Knowing What We Know about Writing in the Disciplines: A New Approach to Teaching for Transfer in FYC

JOANNA WOLFE, BARRIE OLSON, AND LAURA WILDER

In recent years, composition studies has seen a considerable growth of interest in the transfer of learning, with researchers asking what abilities and knowledge students take with them from first-year composition (FYC) and use in new contexts. Anyone familiar with this line of inquiry will immediately be struck by how dismal the discoveries have been. Study after study, starting from Lucille P. McCarthy’s 1987 research, has found that students fail to transfer writing knowledge from FYC to the writing they do in other coursework (Beaufort; Wardle, “Understanding”; Bergmann and Zepernick; Carroll). Worse, sometimes students negatively transfer knowledge, applying precepts learned in FYC to contexts where such advice is rhetorically inappropriate (Beaufort; Walvoord and McCarthy). The news is not all bad: two recent studies have reported positive results for students’ abilities to transfer general rhetorical skills to later writing contexts (Brent; Johnson and Krase) and some teacher-researchers have proposed new curricula for FYC that they hope will encourage transfer (Downs & Wardle; Yancey, Robertson, and Taczak). However, absent these major curricular changes, most research suggests students see little occasion or need to transfer rhetorical knowledge from FYC to other disciplinary contexts.

Although some studies attribute such lack of transfer to students’ dispositional characteristics (Driscoll and Wells; Reiff and Bawarshi), others fault the instructional approaches typical to FYC. For instance, Elizabeth Wardle states that “one reason for lack of transfer is instruction that does not encourage it” (“Mutt” 770), noting that composition instruction rarely encourages students to explicitly consider the connections between genres assigned in FYC and those of other disciplines. Similarly, Dana Driscoll observed composition instructors simply telling students they would use writing knowledge from FYC in future contexts but doing little to help them anticipate or build bridges to those future contexts.

One of the most prevalent reasons why FYC so often fails to promote transfer of learning is likely that writing instructors perceive their own academic writing experience as much more universal than it really is. As Wardle puts it, many FYC instructors mistake “the genres of English studies for genres-in-general” (“Mutt” 769). Consequently, these instructors see no need to prime students for the different genre work most will encounter. Such a generalized conception of writing is reinforced.
by the academic culture of specialization. Because instructors primarily teach and study within their disciplines, they come to mistake their specialized disciplinary ways of thinking and writing as universal skills (Russell, *Writing*; Lea and Street; Thaiss and Zawacki; Wilder). No more immune to this tendency, FYC instructors, frequently trained in literary studies (as recent collections edited by Anderson and Farris and by Bergmann and Baker make clear), tend to view their own discipline’s values, assumptions, and conventions as the norms in other disciplines.

At their worst, such universalizing assumptions can result in giving students incorrect or harmful advice. For instance, Jo Mackiewicz observed writing center tutors, whose disciplinary background is often similar to FYC instructors, not only giving engineering students inappropriate advice that reflected the conventions of humanities writing but also stated inappropriate advice “with certainty” (316). Ghanashyam Sharma similarly encountered engineering faculty who felt their graduate students’ visits to the university writing center actually made their writing worse. Joanna Wolfe found that technical writing textbooks typically written by English faculty, often give humanities-focused advice, such as uncritically promoting the active voice, or telling students that all documentation styles are similar to either MLA or APA (“How”). Heather Graves discovered the rhetorical moves advised by a popular, ostensibly trans-disciplinary textbook for graduate students were not evident in any of the scientific disciplines she examined.

More likely, however, this tendency to see the rhetoric of one’s own discipline as universal simply leads instructors to downplay, or even deny, rhetorical differences among disciplines, even when they emerge before their eyes. For example, Rebecca Nowacek found that three faculty from literature, religious studies, and history team-teaching an interdisciplinary course had very different notions of what they meant by a thesis. However, when these differences appeared in classroom discussions, the faculty immediately suppressed them, encouraging students to see similarities that did not in fact exist. Laura Wilder’s interviews of literature faculty indicate this phenomenon is not uncommon. For instance, one professor shared with students her belief that no fundamental differences exist between writing about literature and writing in other disciplines like psychology or biology, yet she recognized, and even welcomed, the different ways of thinking that diverse majors exhibited. Thus, “while she acknowledge[d] that different majors have different cultures . . . she resist[ed] seeing writing as one of the cultural practices in which these disciplinary differences may manifest” (Wilder 75). Driscoll similarly describes FYC instructors who claim their goal is to teach “general academic writing” or state “all majors go through a similar research process,” but who also confess that they have no idea what engineers write or that “I don’t know if scientists write papers; I kind of think not” (12-13). Such tendencies to gloss over rhetorical differences—or deny the presence of
rhetoric in other disciplines—would seem to promote negative transfer of rhetorical knowledge if students follow their writing instructors’ advice in contexts where that advice is inappropriate.

However the differences in rhetorical conventions and expectations that students encounter in different academic contexts have sometimes been emphasized to the extent that the possibility of transfer seems unlikely, if not impossible. For instance, Ken Hyland argues against general “academic literacy” instruction by claiming “each [disciplinary] discourse community has unique ways of identifying issues, asking questions, solving problems, addressing its literature, criticising [sic] colleagues and presenting arguments, and these make the possibility of transferable skills unlikely” (145). Similarly, David Russell, in an oft-cited passage, draws an analogy between writing in the academy and ball handling skills in sports to argue that “there is no autonomous, generalizable skill called ball using or ball handling that can be learned and then applied to all ball games” (“Activity” 57). While we agree with other WID researchers that different disciplinary discourse communities represent unique activity systems, we also see some commonalities across these systems.

For instance, most academic writing, whether composed by students or their professors, is argumentative (Johnson and Krase; C. Wolfe) and addressed to an insider audience of disciplinary experts who will evaluate the work’s merits. Most academic writing, regardless of discipline, also shows evidence that the writer has been disciplined and open-minded, privileging reason over emotion (Thaiss and Zawacki; Thonney), characteristics that again distinguish it from other discourses. In addition, academic writing announces its value (Thonney), often by claiming to present or create new knowledge (Kaufer and Geisler). As a consequence, proper attribution of others’ work is much more significant in academic writing than in other discourses (Jameson; Thonney). In terms of Russell’s analogy, the games played with words within the academy may require similar-enough “word handling” skills to make some transfer among academic games possible.

More importantly for our purposes, however, is that rhetorical skills need not be universal across all academic genres for transfer to occur across individual disciplines. Certainly, we should expect to find substantial overlap in the rhetorical conventions of closely related disciplines. Moreover, even epistemically diverse disciplines are likely to share some similarities. We believe that FYC instructors can do much more to prepare students to take advantage of these similarities—even while familiarizing themselves with the differences. However, first, instructors must educate themselves about how their own rhetorical knowledge may or may not transfer to other academic contexts.

Our own attempts to teach for rhetorical transfer borrow from research in two branches of English as a Foreign Language—English for Academic Purposes
(EAP) and English for Specific Purposes (ESP)—to flesh out an analytic method we term Comparative Genre Analysis (CGA) that can be integrated into a range of approaches to FYC. CGA involves careful comparison and contrast of the values and conventions of a genre one is already conversant in with those of other less familiar genres in order to better understand the larger activity systems in which both genres function. In an academic context, CGA can be used to better understand the core intellectual values that motivate writing in various disciplinary contexts. The assumption behind CGA is that by recognizing the particular rhetorical conventions of our discipline—and cultivating an awareness of how these conventions support disciplinary values and ways of knowing—we position ourselves to better understand the conventions and values laden in other disciplinary genres.

This essay combines an extensive review of relevant WID research with our own original analysis to perform a CGA that we hope will increase FYC instructors’ awareness of academic writing outside of English studies. We accomplish this by comparing and contrasting the conventions of literary analysis with those of common genres in six other disciplines. We use literary analysis as a departure point because it is a relatively stable genre with which most new writing instructors are intimately familiar. Our goal is (1) to persuade FYC instructors that they are teaching specific rhetorical conventions rather than automatically generalizable writing skills and, more importantly, (2) to demonstrate how instructors can combine their discipline-specific expertise with an awareness of other academic contexts to help students intentionally transfer rhetorical knowledge already possessed.

We also propose CGA as a pedagogical strategy that is particularly useful for FYC sections intended to prepare students for academic writing. Some teacher-researchers, strongly influenced by recent research in genre, have already incorporated elements of CGA in their textbooks and pedagogical recommendations (Wardle and Downs; Devitt, Reiff, and Bawarshi). However, we would like to see such work integrated into a greater variety of FYC approaches, including expressivist, cultural studies, and argumentative approaches. The extensive CGA we perform in this essay not only gives instructors a rhetorical background that will bolster their confidence in discussing non-humanities academic writing, but also allows us to develop a framework of questions that can help students perform their own CGAs. We believe that conducting their own CGAs will heighten students’ meta-awareness of rhetorical differences among academic genres—just as linked interdisciplinary courses or double-majoring improves students’ abilities to recognize and articulate rhetorical differences among disciplines (Nowacek; Thaiiss and Zawacki). Moreover, tasks such as CGA that ask students to explicitly link genre conventions to disciplinary values and goals can help students realize there is no universal criteria for “good writing” (Wilder 161-62).
We proceed by comparing and contrasting literary analysis with the conventions found in genres from six diverse disciplines: Business, Psychology, Nursing, Biology, Engineering, and History. We chose these disciplines for their diversity as well as their relative popularity among undergraduates (the first four fall under the academic areas that the National Center for Education Statistics cites as granting the most undergraduate degrees). In choosing so many fields we have obviously sacrificed thoroughness in favor of variety, but we do so because in this model CGA we are more interested in defining a set of questions that writing instructors can use to better prepare students to navigate the values and conventions of a range of academic disciplines. The disciplinary genres we consider include both pure academic genres, written for an audience of disciplinary experts, as well as pre-professional genres (common in disciplines such as Business) which may invoke external, non-academic audiences as well as the academic audience of the course instructor.

To narrow the scope of our investigation, we focus on three areas of rhetorical analysis that correspond to the three canons of invention, arrangement, and style:

- **Topoi**, or lines of argument, prevalent in a discipline.
- Macrostructures used to arrange arguments in the discipline.
- Naming and citation conventions used to refer to other scholars and their research.

For each discipline, we synthesized as much WID and EAP research as we could find touching on the above conventions. We supplemented this synthesis with discipline-specific textbooks and essays written by teachers and practitioners in those disciplines describing what they are looking for in student writing. Since naming of rhetorical conventions is inconsistent across this discourse, we had to extrapolate from the descriptions various researchers provided to our own framework. We then did our own primary research, examining undergraduate essays published in undergraduate research journals and conference collections and essays that individual instructors had posted to pedagogical websites as examples of model student papers. Our rationale in selecting these sources was that such essays would exemplify good, if sometimes advanced, undergraduate writing in these disciplines. We examined these essays for evidence of the rhetorical conventions described in the literature—or in cases where we could not find discussions of particular conventions, we conducted our own analysis based on our review of this undergraduate work.

**Topoi**

Special topoi, as Aristotle describes them, are mental “places” where the rhetorician goes to find the available means of persuasion in a particular context. These are a finer-grained version of what Michael Carter calls “ways of knowing” in a discipline.
However, where Carter’s analysis allows him to group a range of academic assignments into a few meta-genres and meta-disciplines, our analysis identifies specific rhetorical activities that span such groups. This analysis allows us to foreground similarities across genres and disciplines with very different “ways of doing” (Carter 388). Consequently, our topoi embody values that Christopher Thaiss and Terry Myers Zawacki identify as universal to academic discourse: they emphasize reason over emotion and foreground disciplined inquiry that anticipates the response of a skeptical reader.

We begin our analysis by identifying the special topoi of literary analysis—a genre familiar to most FYC instructors. These topoi were originally identified by Jeanne Fahnestock and Marie Secor and Laura Wilder. Because the current analysis is interested in spanning disciplines, we abstract from this earlier work to articulate two topoi prominent in literary analysis that are evidenced in other disciplines. We call these common academic topoi because they are sufficiently common to span multiple academic disciplines yet still specialized enough that they may not be seen in the same permutations outside of academic discourse.

**Pattern + Interpretation**

The first common academic topos we consider, *pattern + interpretation*, is a combination of Fahnestock and Secor’s special topoi of *appearance/reality* and *ubiquity*. Wilder found that these two topoi played prominent roles in nearly all of the published literary analyses she examined. Moreover, Laura Wilder and Joanna Wolfe note that these two topoi nearly always work together to support arguments in literary analysis, justifying our grouping of them here. An academic writer using the pattern + interpretation topos identifies a pattern in the primary material under analysis and uses this pattern to generate or support an interpretation. Figure 1 shows how pattern + interpretation works in an analysis of Milton’s *Paradise Lost*. The underlined words in example 1 all show the writer pointing out a pattern of scientific imagery in the poem, finding evidence of this pattern in the serpent’s words, Eve’s actions, and the sensory nature of the Fruit itself. Tracing these patterns requires the writer to make a series of mini-definitions, interpreting various images, such as the sensory nature of the Fruit, as scientific imagery. Once the writer has made a compelling case for a pattern, he groups these mini-definitions under a larger interpretation about the significance of scientific imagery for the text as a whole.
Not only does Milton frame Eve’s actions in the language of empirical science, but he also couches the Fruit and the Tree of Knowledge in scientific imagery. For instance, the Serpent calls the Tree a “Sacred, Wise, and Wisdom-giving Plant” (IX. 679) and, strikingly, the “Mother of Science” (IX. 680)… The combination of the Serpent’s words, the lunchtime hour of Noon, and the Fruit itself provoke each of Eve’s five senses and increase her desire to eat from the Tree of Knowledge (IX. 736-42). The Fruit, then, is metonymic for science, as both appeal to sensory experience…. Both Eve and the Serpent conflate wisdom with science and experience… By closely associating science, experience, and sense perception with Satan and the fall, Milton provides a sharp moral critique of this type of epistemology.

Figure 1. Pattern + Interpretation in Literary Analysis (Ruby 82-83)

We found evidence of the pattern + interpretation topos in all six of the disciplines we examined. It is particularly common in situations that call for data- or text-driven discourse in which inquiry begins with primary material and uses disciplinarily appropriate methods to draw interpretations and conclusions about that material (MacDonald). Our review of research suggests students in various disciplines suffer common difficulties in implementing this topos. Just as literature students often write literary analyses that are heavy on plot summary and weak in interpretation, so do students in other disciplines often write essays that over-rely on description at the expense of interpretation. Thus, a history professor warns students “never regurgitate or summarize: look for the hidden truth or the unusual thread” (Writers’ Web). Engineering mentors encourage novices to persuasively interpret data rather than simply provide data dumps of findings (Barabas; Winsor; Wolfe, Britt, and Alexander). Business instructors tell students to persuade readers by demonstrating patterns of evidence that align with their conclusion (Ellet). Psychology students are told to emphasize a “take home message” (Baumeister and Leary 316). In all of these cases, students must make rhetorical choices in describing patterns in datasets, research, or primary texts and use these descriptions to lead readers to particular interpretations or conclusions.

However, while the basic rhetorical moves of the pattern + interpretation topos appeared in all of the disciplines we reviewed, the following elements differed:
the stasis—or the central issue at question—of the interpretation. Contemporary stasis theories typically define five main issues: existence, definition, evaluation, cause, and proposal

the means of demonstrating the pattern—which can include observations, figures, tables, images, and statistical tests, as well as quotes and paraphrases

the complexity of both the pattern and interpretation

other topoi that may be combined with pattern + interpretation, most notably the topoi of comparison and exception.

A few examples should illustrate how this basic topos varies across disciplinary contexts.

Figure 2 shows how a business case analysis addresses different stasis issues and uses means that differ from those common in literary analysis. It begins with a clear argument in the topic sentence supported with evidence in the body—a method of arrangement familiar to those trained in literary analysis—but the evidence consists of observations rather than quotations. Moreover, where literary analysis makes arguments at the definitional stasis, this business case primarily operates at the evaluation stasis. This evaluation will assist the author in ending with a recommendation, reflecting business' emphasis on practical action. The lack of quotations, paraphrases, and documentation further illustrates business’ concern with actions rather than texts and words.

The current organization cannot succeed because it is misaligned, and Rogers has to take much interpretation of the responsibility. He made organization changes that ran counter to the division’s past and restating interpretation were not guided by a clear vision. New product development has suffered because Rogers made pattern changes….He moved the division headquarters to corporate…Sales and marketing were pattern separated with no consideration for their complementary nature….The marketing people can’t pattern collaborate effectively with sales…yet he is not coaching and helping them pattern

Figure 2. Pattern + Interpretation in Business Case Study (Ellet 111).

Whereas Figure 1 shows how a pattern develops by interpreting texts and Figure 2 by evaluating actions, Figure 3 shows how a pattern develops by interpreting and comparing numbers:
This study resulted in a conclusion that only 5.3% of athletes wearing the newer helmet suffered a concussion compared to 7.3% of athletes wearing the older models. Overall, high school players wearing Riddell’s Revolution were 31% less likely to be diagnosed with a concussion. Table (1) shows that out of athletes sustaining their first concussion, those wearing the Revolution were able to return to game sooner than those who were wearing standard head gear. The Revolution Helmet protects the player better than standard helmets.

Figure 3. Pattern + Interpretation in Engineering Experimental Report (Gonzales and Matthews 3-4).

Figure 3 uses percentages, tables, and text to identify two closely related patterns that support the interpretation that the new helmets offer better protection than the standard. These patterns are established through the common academic topos of comparison— one of the most common rhetorical moves in scientific discourse (Fahnestock; Walsh). Our analysis of primary texts found the comparison topos combined with pattern + interpretation in quantitative arguments in a variety of disciplines, suggesting that comparison is a major means for constructing knowledge out of numerical data.

Although those trained in literary analysis may be tempted to dismiss the numbers in Figure 3 as arhetorical facts, the percentages and other numbers included represent rhetorical decisions about how to present data involving dozens of unique incidents (J. Wolfe, “Rhetorical Numbers”). The authors had many choices for displaying the data; they selected representations that guide readers to conclude the new helmet is better. Because engineering students often shy away from clearly stating such conclusions based upon their data— perhaps out of a fear of being found wrong in high-stakes situations, or perhaps out of a belief that numbers can speak for themselves (Winsor; J. Wolfe, “How”; Wolfe, Britt, and Alexander)— there appears to be a real need for instruction in argumentation for these students.

Figure 4 shows a final mutation of the pattern + interpretation topos in a biology lab report. This example uses text, percentages, a figure, and statistical tests to demonstrate a pattern: germination increases as GA₃ increases. However, the interpretation of this pattern does not appear until the discussion section, several paragraphs later, when the writer explicitly states what has been learned about GA₃. This convention of defining patterns in the results section and waiting until the discussion...
to state what they mean helps promote a scientific stance of neutrality (Graves; Stockton, “Students”) that focuses attention on observable phenomena rather than interpretative acts (Bazerman). Thus, some disciplines foreground patterns while others, like literary analysis, foreground interpretations.

The example in Figure 4 additionally makes use of the exception topos, a common—and often challenging—rhetorical move in scientific and technical disciplines where writers need to explain aberrant or unexpected results, couch negatives as positives, or concede weaknesses in methods (Herrington; Walsh; J. Wolfe, “How”). Students, unsurprisingly, struggle with how and when to acknowledge exceptions without detracting from their main arguments (Herrington; Walker). In fact, the writer of Figure 4 ultimately dedicates as much text to exceptions as to the primary argument. Instructors experienced in reconciling conflicting readings of texts can help students make similar arguments reconciling conflicting interpretations of quantitative data.

In the light, germination success of seeds of the gal-3 mutant increased from 6% to 97.8% with increases in GA3 concentration from 0 to 0.5 mol L⁻¹ (Fig. 1). A similar trend with increasing GA3 concentration was observed in seeds maintained in darkness. A two-way analysis of variance (Table 1) showed that the effect of GA3 concentration on germination success was highly significant (P < 0.001). However, there was no significant difference (p > 0.05) in germination success between seeds kept in the light and those kept in the darkness.

Figure 4. Pattern + Interpretation in Biology Lab Report. The interpretation appears several paragraphs later, in the discussion section (McMillan 98).

Finally, writing instructors should be critically attuned to the role pattern + interpretation plays in literature reviews—a commonly assigned genre in Business, Psychology, Nursing, and Biology (Johnson and Krase) and one we find both students and novice writing instructors frequently misunderstand. For instance, in one writing center session we observed, a student explicitly described her organizational plan for a sociology literature review as discussing one source per page. This plan went unchallenged by the two tutors she visited on different days. In contrast to this atomized approach, nearly every source we examined about literature reviews stressed the need to avoid simple summary and instead use the literature review to argue for connections, or patterns, in the research and make interpretations. Thus, Roy F. Baumeister and Mark R. Leary state that psychology literature reviews should...
not “merely recount” previous research, but instead fulfill the “broader imperative” of explaining “how the various studies fit together” (317). Teresa Smallbone and Sarah Quinton describe business literature reviews as “reconstruct[ing] material into a new pattern” (7). Helen Aveyard advises nursing students to make a chart of key themes so that they can “begin to see patterns emerging in the literature.” Victoria E. McMillian urges Biology students to articulate “relationships, patterns, and arguments” in the literature (115). The message is clear: literature reviews use the pattern + interpretation topos to articulate patterns in the research that the writer interprets in a “nuanced conclusion” (Anglim) which often points to the need for additional research.

Conceptual Lens

Our second major common academic topos, the conceptual lens, uses a concept—a term, theory, or hypothesis—to organize observations about the phenomenon under study. In literary analysis, conceptual lens involves using a theory as a lens for analyzing primary texts (Fahnestock and Secor refer to this topos as a paradigm). Anyone who has used Bakhtin’s concept of heteroglossia, DuBois’ double-consciousness, or Lacan’s gaze to analyze a text has engaged this topos. Conceptual lens involves, at a minimum, two distinct rhetorical moves: (1) present the concept and then (2) apply this concept to interpret primary material. We see these two moves at work in Figure 5.

| Foucault distinguishes the Panopticon from the prisons of history in that, unlike a traditional present/summarize concept dungeon...the Panopticon turns an intense spotlight on each individual within its cells.... | [In Villette,] Madame Beck believes constant, methodical surveillance to be her apply concept best recourse in maintaining control over her school, which becomes a microcosm of Bronte’s Victorian context as teachers, students, and headmistress act out Bentham’s apply concept description of the Panopticon. |

Figure 5. Conceptual lens in literary analysis (Bertonneau 21-22).

The writer in Figure 5 first summarizes Foucault’s panopticon and then applies this theory at the definitional stasis to interpret the characters in Bronte’s novel.

Sophisticated uses of the conceptual lens topos go on to include a third move: using the analysis itself as an occasion for redefining or reflecting on the original concept. Such redefinition is often missing from student discourse: in some cases, instructors do not require it while, in others, students are unsure of how to do it—or simply unaware that such reinterpretation is even expected. Figure 5 gestures
towards this final move later in the essay by explaining how the protagonist manages to “beat the Panopticon” (24) and “def[y] the Foucaultian prison of categorization by defying understanding” (29). In this way, individual works of literary criticism may refine and revise literary theory (Wilder 38).

The example in Figure 6 uses similar rhetorical moves to fulfill the nursing goal of reflecting on (and consequently improving) practice. Although the stasis is definition, the example in Figure 6 makes no attempt to redefine the theories or concepts; instead, the writer uses conceptual lens to prepare herself for future practice.

| Severtseen (1990) cited by Duxbury (2000) applies the term therapeutic communication as the present/summarize concept dialogue between nurse and patient to achieve goals tailored exclusively to the patient’s needs. In this case dialogue is used by Mr. Comer in the form of body language and noise to apply concept communicate his needs because of speech loss. |

Figure 6. Conceptual Lens in Nursing Reflective Essay (Pure Maiden)

The conceptual lens topos also appears in hypothesis-driven research, where it serves the disciplinary goal of testing and extending knowledge. In such contexts, the conceptual lens topos serves the evaluation stasis by testing the merits of the hypothesis. In Figure 7, a psychology student tests whether theoretical insights on racial stereotypes can be applied to the domain of regional stereotypes and concludes that the hypothesis can be supported.

| This study hypothesizes that Southern accented speakers will be perceived as more friendly, less wealthy, more aggressive, and less intelligent than Standard accented speakers…. Overall, these hypotheses take the theoretical approach of many race-based stereotype studies that suggest socially salient cues activate stereotypes, leading to perceptual shifts. In cases of regional stereotyping, accent alone may trigger such powerful social perceptions. |

Figure 7. Conceptual Lens in Psychology (Phillips 54)

We found evidence of the conceptual lens topos in all of the disciplines we surveyed, with the exception of Biology (an exception that could reflect the limits of our literature review rather than rhetorical practice in Biology). The ultimate ends to which this topos was put varied across disciplines, but we found evidence of students
struggling to match data—whether from texts, personal experience, or study results—to pre-existing concepts in their work with most of the disciplinary genres we examined. The chief difficulty students seemed to encounter with this topos lay in trying to use vocabulary and concepts they did not fully understand (Abasi and Akbari). Such appropriation can lead to patch-writing as students attempt to reproduce ideas they do not fully grasp (Howard). A second common problem occurs when students assume an assignment is asking them to display their understanding of the conceptual lens rather than transform or apply this understanding. FYC instructors can prepare students to apply the conceptual lenses they encounter in other disciplines by naming this strategy when it occurs in our own assignments (see Appendix A) or class readings and illustrating how discipline-specific concepts and vocabulary help writers make sense of phenomena—whether that phenomena be texts, data, observations, or personal experiences.

**Macrostructures**

Whereas our analysis of topoi stresses similarities between literary analysis and other disciplines, our discussion of macrostructures points to some dramatic differences. A macrostructure is a top-level organizational pattern that provides informed readers with a frame of reference that helps them make sense of the text (D’Angelo). This frame of reference helps informed readers recall important information and reduces reading time.

The primary macrostructure in literary analysis is the thesis-first argument. This structure has two primary functions: it summarizes the main argument(s) of the paper and it forecasts the paper’s organizational structure. Thesis-first argument is so pervasive in English studies and much of the Humanities that many composition instructors may be guilty of believing an early and clear thesis statement is the only way to organize an argument effectively.

Unfortunately, the thesis-first argument is not necessarily the standard in other disciplines. Heather Graves explains that learning this argumentative style has “helped countless undergraduate students learn to write effective arguments for their first year writing and liberal studies classes” (1). Unfortunately, Graves goes on to explain, “once students leave composition and liberal studies classes […], these methods of argumentation may not be as useful in helping them argue effectively in the discourse of their chosen majors” (1). Even within the liberal arts, the thesis-first argument is not necessarily standard (see Table 1).
Table 1. Most Common Genres and Macrostructures in the disciplines we discuss. ²

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Common Genres</th>
<th>Primary Macrostructure</th>
</tr>
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<tbody>
<tr>
<td>Literature</td>
<td>Literary analysis</td>
<td>Thesis-first</td>
</tr>
<tr>
<td>Business</td>
<td>Case study</td>
<td>Problem solution</td>
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<tr>
<td></td>
<td>Proposal</td>
<td>Problem solution</td>
</tr>
<tr>
<td>Psychology</td>
<td>Experimental report</td>
<td>IMRD</td>
</tr>
<tr>
<td></td>
<td>Literature review</td>
<td>Thesis-first</td>
</tr>
<tr>
<td>Nursing</td>
<td>Reflection/Care report</td>
<td>Chronological</td>
</tr>
<tr>
<td>Biology</td>
<td>Lab report</td>
<td>IMRD</td>
</tr>
<tr>
<td></td>
<td>Literature review</td>
<td>Thesis-last</td>
</tr>
<tr>
<td>Engineering</td>
<td>Design paper</td>
<td>Problem-solution</td>
</tr>
<tr>
<td></td>
<td>Experimental report</td>
<td>IMRD</td>
</tr>
<tr>
<td>History</td>
<td>Historical analysis</td>
<td>Thesis-first or thesis-last</td>
</tr>
</tbody>
</table>

Note: IMRD refers to Introduction-Method-Results-Discussion

Table 1 shows thesis-first was the dominant macrostructure in only three of the major disciplinary genres we examined in addition to literature. This is not to say that thesis-first essays were absent from other disciplines, but they were not the primary macrostructure organizing the most common genres in these disciplines. It is also important to note, however, that many of the genres (including nursing reflections and biology literature reviews) did contain a statement of purpose in a position FYC instructors might associate with the thesis, but the primary propositions in the essay did not appear in this position.

Many readers will perhaps be surprised by the prominent role that thesis-last macrostructures play in historical analysis, a genre similar in many ways to literary analysis. Anne Beaufort claims that whether historians explicitly state a central argument and where they place it seems to be at the writer's discretion (71), an analysis supported by Caroline Coffin. When we asked one history colleague who told us she wanted students to include an explicit thesis at the beginning of the paper what she thought of the thesis-last structure, she quickly told us “that is valid too.” Sharon Stockton describes how many historians embed implicit arguments into a “narrative structure” (56) rather than state them explicitly, offering conclusions only after demonstrating they have carefully considered all of the evidence. When students use the explicit argumentative structures favored in literary analysis in their history papers, many professors perceived their writing as “unsophisticated” and “too forceful” (Stockton, “Writing” 63).

Thesis-first argument predominates in literary analysis because it enables readers to follow complex and highly nuanced arguments. Although historians clearly also value complex and sophisticated arguments, they may often privilege ethos and narrative sophistication over logical signposting. For instance, one historian advocating
a thesis-last macrostructure told his students “You don’t set out to prove something; you set out to see where the evidence leads you” (Nowacek 106). Similarly, natural scientists often favor thesis-last writing in literature reviews because it projects a scientific ethos of humility (Bazerman) in which scientists as interpreters are subordinated to the natural phenomena they document. Graves explains how the thesis-last argument projects an ethos of neutrality: not only does the focus remain on results rather than interpretation but scientists use implicit argument to allow discussion of others’ research to remain “essentially descriptive, neutral, and objective” (13).

While the thesis-last macrostructure allows scientists to emphasize their neutrality, the IMRD (Introduction-Methods-Results-Discussion) macrostructure common in many science and social science disciplines emphasizes the communal ethos of fields characterized by rapid knowledge dissemination and accumulation. In contrast to the individualistic nature of thesis-driven arguments, which often need to be read from start to finish to be fully comprehended, IMRD reports are written to allow readers to find specific information quickly. Carol Berkenkotter and Thomas Huckin describe how scientists read for newsworthiness, engaging in “a scanning and reading pattern dominated by the search for interesting new information” (30). The IMRD structure facilitates such searching by foregrounding the most important information in multiple sections: typically the abstract, title, and beginning of the discussion section. Some sections, such as the methods section, are typically read by a minority of readers who often are searching for specific information that will help them validate the credibility of the methods. More information on the IMRD structure can be found at http://www.cmu.edu/gcc/handouts/IMRD.pdf. While writers accustomed to the linear unfolding of thesis-driven arguments may feel that IMRD reports are repetitive and stifle creativity, there are also similarities between the two macrostructures in that both require writers to foreground new and important arguments in predictable places.

Problem-solution macrostructures are most common in applied disciplines, such as Business and Engineering (Ellet; C. Wolfe), and support these disciplines’ values of efficiency (Eustace; Louhiala-Salminen) by creating a structure that is flexible and easy to skim. Problem-solution essays typically rely on document design to highlight main propositions and signal the argumentative structure. The example in Figure 8 shows how a business case study uses headings and parallelism (both visual and grammatical) to allow readers to quickly scan main ideas without becoming bogged down in details.
3.1 Solutions for Motivating the WPC Employees

3.1.1 Appoint a WPC employee to two solicitors

Each data clerk should be appointed to two solicitors where possible. This would allow the WPC employee’s work area to be near the office of their designated solicitor. All data clerks on the perform a greater number of activities instead of doing the same thing all day. Consequently, this would greater initiative, establishing responsibility and loyalty. It would also provide better training for becoming every week to discuss problems and issues. However, WPC employee skills may not improve because to discipline the girls and prevent them from arriving late, talking and slacking off. They may not be abl improve.

3.1.2 Have different levels of data clerks

This would create a work environment where the girls would be willing to work harder in order to receiv undisciplined work behaviour. It would provide better efficiency and create fewer errors because in ord their tasks correctly. It would also identify where the errors are occurring. The clerks on the highest lev

Figure 8. Problem/Solution macrostructure in business case study (CALT Learning)

Although problem-solution and IMRD essays look very different from thesis-first arguments, all three macrostructures provide similar functions in that they fore-ground the most important information readers will need in fairly predictable places: near the end of the introduction, in the abstract, in the headings. FYC instructors can therefore explain how similar principles of arrangement function in these diverse macrostructures while avoiding the misconception that thesis-first organization is universal.

Naming and Citation

Stylistic differences between genres, such as differences among citation conventions, tend to be among the most noticeable. In this section we examine how disciplinary values and scholarship practices inform stylistic conventions such as how and when to cite, whether to use direct quotation, and how explicitly to foreground other authors.

Table 2 illustrates the citation differences among three different disciplines: literature, psychology, and electrical engineering. While the use of the same sources across citation formats in Table 2 may promote the misconception that citation style is a purely technical matter unrelated to content (Dowdey 346), the use of the same sources allows us to highlight key differences that reveal disciplinary assumptions about research and authorship. We often provide such an example to students and ask them to reflect on the differences among these styles and what they mean for the various disciplines. Students immediately point to the prominent date in the APA style, which reflects the importance of recent knowledge in the social sciences, and IEEE’s (Institute of Electrical and Electronics Engineers) use of numbers rather than author names, which reflects the high value this discipline places on concision and the comparatively low value it places on individual authorship.
Table 2. Citation styles across three disciplines. The first two rows illustrate in-text citations while the last illustrates the works cited.

<table>
<thead>
<tr>
<th>MLA</th>
<th>APA</th>
<th>IEEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snyder calls the concept “medium-fidelity prototyping” (35).</td>
<td>Snyder (1999) calls the concept “medium-fidelity prototyping” (p. 35).</td>
<td>The concept has been called “medium-fidelity prototyping” [5].</td>
</tr>
<tr>
<td>Many educators agree that students suffer from insufficient unstructured play time (Anderson; Capps, Stevens, and Brown; Smith, Taylor and Johns)</td>
<td>Many educators agree that students suffer from insufficient unstructured play time (Anderson 1999; Capps, Stevens, and Brown 2004; Smith 2000;Taylor and Johns 2008)</td>
<td>Many educators agree that students suffer from insufficient unstructured play time [6-9].</td>
</tr>
</tbody>
</table>

Overall, these various conventions reflect differences in what Susan Peck MacDonald calls compact and diffuse disciplines. Compact disciplines, where large numbers of scholars focus on a small number of relatively well-defined problems, are characterized by co-authorship, large numbers of recent citations, and low importance placed on individual authorship. Such disciplines tend to have citation conventions that facilitate multiple citations and deemphasize author names. By contrast, diffuse disciplines, with a large range of loosely defined problems and relatively few scholars working on each one, are characterized by individual authorship and fewer current citations. Their citation conventions reflect this individuality and particularity.

Diffuse and compact disciplines also differ in how they handle controversy. In diffuse disciplines, knowledge is more particular, scholars are more likely to refer to one another by name, and disagreement is more pointed. For instance, Robert Madigan, Susan Johnson, and Patricia Linton quote an author in literary studies referring to a critic as “truculently persist[ing] in crediting the discredited” and another describing an alternative view as “willful revisionism” (431). Laura Wilder similarly observes critics directly naming and disagreeing with others in statements such as, “In this light, [X]’s argument….requires amendment” (43). Wilder goes so far as to describe...
such rhetorical moves as a special topos in literary studies—one she tellingly names “mistaken critic” (42).

By contrast, although controversies occur in compact disciplines, writers tend to avoid naming individuals and instead focus on knowledge claims. Madigan, Johnson, and Linton claim confrontational disagreements are rare in psychology and are explicitly discouraged by the APA publication manual (431). Roy F. Baumeister and Mark R. Leary elaborate:

Good writing of literature reviews [in psychology] requires a concerted effort to feature the findings and ideas. Downplaying the names of researchers (such as by putting citations in parentheses) is a valuable stylistic device for ensuring that the article focuses on ideas and research rather than on theorists and researchers. It also helps the writer to avoid the appearance of making ad hominem arguments. (320)

Greg Myers, likewise, states that biologists rarely cite other authors to refute claims, but instead to show parallels or alternative explanations.

The extent to which different disciplines privilege individuality and particularity of knowledge extends to their attitudes towards direct quotation. MLA style contains copious rules for citing different types of texts and managing quotations of varying lengths and direct quotations are common. Such frequent quotation may reflect a belief that meaning is inseparable from its expression (Madigan, Johnson, and Linton); or it may simply indicate that literary analysis is concerned with text and textual matter—an emphasis it shares with history, which also has a high rate of direct quotation (Madigan, Johnson, and Linton 430). By contrast, IEEE style lacks a mechanism for citing page numbers, illustrating how rare direct quotations are in scientific and technical disciplines. In fact, Victoria E. McMillan explicitly warns Biology students against direct quotation, which she claims suggests the writer “is either too inexperienced or too lazy to use his or her own words” (124). Direct quotations are also rare in psychology, causing problems for students who have been taught by composition instructors to quote the exact language of their sources (Madigan, Johnson, and Linton 433).

Even stylistic conventions such as voice can be linked to disciplinary values. For instance, Joanna Wolfe (“How”) has argued that the preference for passive voice in engineering reflects this discipline’s tendency to privilege things rather than people whereas scholars in the humanities prefer active voice because it places grammatical focus on individual actors and texts. Following similar logic, nursing tends to privilege active voice and direct quotation (Dexter) because of its focus on individual human agents while biology uses passive voice to downplay the role of human agency and focus attention on nature (Stockton, “Students”; Bazerman). Thus,
stylistic conventions that may at first seem arbitrary are linked to larger disciplinary values (see Soliday for a more thorough discussion). Students need to be attuned to these values because genres that have the same name may have different conventions depending on the discipline. A nursing student will be rewarded for using direct quotation and active voice in a literature review while a similar style will be perceived as laziness or lack of mastery in a biology literature review. FYC instructors should help prepare students to look for the rationale and values underlying such preferences—rather than perceive them as bewildering arbitrary expectations.

Conclusion

Our CGA presents a large amount of information about genre differences in a small space. Our analysis is limited both by our choice to start with literary analysis as a point of departure (which causes us to miss topoi central to other disciplines but peripheral in English) and by the limited space we have to discuss important rhetorical issues such as stance (Hyland; Soliday), ways of doing (Carter), or stasis. We have shown commonalities in rhetorical topoi across very different disciplines and academic tasks. At the same time, our CGA also shows how different our discipline’s arrangement and stylistic preferences can be from other academic writing students will perform. These differences are major enough that—without explicit coaching—many students will be unable to look past them to see the similarities. Such concern is lent support by Linda S. Bergmann and Janet Zepermann’s finding that students dismissed much of their training in composition as irrelevant to the writing they do in other disciplines. Matthew Wiles likewise found disciplinary faculty reinforcing this mindset by explicitly telling students to forget what they learned about writing in FYC.

We hope that many FYC instructors will find our analysis provocative and this provocation will encourage them to provide more scaffolding to help students apply rhetorical knowledge from FYC to future academic (and pre-professional) writing tasks. Much as Liane Robertson, Kara Taczak, and Kathleen Blake Yancey have argued that students need to understand that they lack critical knowledge to be motivated to take up rhetorical challenges they have not previously understood, we hope that our CGA will point to lacunae and blind spots in FYC instructors’ rhetorical knowledge that will motivate them to seek out other similarities and differences in the writing assigned in their institutional context.

But what should FYC instructors do with the knowledge that we hope our CGA will foster? We want to clarify first that we are not proposing that FYC instructors attempt to master the conventions of other disciplines. Such mastery is unrealistic, and in any case, it would be nearly impossible to decide which disciplines’ conventions to teach. Instead, we propose that FYC instructors develop some
meta-awareness of recurring differences and commonalities between their own rhetorical knowledge and that manifested in other disciplines and attempt to impart some of that meta-awareness to their students.

In particular, we propose that FYC instructors look for ways—both large and small—to integrate elements of CGA into their curriculum. CGA can teach students to extract genre features from model texts and learn what questions to ask in new rhetorical environments—skills that Doug Brent associates with successful transfer. If students can learn to tie the rhetorical similarities and differences they observe to the values underlying particular academic discourse communities, we believe they will be develop a “flexible” rhetorical knowledge that will prepare them to transform rather than simply transfer rhetorical principles across contexts (Brent 565).

Thus, we offer a multi-tiered proposal suggesting a variety of ways instructors can incorporate elements of CGA into their classes:

1. At the most basic level, FYC instructors can call attention to the common academic topoi used in their assignments and connect these topoi to other contexts students are likely to encounter in future academic work. Appendices A and B provide examples of how instructors might label the common academic topoi and macrostructures used in a literacy narrative and evaluation argument, respectively. These handouts both conclude with discussions of how these topoi function in other fields and how the skills practiced in a thesis-first macrostructure will prepare students to prioritize and arrange information in other organizational structures. Such labeling and contextualization helps students develop meta-knowledge about rhetorical strategies that lays the groundwork for rhetorical transfer.

2. We also encourage FYC instructors to explicitly discuss one or two academic readings that do not use a thesis-first macrostructure. In particular, we recommend examining the IMRD macrostructure since, without explicit discussion, the differences between IMRD and the thesis-driven essay will likely overwhelm students’ abilities to see any commonalities. A concise summary of the IMRD macrostructure can be found at http://www.cmu.edu/gcc/handouts/IMRD.pdf. We encourage instructors to spend part of a class period discussing how IMRD constrains writers’ freedom, but allows readers to skim and read non-sequentially. Students can be asked to brainstorm about how the macrostructures and stylistic differences typically found in IMRD reports vs. thesis-first essays reflect the values of the scholarly communities where these formats are typically found.

One good way to choose an IMRD text is to select a research study cited in a reading already on the course syllabus. For instance, we have had success
pairing sections from Levitt and Dubner’s *Freakonomics* with Levitt’s academic articles discussing his research. Such pairing not only allows students to analyze differences in style and arrangement in academic and popular texts, but also provides them with opportunities to compare topoi across popular and academic texts. For example, where Levitt’s academic articles use *conceptual lenses* from economics such as *profit maximization* and *cannibalization*, such lenses are absent from his popular texts. Both texts use *pattern+interpretation*, but only in the academic article does the reader see the data: readers of the popular text must trust the author’s conclusions with minimal evidence.

In short, we are recommending that instructors include some readings that look very different from those typical in FYC and they use class discussion to lead students through a mini-CGA. Appendix C contains a list of questions that can be used to guide such CGAs.

3. Finally, we also recommend including CGA as a class assignment or class unit, a practice already found in some genre-based textbooks, such as Amy J. Devitt, Mary Jo Reiff, and Anis Bawarshi’s *Scenes of Writing* (463, 465). Appendix D presents an extended example of one such assignment. Students are asked to pick a topic of interest and compare and contrast how this topic is presented in academic journals from two different disciplines and a popular magazine, newspaper, or blog. Students then use their observations to make recommendations about what writers need to keep in mind when writing for the audiences of these different publications. Such assignments introduce students to the process of library research, but do not require that students fully comprehend this research—comprehension that may be beyond their, and our, abilities. Instead, students use the results of their library research as a form of data out of which they can make arguments.

Assigning a CGA addresses one problem in our analysis here: namely that we anchor our discussion in literary analysis, looking at how topoi and stylistic conventions common in this discipline manifest themselves in other academic discourse communities. Students who start their own CGAs with a different discipline will likely turn up other topoi and conventions. Thus, by assigning CGA, instructors will increase their knowledge of other academic discourses—knowledge that they can then use to develop even more connections between FYC and other academic writing contexts. Unlike many recent curricular proposals for FYC, instructors can implement elements of CGA without overhauling their current curriculum. However, we also want to stress that the benefits of CGA would likely stretch further if integrated into
a Writing about Writing program or a pedagogy such as Yancey, Robertson, and Taczak’s Teaching for Transfer (TFT) in which students work to develop a “theory of writing” that will provide them with a framework for assignments they take with them elsewhere (57). We also hope that the CGA we have presented in this essay will provide instructors who do take up these pedagogical programs with more information about the types of transfer they may want to promote.

We would like to end by discussing the important role we believe CGA should play in instructor training if any of the above recommendations are to be implemented in the FYC classroom. While we are aware that the teaching practicum required of many new instructors already covers too much, we argue that significant attention to CGA is a worthy addition—even in programs where FYC is intended less as preparation for academic writing than for personal expression or civic participation. At the very least, including CGA in the practicum can reduce instructors’ tendencies to perpetuate misleading and inaccurate writing instruction. Likewise, we believe some exposure to CGA is essential to the preparation of writing center tutors. Writing centers have long wrestled with the thorny problem of employing tutors who lack expertise in the rhetorical practices of the disciplines they aim to support writers to work in (Shamo and Burns; Walker). CGA should not only discourage tutors from mistaking the conventions of familiar disciplines as universal norms, but can also give them specific criteria to look for when encountering unfamiliar genres.

In sum, we believe FYC needs more attention to genre, and that instructors in particular need more exposure to unfamiliar genres both inside and outside of the humanities. FYC will be a better preparation for students’ future academic writing if instructors have a clearer idea of the types of rhetorical challenges their students will face. CGA is one method for helping both students and instructors take a clearer stock of their existing rhetorical knowledge and its potential future applications.

Notes

1. Rhetoricians typically subordinate topoi to stasis, making the stasis the larger lens under which various topoi fall. Our analysis reverses this hierarchy, allowing us to see commonalities in topoi that might otherwise be obscured.

2. This table draws on the following sources: Literature: Wilder and Wolfe; Business: Ellet; Forman and Rymer; C. Wolfe; Zhu; Psychology: Baumeister and Leary; Baron; Johnson and Krase; Madigan, Johnson, and Linton; Mitchell, Jolley, and O’Shea; Nursing: Craft; Gimenez; Jasper; Johnson and Krase; Biology: Graves; Haas; Johnson and Krase; McMillan; Engineering: Carter; Johnson and Krase; C. Wolfe; J. Wolfe, “How”; Wolfe, Britt and Alexander; History: Beaufort; Coffin; Nowacek; Stockton.
3. Although several researchers have proposed classifications for various historical genres (c.f., Beaufort; Coffin), these classifications would likely be unfamiliar to many historians.

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**Appendix A: Assignment Foregrounding Conceptual Lens**

**Literacy Narrative**

**Overview**

Deborah Brandt argues that literacy sponsors “set the terms for access to literacy and wield powerful incentives for compliance and loyalty. Sponsors are a tangible reminder that literacy learning though out history has always required permission, sanction, assistance, coercion, or, at minimum, contact with existing trade routes” (166-167). To that end, write a literacy narrative that describes the literacy sponsorship you received that ultimately led you to a seat in this classroom. In other words, reflect on the writer you are today and the role that literacy sponsorship (positive or negative) played in creating that writer. Be sure to reference the literacy sponsorship scholarship we’ve read as you write your narrative.

**Goals**

This assignment is designed to give you practice

- applying concepts you have learned about in class to your own experiences (this is a strategy we call using a **conceptual lens**)
- organizing information in a thesis-driven argument
- using detailed description as evidence supporting an argument
- developing appropriate tone, voice, and level of formality for academic writing
**Evaluation Criteria**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analysis</strong></td>
<td>The essay clearly defines what literacy sponsorship entails, using relevant quotes and paraphrases from the course readings. The concept of literary sponsorship is then used to analyze details from the author’s life to show how the literacy sponsorship influenced the author’s literacy practices and development.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>The essay uses a thesis-driven structure that places main arguments in the thesis and topic sentences. Each individual paragraph emphasizes one unique main idea that is clearly connected to the thesis statement. Paragraphs are arranged according to a logical principle and connected to one another with coherent transitions.</td>
</tr>
<tr>
<td><strong>Mechanics &amp; Style</strong></td>
<td>The essay demonstrates appropriate word choices, a formal tone, and grammatically correct sentences.</td>
</tr>
</tbody>
</table>

**How this assignment will help you with other academic writing**

This essay asks you to take a concept discussed in course readings—literacy sponsorship—and apply it to personal evidence from your own life. We call this process using **conceptual lens** because you are using a concept developed by other scholars to interpret a particular set of information or data (in this case, your own life). Assignments asking you to apply a conceptual lens are particularly common in the social sciences and humanities where students are asked to use concepts such as *social distance*, *conflict theory*, or *paternalism* to interpret texts, documents, historical or cultural phenomena, or personal observations. We also find conceptual lenses in applied disciplines, such as nursing and business, where students are asked to apply concepts such as *therapeutic communication* or *diversification* to particular workplace practices.

This essay also asks you to follow a **thesis-driven** (or thesis-first) organizational structure. Practicing a thesis-first organization prepares you for other organizational structures by teaching you to prioritize your main claims by placing them in key locations (in this case, the thesis statement, topic sentences) that attract the reader’s attention and provide a framework for understanding the details that follow.

**Works Cited**

Appendix B: Assignment Foregrounding Pattern + Interpretation

Entering a Conversation

Overview
In your academic writing, you will often be asked to synthesize and respond to the research and writings of other scholars in order to insert your own voice into a conversation. For instance, researched essays respond to what others have said or argued about an issue. Scientific studies begin with a review of other experiments on a topic. Business proposals survey current practices or approaches to a problem. Reviews of research studies (often called literature reviews) synthesize and evaluate a large number of studies on a topic.

This assignment asks you to practice the work of synthesizing and responding to others' writing in order to stake out your own position. However, instead of analyzing difficult texts on an academic topic, you will instead work with criticism from popular culture. This allows you to practice academic writing without the burden of also working to understand difficult academic subjects.

The Details
Pick a cultural artifact (a movie, TV show, video game or musical album) that is no more than two years old and has received mixed reviews from critics. Write a 3-5 page argument that identifies patterns, or trends, in the reviews and evaluates them using your own analysis of the cultural artifact. Your argument must fairly and respectfully respond to exceptions to your argument and interpretations that differ from your own.

Your argument must:

- include a short summary of the artifact you are defending
- paraphrase or quote at least three sources with which you disagree
- paraphrase or quote at least two sources with which you agree

Goals
This assignment is designed to give you practice

- identifying patterns (or trends) in the sources you cite (for instance, you may note that a majority of reviews criticize a particular actor or note “plot holes” in a film);
- identifying patterns in the artifacts you analyze (for instance, you may note a pattern of strong special effects in a video game or a pattern of “body humor” in a show);
interpreting these patterns to support or reject an overall evaluation of your artifact;
responding to exceptions, both to the patterns you identify and the interpretations you make;
writing a thesis-driven argument; and
paraphrasing and quoting from other authors as you insert your voice into ongoing arguments.

Evaluation Criteria:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis</td>
<td>The essay argues for patterns in the reviews you cite and in the artifact you analyze. The essay interprets these patterns in order to support or reject particular evaluations of your artifact.</td>
</tr>
<tr>
<td>Exceptions</td>
<td>Exceptions to the author's main arguments (or counter-arguments) are considered with respect and either conceded to or countered with logical arguments.</td>
</tr>
<tr>
<td>Organization</td>
<td>The essay uses a thesis-driven structure that places main arguments in the thesis and topic sentences. Each individual paragraph emphasizes one unique main idea that is clearly connected to the thesis statement. Paragraphs are arranged according to a logical principle and connected to one another with coherent transitions.</td>
</tr>
<tr>
<td>Mechanics &amp; Style</td>
<td>The essay demonstrates appropriate word choices, a formal tone, grammatically correct sentences, and a correctly formatted list of works cited.</td>
</tr>
</tbody>
</table>

How this assignment will help you with other academic writing

This essay asks you to define patterns in the work you read and analyze and interpret these patterns for a particular purpose. We call this strategy pattern+interpretation. In this assignment, you are arguing for patterns in texts; in other academic writing, you may be arguing for patterns in data, observations or practices. However, regardless of what you are analyzing, the basic pattern+interpretation strategy remains consistent. In a nutshell, it consists of

1. identifying a pattern  
2. providing evidence to support that pattern and  
3. interpreting that pattern to make or support an argument

This essay asks you to identify patterns across multiple texts. This is in many ways similar to a common assignment in the social sciences and sciences called a literature review. A literature review asks you to identify patterns in research methodologies or results across multiple research studies.

Another major component of this essay involves handling exceptions (or counter-arguments) to your argument. All academic disciplines require writers to
acknowledge and respond to exceptions to their arguments. It is a particularly common—and challenging—part of research writing in science and engineering, where writers need to explain unexpected results, concede weakness in methods, or reconcile conflicting interpretations of quantitative data.

As with other assignments this semester, this essay requires a thesis-driven (or thesis-first) organizational structure that gives you practice situating your main claims in places that readers are most likely to focus on.

Appendix C: Analyzing Unfamiliar Academic Genres

*TOPOI*

Definitions

**Pattern + Interpretation**

A writer using the pattern + interpretation topos identifies a pattern (such as a recurring theme) in the primary material under analysis and uses this pattern to generate or support an interpretation.

**Conceptual Lens**

The conceptual lens topos uses a concept—a term, theory, or hypothesis—to organize observations about the phenomenon under study.

**Comparison**

The comparison topos is used to illustrate the relationship between or among the items being studied or analyzed. It can often, though not always, be identified by the use of comparative adjectives or adverbs (as in, “simpler,” “faster,” “larger”).

**Exception**

The exception topos is used to explain aberrant or unexpected results, couch negatives as positives, concede weaknesses in methods, or to acknowledge other anomalies in the analysis.

**Questions**

1. Does the text make substantial use of **pattern + interpretation**?
   - Is the pattern found in a text; across multiple texts; in numbers, figures, or data; in observations or workplace practices; in something else?
   - What interpretation is drawn from this pattern?

2. Does the text make substantial use of **conceptual lens**?
What concepts are being used?
What phenomena is the lens used to analyze? Is it analyzing texts, data, observations, practices?
Does the writer attempt to redefine the conceptual lens?

3. Does the text make substantial use of comparison?
What is being compared? Is the comparison based on numbers, data, words, observations?
What interpretation or recommendation is being drawn from this comparison?

4. Does the text make substantial use of exceptions?
Where do these exceptions appear?
How does the author respond to these exceptions without detracting too much from the main analysis s/he wants to make?

5. What stasis—or type of question—is each topos being used to answer? Does it allow the writer to show that something exists (such as a new planet or species), define what something means, evaluate something, argue for causes and effects, or propose a solution to a problem?

6. How complex is the argument made with each topos? Is the argument fairly straightforward? Or does it require substantial explanation and interpretation?

7. What type of values do these topoi suggest? Do they emphasize logical reasoning? Fair-mindedness? Disciplined inquiry? Skepticism?

Macrostructure

Definitions

Thesis-first

A statement (or thesis) summarizing the main arguments of the essay and previewing the essay structure appears near the beginning of the essay.

Thesis-last

A thesis summarizing the main claim of the essay appears in the conclusion, after the writer has presented the evidence and demonstrated that they have done the research and analysis necessary to make this claim.

IMRD

Stands for Introduction-Method-Results-Discussion. This is a highly structured genre typical of experimental research (including lab reports) in which “newsworthy” information appears in the abstract, results, and
discussion section and often the title.

Problem/Solution

The essay is divided into two somewhat parallel—although not equally weighted—sections: the problem and the solution section.

Questions

1. What type of macrostructure does this essay use?

2. Where is the newsworthy information found? In a thesis statement? In the title? The abstract? The conclusion? The headings? The figures or illustrations?

3. What does this organization suggest about the values of the community who will be reading it? Do they privilege quick reading? Logical progression of ideas? Establishing credibility?

Style & Citation

1. What citation system is used and what disciplinary values does it support? Does it privilege authors? Are ideas or information more important than who said them? To what extent does it privilege current research? Does it privilege conciseness and efficiency?

2. To what extent is direct quotation used in discussing other research?

3. How explicit is disagreement?

4. What types of phrases do authors use to align themselves with others’ ideas? How do they express agreement or disagreement?

1. To what extent is active voice used?

* This handout focuses on topoi you are most likely to encounter in your writing classes. However, these are not the only topoi, and you may find others that are common to your field. Some additional topoi you may encounter include generating solutions (common in applied disciplines such as business or nursing where writers brainstorm solutions to a problem on paper), justification of criteria (used to justify selection criteria for experimental populations or articles to examine reviews of research), argument by analogy (where an extended comparison is made in order to explain a concept—such as the use of the “hand” metaphor in economics, used to discuss the invisible hand of the market).
Appendix D: Sample CGA Assignment

How Context Shapes Controversy: A Researched Comparison/Contrast Argument

Overview
As you take classes in disciplines across the university—and as you eventually move from the university to the workplace—you will continually be asked to adapt your writing style and methods. This essay prepares you for these shifts in your writing practices by teaching you to closely examine different genres, reading them in order to determine what features and rhetorical strategies you should mimic.

For this assignment, pick a controversial topic related to your future career and compare/contrast how this topic has been discussed in three different rhetorical contexts. For instance, you might look at recent research on a drug trial or dieting regime, the funding of public art, the role of nurse practitioners in medicine, or the environmental impact of electrical cars. You should then use your analysis to make recommendations for writing persuasively in each of these contexts.

The Details
Your essay should be 5-8 pages and do the following:

- Begin by introducing the topic and explaining why it is controversial
- Analyze multiple examples of writing from three different contexts including
  - peer-reviewed journals from two different disciplines
  - a popular source, such as a newspaper, blog, or popular magazine.
- Use both textual and numeric evidence to support your arguments
- Use your analysis to recommend effective writing practices in each of these contexts.
- Include a works cited page
- Organize the essay in either a thesis-driven or IMRD format.

Goals
In addition to teaching you how to read a text to select features that you can use as a model, this assignment is designed to give you practice

- **identifying patterns** within a particular genre or context and **interpreting** these patterns to show what they reveal about this community’s values and practices (use the handout on “how to analyze an unfamiliar academic genre” to guide your analysis)
- **comparing and contrasting** these patterns across genres or contexts
• using these comparisons to **make recommendations** for writing practices
• **locating and citing** information from a wide variety of sources.
• **organizing** information in the form of a recognizable academic macrostructure

**Evaluation Criteria**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis</td>
<td>The essay argues for patterns within each different context and makes comparisons/contrasts across contexts. Patterns are interpreted in terms of what they reveal about rhetorical values and practices. Comparisons/contrasts are interpreted to make recommendations for how to adjust your writing practices in different contexts. Arguments are supported by both numerical and textual evidence.</td>
</tr>
<tr>
<td>Organization</td>
<td>The essay either has a clear thesis statement or clearly follows all parts of the IMRD genre. Each paragraph has a clear topic sentence and focuses on one main idea. Headings and subheadings are used effectively. Appropriate coherence strategies connect main ideas.</td>
</tr>
<tr>
<td>Mechanics &amp; Style</td>
<td>The essay demonstrates appropriate word choices, a formal tone, grammatically correct sentences, and a correctly formatted list of works cited.</td>
</tr>
</tbody>
</table>

**How this assignment will help you with other academic writing**

As with other writing tasks this semester, this essay asks you to define patterns in the types of topoi and stylistic conventions in various writing contexts. You will then interpret these patterns to make arguments about the types of readers and writers who participate in these contexts. This basic strategy of **pattern+interpretation** is found in many academic contexts and can be used to interpret patterns in data, numbers, observations, and practices as well as texts.

This essay also asks you to compare/contrast the patterns you define across different contexts. **Compare/contrast** is a major academic strategy that is common when we want to compare the merits of two items or factors or to compare groups to understand what makes them unique. In this essay, you will use compare/contrast to define what makes different writing situations unique. This is similar to how social scientists might compare/contrast different cultural groups, educators different types of learners, biologists different types of specimens, or business analysts different types of leaders.

This essay also gives you a choice of practicing either a thesis-driven organizational structure or an IMRD structure. These two organizational structures are among the most common in academic writing.