

## White Paper: Addressing Complexity in Writing Intensive Course Assignments

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Published online at <https://cwp.missouri.edu/2022/white-paper-complexity-in-wi-course-assignments/> on  
November 15, 2022.

### Introduction

By all accounts, we are living in a post-truth era. From politics (Roberts, 2010) to the Oxford Dictionaries 2016 Word of the Year, the label of “post-truth” has been applied to social, political, and educational contexts. Across the globe, we are witnessing a widening chasm of political discourse and an increasingly divided social environment. Adding to these challenges is the online world we all inhabit. Social media sites like Facebook and Twitter encourage speedy sharing of information—establishing a context where truth matters less than readily-shareable “evidence” to support one’s opinion. Jonathan Ellis, a veteran journalist currently serving as the managing editor of *Mashable*, even suggests that we no longer live in the age of “clickbait” in internet journalism. Instead, he says we live in the age of “sharebait” wherein 59% percent of links shared on social media sites were distributed by users who never clicked on the article (qtd. in Dewey, 2014).

As these debates about the nature of truth and the quality of evidence take place in the larger world, they also play out on a micro scale within university classrooms. Writing Across the Curriculum (WAC) programs are uniquely positioned to help combat the consequences of the post-truthiness and “sharebait” of our modern world. Whether located in Sweden or the

midwestern United States, WAC programs require undergraduates to use writing as a way to explore the complexity of the disciplines they're studying. In their introduction to the special issue *Internationalizing the WAC/WID Curriculum in Across the Disciplines* (2018), Stefanie Frigo and Collie Fulford put forth the proposition that today's writing courses should take a sociopolitical focus to increase students' much-needed global awareness and cultural competencies. Furthermore, though the WAC/WID acronym is not widely used outside of North America (Thaiss & Porter, 2010), Frigo and Fulford argue that Writing Across the Curriculum-style programs everywhere are well-situated to address these socio-political education goals. While general composition courses are not common in most countries, writing within the disciplines is universally expected (Frigo & Fulford, 2018).

This social education is often undertaken in Writing Intensive (WI) courses through assignments which ask students to argue a complex disciplinary problem which does not have one clear, correct answer. Whether working within the framework of a formal undergraduate WAC program or through informal graduate WID workshops as in the Singapore-US alliance Craig (2014) discusses, disciplinary faculty overwhelmingly support students' learning how to craft effective arguments using evidence, language, and structure required of the genre. In short, academic writing often featured in WAC/WID courses asks students to take a critical stance on complex issues of the discipline.

### **The Research Context**

In 1987, the University of Missouri's Writing Across the Curriculum (CWP) program was established by faculty who recognized that the university's students needed strong writing courses to be successful in their disciplines. This was the beginning of a one-course Writing

Intensive requirement for all undergraduate students. After much success and positive feedback, in the 1990s, the University of Missouri's Writing Across the Curriculum Program Governing Board (CWP Board) recommended a second Writing Intensive course be added to the general education requirement. These WI course requirements have endured as current University of Missouri (MU) undergraduate students are required to complete a three-course writing program consisting of one course in English composition and two Writing Intensive courses.

Currently, the CWP Board is composed of individual subcommittees based on the faculty member's field of study. These three subcommittees—Education and Social Sciences (ESS), Natural and Applied Sciences (NAS), and Humanities and Arts (HA)—show a broad representation of all types of courses across campus. The Board continues to serve, 30 years later, to provide oversight for MU WI courses and set policy related to these courses.

Though university writing requirements have been rather explicit about expectations for criticality in writing (Mirador, 2018), as we saw in our own Writing Across the Curriculum program and through discussions with our CWP Board, wide disciplinary differences exist in the ways criticality intersects with argumentation. We see similar tensions emerge in secondary WAC assignments where argument has historically been presented as a one-size-fits-all procedure of formal logic, positioned as distinct from persuasion and taught predominantly in English Language Arts courses (Hillocks, 2010). Recently, as a need for more STEM writing has emerged, argument at the secondary level has moved from an English teachers' only endeavor to one acknowledged as important for other disciplines. In 2013, for example, the [Next Generation Science Standards \(NGSS\)](#) were developed and implemented across United States

secondary schools. The NGSS place heavy emphasis on the claim-evidence-reasoning format as the uniform approach to effective scientific argumentation.

However, as students matriculate to university and engage in writing experiences, they are introduced to a wide variation of disciplinary expectations for argumentation. In their humanities and arts courses, for example, they are often asked to “respond to ideas in texts and works of art, consider historical contexts, and theorize to make generalizations” (Melzer, 2014, p. 65). For example, in social science courses students are introduced to a form of argumentation that is heavily audience-focused. Social science writing assignments often ask students to address a wide range of audiences—from the general public, to knowledgeable experts, to legislators to “advocate for policy change” (Kilgore & Cronley, 2017, p. 3). And, in the natural and applied sciences, students may view argumentative writing as “inputting facts antiseptically, privileging accuracy and mechanics above all else” (Falconer, 2017, p. 131). Overall, as we know, there is “no universal genre of academic argument” (Iten, 2014, p. 36). If we place these wide disciplinary differences in argumentation styles within our post-truth era, it is no wonder that university students find such argumentative writing assignments challenging.

A central tenet of the WI courses at our university is the inclusion of “at least one writing assignment addressing a question for which there is more than one acceptable interpretation, explanation, analysis, or evaluation.” To interrogate how this element emerges in writing assignments, we designed a research study based on data from 300+ WI course proposals. As we worked through our analysis, we asked the following question: **How do WI assignments engage students in the complexity of their disciplines?**

## **Methods**

We drew on grounded theory data analyses to capture a comprehensive but focused view of the instructors' use of argumentation within their Writing Intensive courses at University of Missouri (Charmaz, 2006).

### **Data Collection**

For a course to be approved as Writing Intensive, it goes through a 6-step course approval process starting with the instructor submitting a proposal for their course. In this proposal instructors are asked to describe the structure of the course, the writing assignments with page totals (20 pages total are required with 8 pages of those being revised), and the revision process used to provide the required feedback to students. Additionally, instructors are required to describe how at least one of the assignments included meets the requirement for "addressing a question for which there is more than one acceptable interpretation, explanation, analysis or evaluation" which we will call the multiple interpretations question (MIQ) throughout this study. Course proposals are then submitted through the campus course management system, and, after submission, the course is sent for review by Program staff before proceeding to the subcommittees and finally the full Board for final approval.

### **Data Analysis**

For our original analysis, we downloaded 351 WI course proposals from the Fall 2018 and Spring 2019 academic year. After collection, all identifying information was removed from the proposal information to protect instructors' privacy. We group WI course proposals for review based on the field of study, and review groups comprise the following Education and Social Sciences (ESS), Natural and Applied Sciences (NAS), and Humanities and Arts (HA). We

collected 116 WI proposals from NAS, 117 from HA, and 118 for ESS. We were interested solely in the use of complex arguments in the WI courses, so we restricted our original data collection to instructors' answers to the multiple interpretation question (MIQ) as independent sources of data from each of the 351 courses. Our first round of analysis focused on identifying patterns among the data (Strauss & Corbin, 1998).

After a round of open coding (Strauss & Corbin, 1998) to note the dominant concepts, key phrases, or ideas, we grouped assignments into six categories. The team revised and edited the categories after further review of the data, resolving any instances of disagreement or confusion of how to apply the categories during the second round of coding. Finally, the research team further refined the six categories to include more specific definitions and descriptors as well as example instructor responses which act as a representative for the whole data set.

## Findings

In this analysis, we identified and refined six categorical definitions for the multiple interpretations question in the course proposal dataset (see Table 1). The categories are listed in order from most commonly to least commonly found in instructors' MIQ answers.

<b>MIQ Category</b>	<b>Definition</b>
<b><i>Take and defend a position on an issue</i></b>	Writing assignments ask students to engage in scholarly debate, supporting their assertions with evidence while considering multiple perspectives on the issue.
<b><i>Practice critical scholarship</i></b>	Writing assignments ask students to take a critical view as they curate, evaluate, and/or synthesize the disciplinary literature.
<b><i>Pick topic/format and justify the choice</i></b>	Writing assignments ask students to make and provide reasoning for choices (e.g., topic, context, format, research questions, and/or evidence).
<b><i>Interpret data and evidence to justify conclusions</i></b>	Writing assignments ask students to analyze and interpret data produced from experimentation and/or gathered from the literature and justify their conclusions.
<b><i>Perform critical reflection</i></b>	Writing assignments ask students to think critically about their own positionality while reflecting on course material or course experiences.
<b><i>Perform original research and defend research approach</i></b>	Writing assignments ask students to engage in original research in the style of the discipline, justifying the choices and process undertaken.

Table 1: Categories of multiple interpretations that emerged through grounded theory analysis.

When we quantified instances for comparison (See Figure 1), both researchers identified the most common categories as those which asked students to (1) *take and defend a position on an issue* and (2) *practice critical scholarship*. The least common categories were (1) *perform critical reflection* and (2) *perform original research and defend research approach*.

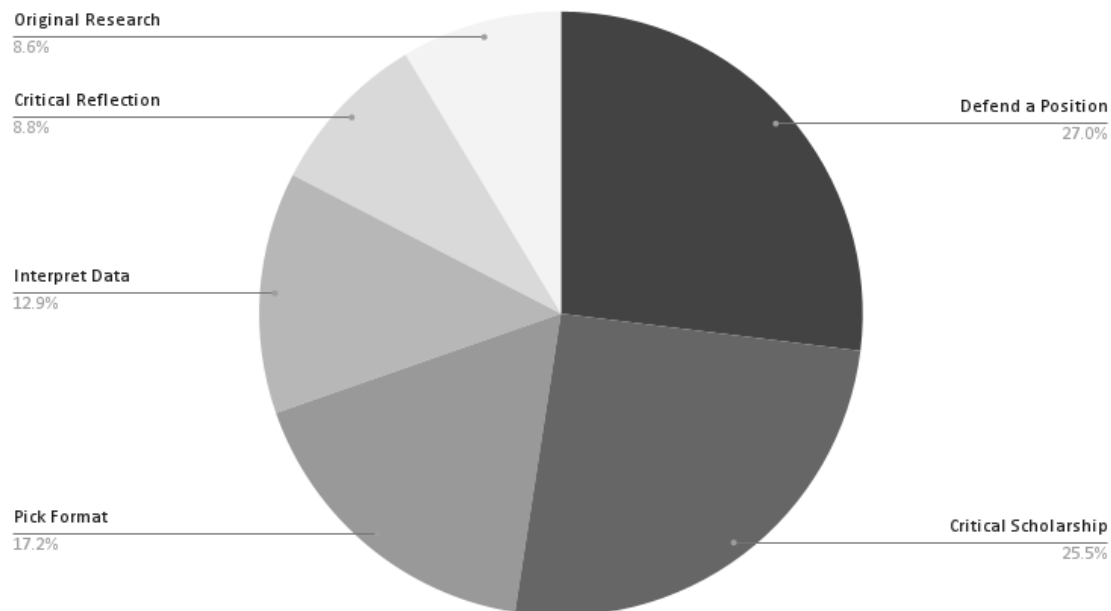


Figure 1. Graphical representation of the percentage of total instances identified for the six various MIQ categories.

### Example Excerpts from the Six Categories

Below, we present example excerpts which represent the general tone and themes of each category.

**Take and defend a position.** In this category, instructors asked their students to choose a side to support. One instructor wrote, “The audio-shaping-history assignment requires that



each student come[s] up with a unique instance of audio's influence on history and research, explain, analyze and evaluate the situation based on that student's own research and interpretation of the event." Public policy was often brought into these types of assignments such as when "students are presented with a current controversy and asked to form and defend an opinion, and make policy recommendations." In another instance, the instructor described how the "students must take a position or offer best practices for their given research question. It is through this process that students will then construct an argument or create guidelines based on what they consider evidence-based best practices in their field."

***Practice critical scholarship.*** When students were prompted to *practice critical scholarship*, the instructors often required "students . . . [to] reconcile conflicting results and make judgments on whether they accept the authors' interpretations of their results." Other instructors described *critical scholarship* activities as asking the student to "provide a value-added commentary that augments the assigned material." Another example asks students to consider the reliability of multiple sources: "Students are asked to evaluate the literature on their assigned [topic], and they are required to synthesize material from multiple sources to come up with their own interpretations of that information."

***Pick a topic/format and justify the choice.*** In this category, instructors allowed their students the freedom to make decisions about the assignment itself. For instance, one instructor noted, "[In their project,] students must be able to justify why a particular problem deserves their attention and resources." Another option was for students to be allowed a choice in how to solve a given problem. In mathematics, "in solving the given mathematical problems and writing proofs of mathematical statements and theorems, students are free to choose their

own approach, provided they produce logically sound arguments and correct mathematical reasoning.”

***Interpret data and evidence and justify conclusions.*** Similarly, we found instances where students were provided with data or evidence and then asked to justify conclusions from the evidence. The theme of justification and explanation was prevalent throughout many categories. In this instance, instructors asked students to “read a recent experimental paper testing a specific hypothesis. In the summary of the paper, they . . . either defend or attack the author's conclusions on the basis of information in the paper or in additional reading that they have done on the subject.” In other instances, students perform real world analyses: “The students are required to interpret the data to make a diagnosis. The interpretation, while based on clinical best practice, does rely on the students’ ability to synthesize the various analyses along with given information.”

***Perform critical reflection.*** Rather than critique other research or data, these assignments ask students to focus on themselves as they consider their own position on an issue. This action is often described by instructors as a reflection writing; for instance, “[The reflection paper] offers opportunities for them to examine and respond to ideas that are generated during the design process and then write about those ideas as they see them occurring.” Another instructor described assignments which “require students to reflect on themselves and their field, critically think about their audiences, and analyze information to solve problems of the field.” In another instance, *practice critical reflection* was seen in the format of the writing, such as in this instructor’s example: “The format of each week's

[reading/writing] response invites students to take passages from the readings and critique, question, and connect to their own lives.”

***Perform original research and defend research approach.*** This last category was characterized by the usual original research paper in which students were asked to complete their own research study including questions, data and conclusions. In a science course, this category was commonly carried out through student data production and analysis activities: “The third assignment involves creating their own quantitative data presentation on a research question of their choosing. This entails selecting a topic, researching background materials, gathering data, running some simple statistics and choosing how to present the results.” Other courses involved similar research strategies: “The student may design any study that tests a hypothesis about a human relationship. The student may then explore any aspect of the hypothesis that interests them. Once they find support (or not) for their hypothesis in their data, they will speculate about conclusions, areas of future research, limitations of their study, etc.” One humanities instructor described the *original research* activity in their course as focusing on text-driven independent response: “The analysis we do of [texts] is based primarily in phenomenology, with students noting their first subjective response to a work and coming up with an essence for that work, bracketing out any received wisdom, so that their unique response is celebrated rather than questioned.”

### **Implications**

Our grounded theory analysis of Writing Intensive instructors’ MIQ responses revealed that instructors most often described assignments which asked students to 1) *take and defend a position on an issue* and 2) *practice critical scholarship*. As Writing Program Administrators, we

view these findings as a pedagogical tool to help us improve our faculty development programming. In our current socio-political environment, these findings create a space for faculty and WPAs to consider the ways WAC/WID assignments engage students in reading, thinking, and writing about complex issues. Early in the academic year from which our data was derived, the Campus Writing Board wrote definitions of Writing Intensive courses. Across those definitions, one common element emerged: Writing Intensive courses provide students “opportunities to experience writing as *part of* thinking, not merely a product of it.” If this statement is true—and we wholeheartedly agree with its veracity—then examining counterargument, criticality, and scholarship in WI assignments can help serve a greater social purpose by providing freedom for students to make their thinking visible and, thus, allowing them to engage in the complexity of modern discourse.

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