*, the keyword *pathos* is also a term emphasized in the USF FYC assignment descriptions, though it is emphasized alongside *ethos*, *logos*, and *Kairos* as well, which are not key. Also key in the ENC 1102 visual analysis are lexical, reporting verbs, as well as the to be verb *is*, often used descriptively such as in the statement "*the large font…is very prominent*." Present tense lexical verbs are used in statements that describe choices and positions taken by governments or organizations, as well as the effect of images intended to convince an audience of said choices or ideas.

In the ENC 1102 visual analysis, other keywords such as the third person possessive pronoun *their*, articles, prepositions, and the adverb *also* help facilitate elaborated, descriptive statements about organizations and their materials. For instance, in the example below, the student uses third person pronouns and several prepositions and articles to elaborate on an asserted belief of the National Football League.<sup>9</sup>

## **The** National Football League believes **they** take great care **of their** athletes as **they** provide the space, equipment, and money **for** these athletes to train and prevent as much [sic] injuries as possible.

The ENC 1102 argumentative essay, in contrast, is characterized less by descriptive statements about specific entities and more by generalized statements of prediction and recommendation, often about human needs or behaviors. The ENC 1102 argumentative essay contains significantly more uses of the modal verb *can* (e.g., *People defend their risky behaviors by stating that they are fine at texting while driving...but...they can hurt themselves, their passengers...*), as well



as infinitive verbs associated with persuasive language. Adverbs and negation are also key in the argumentative essays (e.g., *people can be very; people should not*), which are salient features of interpersonal versus informational language (Biber et al., 2002). Additionally, as is the case in the ENC 1101 argumentative essays versus the annotated bibliographies, the ENC 1102 argumentative essays have a slightly shorter mean word length than the visual analyses, meaning that in both courses, the argumentative essays are more likely to contain less formal, more interpersonal language use.

As is already clear, there are several key features that overlap across the explanatory writing in each course versus the argumentative writing in each course. Both the explanatory annotated bibliography and visual analysis include *this* statements referring to an object of study, lexical verbs, prepositions and articles, and elaboration signaled by additive connectors like *also*. Both the argumentative essays contain key features like modal verbs (in the same order of *can, will*, and *should*), infinitive verbs, negation, common nouns of *people* and *media*, and subordinating conjunctions in causative statements. These are elucidated by the macro-genre analysis, which indicates shared lexical and grammatical features associated with argument and explanatory tasks, within and across the two courses.

#### 5.2 Macro-genre Keywords Across Courses

The explanatory writing, foregrounded in both the ENC 1101 annotated bibliography and the ENC 1102 visual analysis project, is significantly more likely to contain elements of complex noun phrases, as evidenced in the keyness of articles and prepositions. The most key noun phrases reference an object of analysis, such as *article* or *image*. Related nouns occupy the subject positions of sentences—e.g. *this study; this image*—and they serve as the object of *in this* phrases such as *in this article* and *in this advertisement*. These phrases demarcate the scope of attendant claims by drawing attention to the source of observations, and they also build cohesion by referring back to previously-noted sources or views (Aull, 2015b). These noun phrases are often followed by lexical reporting verbs such as discusses or shows. In these ways, the student writers elaborate on their initial statements about a given object of study, describing what the articles or images show or focus on. Such elaboration is likewise facilitated by key structural features including prepositional phrases and additive and coordinating connectives like *also* and *and*. Through such explanatory structures, students can demonstrate understanding of origins, premises, and observations in sources or images they analyze. Keywords of the annotated bibliography and visual analysis also reflect specific concepts foregrounded in the assignment materials-



rhetorical terms that relate to attention to audience, including *pathos*, *appeal*, and *audience*.

Relative to the annotated bibliographies, the argumentative essay tasks contain different key patterns. Rather than articles in noun phrases, the most key features of the argumentative essays are verbs: modals verbs like can, will, and should, infinitive verbs like to help and can/not make, and infinitive to be verbs. Salient nouns, rather than references to source texts, are general common nouns like *people* and *media*, with *people* constituting 60% of all of the common nouns. The verbs collocating most often to the right of *people* are key verbs in the argumentative corpus—are, will, and should—and collocating to the left of nouns are other key features including indefinite pronouns like some and adjectives like other. These key features help facilitate general predictions and statements about people. In addition, other key features facilitate statements about causal relationships, such as the subordinating conjunction because, and general observations without a clear source, e.g., those beginning with existential there (there are many). Also interesting is that phrasal verbs are key, which tend to be associated with more informal language use and are also increasing generally in the English language (Brown & Palmer, 2015). One other interesting note is that there are also more keywords for the argumentative macro-genre, suggesting that there may be more variety regarding what is considered successful argumentative essay writing than explanatory writing. This could support research suggesting that there are multiple profiles of successful argumentative essays by student writers, ranging from more to less formal, constituted by distinct linguistic combinations (Crossley et al., 2014)—but may further suggest that the specific genre of the argumentative essay directly influences this finding.

The macro-genre discourse patterns suggest that regardless of course and regardless of distinctions between annotated bibliographies and visual analyses, there are key distinctions between argumentative and explanatory student writing. In both courses, the two explanatory projects are characterized by more specific and small-scoped subjects like *articles* and *images*, which collocate with lexical verbs (*discusses, shows*) as writers elaborate descriptively on those objects of study, e.g., more often according to what they *do* than what they *can* or *should* do. Frequent use of prepositional phrases and relative clauses also make space for elaboration, e.g., *views on the, by using, psychology of religion; which make.* Consider, for example, one more passage in light of these aggregate patterns, which comes from an ENC 1102 visual analysis:

Even though the image is related to military mental health, which usually involves trauma and dramatic memories, the fact that the family shown in the picture appears to be happy and calm communicates to the audience a message of hope and restoration.



In this explanatory visual analysis passage, prepositional phrases *to military mental health, in the picture, to the audience,* and *of hope and restoration*, as well as the relative clause *which usually involves trauma and dramatic memories*, all provide structures for specification and elaboration.

On the other hand, in both courses, argumentative versus explanatory writing is characterized by more general nouns, modal verbs of prediction and necessity, infinitive verbs, negation, and subordinating conjunctions. These facilitate general predictions and statements about people, causal relationships, and definitive observations (*there are/ people are*). By way of illustrating these concurrent patterns, consider one more passage, taken from an ENC 1101 argumentative essay.

When parents decide to take a stand and be the role model that their child needs, we can ensure that the social problems amongst teens will reduce. Children will start receiving the affection and support that they desire and will no longer have to seek for that on their own.

The passage includes general predictions about parents and social problems, using adverbs such as *when*, general nouns and second person plural pronouns such as *parents* and *we*, and modal and infinitive verbs such as *will no longer have to seek* in order to advance an argument about a general topic, the need for parents to be role models in order to curb emotional and behavioral problems among teens.

These findings point to patterns of language use that are distinct in argumentative versus explanatory writing, including recurring co-occurrence of modal verbs, adverbs, and negation in the argumentative writing that place a primary focus on personal stance and involvement and persuasion (Biber et al., 2002). On the other hand, the frequent co-occurrence of nouns, determiners, and pronouns in the explanatory writing contributes to more informational and elaborated language use in the annotated bibliography and visual analysis, the two explanatory projects. This also means that in terms of informational versus interpersonal language use, the key features in the explanatory writing are closer to those of formal academic writing (e.g., research articles); they are likewise closer to later versus earlier undergraduate writing in the British Academic Written English corpus (Nesi & Gardner, 2012).

It is notable that most of the macro-genre patterns emerge in both the incourse and across-course analyses, meaning that not only are they similar across tasks (despite differences in the visual analysis and annotated bibliography tasks), but are also similar despite some students having one more semester of training than others. These similarities suggest that at least for these successful students, the macro-genre distinctions are even more influential than specific task parameters and student advancement across a semester—and that these macro-



genre distinctions are visible in micro-level discursive strategies that impact what is foregrounded and how information is treated. By extension, they suggest that in this study, there is not a strong empirical relationship between argumentative essay discourse and conventional academic discourse practices, despite the pervasive use of argumentative essays in transitioning student writing.

Key to the above conclusions is the importance of the co-occurrence of features. While it may not be surprising that students use significantly more general nouns like *people* and *media* in argumentative essays than annotated bibliographies, the fact that these general nouns are frequently coupled with modal verbs and degree adverbs indicates that a common sociocognitive action of argumentative essays is to offer generalized, often intensified, predictions. By this I mean that the features together contribute to a genre-specific rhetorical effect. This notion of a cumulative rhetorical effect parallels how Thompson and Ye (1991, p. 367) describe evaluation in academic texts:

[E]valuation is best seen as working at the discourse level of text...it may hold over relatively long stretches of text (including over a complete text); it is often cumulative rather than clearly signaled at any one point in the text; and it may depend crucially on context (including position within the text). It can be seen as a separate layer of meaning potential.

This analysis does highlight what Thompson and Ye describe as "discrete" textual instances, but it emphasizes how multiple discourse features work together to create meaning for writers and readers. If we consider the cumulative discursive patterns within and across the projects, we see distinct practices prioritized in the explanatory versus argumentative tasks. A cumulative effect of several key features in the explanatory tasks seems to be informational delineation of specific objects of study, a bit like what Brown and Aull label "elaborated specificity." In contrast, the effect of several key interpersonal and persuasive features in the argumentative essays seems to be one of generality and persuasion by way of more text-external or "real world" predictions and observations, closer to what Brown and Aull label "emphatic generality" (in press). These recurring discursive practices, it seems to me, create cumulative effects, not only for readers, but for writers—sociocognitive habits that, for instance, repeatedly encourage summary and explanation, or repeatedly encourage generalized predictions.

Perhaps more compelling than these findings *per se*, therefore, is that they show a recurring affinity for certain discursive practices—and not others—in different tasks that students are expected to write, and it suggests that these A-graded students are successfully adapting to them. Different discursive practices do not necessarily suggest that one genre is more beneficial than the other; rather, they suggest that genres depend upon co-occurring, patterned choices that make



them recognizable and that privilege certain ways of thinking and writing. Identifying these discursive practices is thus a way of grounding Bawarshi's claim about the socializing effect of genres in empirical patterns. It follows that discourse offers a valuable, systematic focus for investigating genre and transfer as well as improving connections between assignment goals and choices students have for fulfilling them. Such investigations are well-suited for writing analytics, in that they exist at the locus of writing analysis and practical challenges for writing instruction and assessment. In this spirit, I use the final section to discuss discourse-driven sociocognitive profiles of the explanatory and argumentative macro-genres in this study as well as questions for future research.

#### **6.0** Conclusion

#### 6.1 Sociocognitive Profiles for Writing Task Macro-genres

In section two, I suggested that genre research poses two questions that are to date under-explored. One question concerns how assignment genres are constructed discursively, or how discourse-level patterns distinguish particular writing tasks. This question underscores discourse as an important way to trace students' genre adaptations (or lack thereof) and also highlights that genrespecific discursive demands are related to sociocultural affordances that, in turn, yield particular learning opportunities (and not others). The other question, by extension, concerns how instructors might design assignments that are consistent with the kind of discourse they expect and perceive as meaningful in student writing. Ideas about genre, transfer, and writing task design are already central to student writing research, but they stand to benefit from additional attention to discourse as part of examining how genres work. In this section, I consider these questions specifically in light of how analysis-driven macro-genre profiles might help us think about assignment design and writing transfer.

We know that it is a significant challenge for students to transfer genre knowledge and adapt to new rhetorical situations. It is specifically difficult for first-year college writers, because many struggle to make the needed links between their prior and new writing experiences (Beaufort, 2007; Clark & Hernandez, 2011; Reiff & Bawarshi, 2011; Rounsaville, Goldberg, & Bawarshi, 2008). Research suggests that explicit instruction and a "meta-language" for writing helps facilitate this process (Jarratt, Mack, Sartor, & Watson, 2009; Meizlish, LaVaque-Manty, & Silver, 2013), but we have much more to learn. Transfer research often depends on self-reported data on students' beliefs and strategies and has not yet explored the role of linguistic features in students' writing development (Aull, 2015b, p. 178). As Chris Anson recently put it, existing frameworks for transfer are helpful but also insufficient. Our conceptions "must understand writers' experiences as involving much more than knowledge of



genre, content, rhetorical situation, or process," and must consider ways that writers are habituated to particular discourses (2016, pp. 539-540). Here, Anson underscores that cognitive conceptions of writing alone do not account for myriad influences on transfer. The present study corroborates the important role of patterned discursive practices in the work of genres.

The study findings suggest that these A-graded students are responding, consciously or not, to the discursive demands of different tasks, and that these demands are genre-specific. Based on the key distinctions, such discourse choices help contribute to the students' writing success. The patterns accordingly suggest that in addition to identifying traditional, macro-level rhetorical concepts like audience and purpose, there is value in identifying micro-level discourse strategies embedded in genres. They furthermore suggest that the primary or exclusive focus in composition courses—"that is, academic argument" (Clark & Hernandez, 2011, p. 65)—will habituate students into particular discursive strategies, and not others. Along these lines, comparative corpus analysis across student genres can help identify patterned discourse that (1) highlights examples of discursive adaptation to particular genres, and (2) explicitly links writing goals with specific writing choices students make.

An exploratory way I have attempted this is by using the keyword findings to inform macro-genre profiles. These profiles note discourse patterns, social purposes, genre networks, and stages or processes entailed; in so doing, they highlight discourse as an integral part of the sociocognitive work of explanatory and argumentative genres. These profiles, or improved versions based on further research, work toward the goal of using context-informed corpus analysis to create accessible descriptions that reconceptualize writing task genres according to many levels of meaning-making: macro-level (e.g., audience), meso-level (paragraph-level [Gere et al., 2013]), and micro-level (e.g., discourse patterns).



#### Interpersonal, text-external, persuasive <u>argument</u>

Social purposes include crafting an individual stance toward a topic and connecting observations to broader, generalized predictions and claims. Genre (cognitive) networks include print and online editorials and popular and literary essays.

**Discursive practices** include interpersonal and persuasive prose, including conversational features that show affect such as negation and intensifying adverbs, as well as persuasive features such as infinitives and modal verbs that predict and provide recommendations.

**Process** includes reading about a topic, summary, thesis-building, drafting, revising.

#### Elaborated, text-internal, non-persuasive <u>explanation</u>

Social purposes include demonstrating knowledge and/or analysis of sources or objects, and providing a focused, detailed accounting of said sources. Genre (cognitive) networks include annotated bibliographies, literature review papers or sections, general professional and academic summary reports or analyses. Discursive practices include informational prose focused on sources or objects analyzed, including elaborated and informational features like complex noun phrases, prepositional phrases, and use of reporting verbs to provide detailed descriptions. Process includes selection and study of focal objects or sources, drafting, revising.

Figure 1. Sociocognitive profiles for argument and explanation macro-genres.

First, consider these working profiles as part of supporting students. The profiles strive to help develop students' genre awareness and meta-language for writing according to social, cognitive, and discursive expectations. They aim to help both those who have and have not consciously perceived certain genre differences, by making explicit example choices that successfully adapt to the genre. Such explicit attention may help disrupt discursive entrenchment that thwarts transfer for novice writers, by connecting multiple levels of genre meaning (see e.g., Anson, 2008; Gere et al., 2013). In other words, discourse-level strategies, presented as part of the profiles of genres, may help specify and concretize some of the discursive resources that students are using, or could use, as they search for rhetorical strategies (Anson, 2016) and repurpose genre knowledge (Reiff & Bawarshi, 2011).

Next, consider the profiles in light of the related goal of supporting instructors—specifically, to help elucidate connections between instructors' goals and the writing tasks they design. This goal rests on my belief that writing task design should attempt, in a systematic way, to account for connections between discursive practices and the goals of the tasks, and that the conventional dichotomy between language and writing in assignments and standards is inaccurate and unhelpful (Aull, 2015a). It also stems from the sense that many instructors, myself included, have been socialized to primarily assign argumentative essays, rather than other genres, without necessarily having a thorough rationale for doing so (cf. DeStigter, 2015). These initial profiles strive to accessibly, concisely outline macro-genres in such a way that instructors can



identify several specific levels and details of their goals for a particular writing task.

For instance, if the goals of a writing task include having students practice constructing an evidence-based argument for a generally educated audience—but also having students practice positioning themselves as participants in generalized debates, using relatively persuasive and emphatic discourse-then some version of argument (on the left) seems an apt macro-genre compared to explanation. If the goals of a writing task include having students practice engaging with an existing conversation of views and informing a generally educated audience about it—but also having students practice positioning themselves as analytic readers, using relatively specified, detailed discourse—then some iteration of explanation (on the right) seems appropriate. In either case, or something else altogether, we can strive to make several practices inherent in the sociocognitive work of genres more explicit. One way we can do this is through detailed assignment descriptions that, like these profiles, strive to account for macro-level rhetorical expectations as well as more micro-level, discursive ones. Clear writing expectations have been identified as top contributors to students' learning and development across university courses (Anderson, Anson, Gonyea, & Paine, 2015). At the same time, all of these ideas merit more research, as emphasized in the final section.

#### **6.2 Future Research**

Writing analytics aims to create new writing knowledge and to use that knowledge to respond to practical challenges. It pursues the measurement and analysis of written texts for the purpose of understanding writing in educational contexts and improving the teaching and learning of writing (Shum et al., 2016). Ideally, writing analytics is thus practical, conceptual, and interdisciplinary.

Context-informed corpus analysis of FY student writing, which brings together composition and applied linguistics and connects patterned discourse to tasks and macro-genres, is precisely this kind of practical, conceptual, and interdisciplinary endeavor, and it can help explore how student genres reflect and constitute the values embedded in educational contexts during a critical period of writing development. This analysis, of course, has only begun to consider such connections and implications. The corpora capture only A-level student writing in four projects within one institutional context of FY writing. Likewise, they account only for patterns shared across tasks, rather than variation within those tasks or macro-genres, and more analysis is needed to determine the range of tasks that might constitute macro-genres of argument and explanation as well as to identify



what patterns and variations characterize student writing across more contexts.

As it is, this study has identified features that persist across four projects and two macro-genres written by successful FY writers in one institutional context, and it poses questions that warrant more investigation. I hope that it has specifically highlighted the value of discourse-driven analysis as part of exploring writing tasks, in particular, as part of evaluating the pervasive use of the argumentative essay in undergraduate writing (e.g., Burstein et al., 2016; DeStigter, 2015; Heath, 1993). The initial questions below relate to using similar research findings as part of evaluating common FY writing tasks like the argumentative essay.

- Are the discursive practices encouraged in the argumentative essay those that students should practice most in FY writing? Why and why not?
- (2) To what extent might it be valuable to assign a range of writing tasks, and therefore have students practice a range of discursive practices? What range and balance?
- (3) How might drawing attention to discursive practices in arguments and other macro-genres help students understand the unique purposes and effects of different writing choices?

Broader questions posed by the study include how to use contextinformed corpus analysis, and the sociocognitive habits it helps expose, to improve connections between writing goals and writing genres and tasks.

- (4) How might attention to context-informed corpus patterns inform how expectations are clarified for students? How might they help foster transferable discursive consciousness for students, e.g., by helping students recognize concurrent discourse choices in unfamiliar genres?
- (5) What additional focal points of discourse analysis and assignment analysis might inform profiles for texts that account for genre and task parameters? What additional research is needed to better connect embedded, sociocognitive habits of writing tasks with a wide range of social, cognitive, intrapersonal, and interpersonal domains and goals?

Future research can help us consider how to use context-informed corpus analysis and other approaches that highlight assignment and rubric details as well as the patterned discourse choices students use in their writing. These in turn help us consider the discursive realizations of conventional school genres, which foreground certain competencies and goals, including practical, personal and social, and general learning goals. According to Gonyea and Miller (2011), we might, for instance, consider which tasks seem to emphasize "Practical Competence," which underscores



acquiring job- or work-related knowledge and skills as well as the ability to work effectively with others; using computing and information technology; analyzing quantitative problems; and solving complex real-world problems. Other tasks might instead emphasize "Personal and Social Development," including learning independently, understanding oneself, understanding other people, developing a personal code of values and ethics, and contributing to the community. Others might highlight "General Education Learning," including the ability to write and speak clearly and effectively, and to think critically and analytically for a general audience. Identifying discursive realizations of such goals might help us further connect written patterns with key interpersonal, intrapersonal, and cognitive domains of writing development (White, Elliot, & Peckham, 2015).

General education learning is perhaps the most elusive. It may especially benefit from better understanding of general writing macro-genres such as FY argument and explanation. Going forward, such understanding can help account for recurring discourse practices as empirical evidence of ways of thinking, writing, and being in the world, re/constituted by particular genres and tasks.

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#### Appendix A

| FYC          | Project  | Tasks, Purpose, audience  |
|--------------|--|---|
| Intermediate |  | - ····································  |
| ENC 1101     | 1: Annotated bibliography:<br>Researching and summarizing<br>http://hosted.usf.edu/FYC/1101-<br>2/project-1/   | You will develop a research process, learn<br>that academic conversations occur within a<br>historical and rhetorical context, and learn<br>how to trace these conversations over time.<br>Your audience for this paper is an audience of<br>academic peers who is less knowledgeable<br>about the subject or historical figure.  |
|              | 2: Argumentative summary<br>essay (What they say):<br>Arguing how a topic has<br>changed over time<br><u>http://hosted.usf.edu/FYC/1101-</u><br>2/project-2/<br>(Not used in analysis) | You will develop a thesis (a claim) about<br>how the scholarly conversation has changed<br>over time that integrates evidence from the<br>research you did in Project 1 to support your<br>thesis; make connections between sources<br>(compare and contrast) to support your<br>argument. Your audience for this project is<br>an academic audience who is unfamiliar with<br>the topic and changes in perspectives<br>regarding the topic or figure.  |
|              | 3: Argumentative essay:<br>Joining the conversation<br>http://hosted.usf.edu/FYC/1101-<br>2/1101-project-3/  | Students should use research as support for<br>their thesis and a way of acknowledging and<br>incorporating counterclaims. Students should<br>incorporate a minimum of six sources, at least<br>four of which need to be peer-reviewed. The<br>thesis for Project 3 should distinctly stake<br>your claim in the argument. The thesis should<br>respond to the research question by<br>establishing an arguable claim. The thesis<br>should include your understanding of<br>counterarguments and develop evidence-<br>based claims that support your argument on<br>the topic. |



| ENC 1102 | Project                         | Tasks, Purpose, audience                         |
|----------|---------------------------------|--|
|          | 1: Analysis of visual rhetoric: | Identify the argument of one of                  |
|          | Identifying and analyzing a     | your stakeholders as projected through their     |
|          | stakeholder's argument in an    | visual images and think critically about the     |
|          | image                           | visual and rhetorical strategies this particular |
|          | http://hosted.usf.edu/FYC/1102- | group implements in their campaigns. You         |
|          | <u>2/project-1-2/</u>           | will choose two specific images created by       |
|          |                                 | the organization (i.e., advertisements, PSAs,    |
|          |                                 | or static images used on a website, flyer,       |
|          |                                 | billboard, etc.), and analyze how these visual   |
|          |                                 | arguments reflect the organization's goals.      |
|          | 2: Argumentative analysis       | You will analyze two stakeholders with           |
|          | (Finding common ground):        | seemingly incompatible goals regarding the       |
|          | Analyzing two views and         | same issue or topic. Building on this common     |
|          | arguing for a solution          | ground, students should then propose and         |
|          |                                 | clearly argue for a feasible, objective          |
|          | http://hosted.usf.edu/FYC/1102- | compromise wherein each would be asked to        |
|          | 2/project-1-2-2/                | make concessions that would ultimately           |
|          |                                 | benefit both stakeholders, provide contexts in   |
|          | (Not used in analysis)          | which the compromise will work, and              |
|          |                                 | demonstrate that the compromise appeases         |
|          |                                 | both stakeholders. Include a thesis that         |
|          |                                 | presents the point of contention between the     |
|          |                                 | stakeholders and explains a proposed             |
|          |                                 | compromise                                       |
|          | 3: Multimodal argument,         | You will draw on research about your issue or    |
|          | including argumentative         | topic and use your knowledge of rhetorical       |
|          | essay: Composing multimodal     | appeals to educate, engage, and                  |
|          | argument                        | empower audiences using written, visual, and     |
|          | http://hosted.usf.edu/FYC/1102- | verbal strategies. You will compose              |
|          | 2/project-3/                    | an argumentative essay of 1200-1400 words        |
|          |                                 | that (a) educates an audience of non-engaged     |
|          |                                 | stakeholders about the issue or topic; (b)       |
|          |                                 | engages the audience by convincing them that     |
|          |                                 | they should care about this issue or topic; and  |
|          |                                 | (c) empowers the audience to take action in      |
|          |                                 | some way.  |

<sup>&</sup>lt;sup>1</sup> Students also read essays, as part of assessments like the Scholastic Aptitude Test (SAT) and Common Core exams, and in commonly-assigned reading material such as the composition "essay canon" (Bloom, 1999, 2000; Burrows, 2011). See, for example, <u>https://collegereadiness.collegeboard.org/sample-questions/essay</u> for SAT practice test examples, and see <u>http://www.corestandards.org/ELA-Literacy/W/11-12/</u> for more information about the U.S. Common Core standards.

<sup>&</sup>lt;sup>2</sup> In addition, corpus analysis has been used in composition studies to reveal institutional norms. Dryer's (2013) corpus study of FY composition rubrics across U.S. institutions shows that



"essayistic expository prose" is privileged even though it may not be encouraged in certain disciplinary or workplace genres; he suggests that while the emphasis on essayistic conventions in composition is unsurprising, the "lack of self-consciousness about the uses, limitations, and site specificity of these conventions may be working against writers' ability to negotiate transitions to other genres" (p. 28). Lancaster (2016) uses corpus analysis to empirically test the validity of the formulations in the popular composition textbook *They Say, I Say* according to patterns in academic written corpora. These studies show additional uses of corpus analysis to shed light on assumptions and expectations at work in writing instruction and constructed response tasks. <sup>3</sup> For example, in the following annotated writing tasks, the first one solicits both source text and personal evidence and poses an open-ended question as the point of departure for the students' arguments:

(A) In 2010, we rely on machines for many of our daily activities. Some argue that this reliance on machines can enhance our lives. Others argue that it may diminish human interactions. Both views are expressed in the article you've read, "Robots That Care." Based on evidence from the article and your own views, write an argument that addresses the question: "What role should machines play in our lives?"

In another example task, only source text evidence is explicitly solicited, and an argument in the source text is the point of departure for the students' claims:

(B) Read Malcolm Gladwell's article entitled "Small Change: Why the revolution will not be Tweeted." Analyze Gladwell's argument about digital media and social revolutions. Then write your own essay in which you support and/or challenge his argument using evidence from the article.

The spectrum of evidence, scope, and source text references in first-year writing (2015a, p. 80) follows:



<sup>4</sup> For 2011-2012, CCCC awarded the FYC Program the *Writing Program Certificate of Excellence*, a national award. The program's standardized curriculum is publicly available at <u>http://writingcommons.org</u>; see also (Moxley, 2013). Note that since the spring of 2016, the order of the first two ENC 1102 projects has switched; in the current USF FYC ENC 1102 course, students first write the "Finding Common Ground" assignment and then write the visual analysis project (followed by the argumentative essay). Finally, note that the student papers for this analysis were de-identified prior to being sent to the author to ensure the writing texts were anonymous and followed USF IRB exemption for the use of student records. <sup>5</sup> The two projects excluded from the analysis contained broadly similar numbers and percentages within their respective courses: the ENC 1101 project 2 exemplary draft N= 90 texts (40.5% of total), and the ENC 1102 project 2 exemplary draft N=215 (32.5% of total).

<sup>6</sup> See more information on the CLAWS 7 tagset at <u>http://ucrel.lancs.ac.uk/claws7tags.html.</u> See more information on the BYU family of corpora at <u>http://corpus.byu.edu/</u>. An excellent resource for POS-tagged corpora and information is David West Brown's Grammar Lab website <u>http://thegrammarlab.com/</u>.

<sup>7</sup> Conventional thresholds for significance (for df = 1) occur at 3.84 (p < 0.05), 6.63 (p < 0.01), and 10.83 (p < 0.001).

<sup>8</sup> Another note is that in addition to checking recurring concordance lines and collocations, I also spot-checked for such outliers; but this too does not guarantee that all exceptions to the common phrasal verb structure are caught. Furthermore, owing to the relatively small corpora sizes, this was not overly-burdensome; in the case of phrasal verbs in this study, this only meant spot-checking about 20 different forms, in under 1300 uses. In corpora comprised of millions of words of text, this process would be more laborious; at the same time, corpus parsing tools like POS-taggers will likely become more sophisticated as time goes on.

<sup>9</sup> The use of *their* to refer back to the organization, a common discourse practice in the corpus that perhaps suggests that the students associate the organizations with the people within them, rather than viewing them (or discursively constructing them) as impersonal entities.