

Rhetoric and Resolution: Translating Institutional and Disciplinary Definitions of Critical Thinking in the Senior Capstone

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Introduction

When writing studies scholars discuss the tension between general education and disciplinary specialization, they often focus on lower-level courses aimed at non-majors. David R. Russell and Arturo Yañez (2003), for example, maintained that students often experience “alienation” when they encounter “specialist discourses” in courses outside their fields, a “fundamental contradiction” inherent to general education (p. 332). According to Mary Soliday (2011), this contradiction between faculty’s disciplinary expertise and students’ lack thereof “affects which genres teachers assign and the sometimes mixed motives they ascribe to genres” (p. 47). She advocated “building a context for genre” (p. 99), or what Russell and Yañez (2003) called “genre pathways” (p. 358), through which students can connect genres from other disciplines to their own professional goals.

While such conflicts are indeed characteristic of what Lauren Fitzgerald (2013) called “a traditional distributive model” of general education, they may look different in “a newer integrative model” that extends liberal learning principles into all levels of the curriculum, not just lower-level, introductory courses (p. 94). When upper-division courses combine disciplinary education with liberal learning, instructors may feel particular pressure to translate institutional critical thinking language into disciplinary terms—and vice versa. After all, institutions often use broad critical thinking definitions because they have interdisciplinary appeal. They may look to critical thinking advocates like Richard Paul and Linda Elder (2006), who called it “the art of analyzing and evaluating thinking with a view to improving it” (p. 4), or the American Association of Colleges and Universities (AAC&U, n.d.-a), which described it as “a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion” (“Definition”).

Despite these definitions’ portability, they may not accurately reflect discipline-specific values and thinking practices. Critical thinking, like writing, is a social activity that can look quite different across contexts. According to William Condon and Diane Kelly-Riley (2004) critical thinking is “driven by the values and the types of work required in the discipline,” which means “an all-encompassing definition” may not always be appropriate (p. 64)—particularly in upper-division courses for majors. Therefore, when broad institutional definitions do exist, faculty need “to translate” their knowledge of critical thinking “into a form that others”—including colleagues and students—can “understand and apply to their particular contexts” (Merrill, 2004, n.p.). In other words, faculty need to learn how to speak to both institutional definitions of critical thinking and the disciplinary habits of mind they expect of students. How exactly can they go about doing so? How do they articulate the relationship between broad, institutional definitions of critical thinking and its specific

disciplinary manifestations? How can they clarify those institutional and disciplinary expectations for students who are already familiar with disciplinary ways of knowing and writing—and what role can writing play in helping students navigate among seemingly different conceptions of critical thinking?

In this article, I consider these questions in the context of a general education program that integrates liberal learning principles into multiple points of the curriculum, not just lower-level, introductory courses. Specifically, I discuss ethnographic data I collected in a senior capstone course in political science and public administration that emphasized students' written and oral communication skills; the faculty member who taught the course also included discussion of, practice with, and reflection on critical thinking, in keeping with departmental and institutional goals. I found four different ways of talking about critical thinking in the course: students and the professor described critical thinking as institutionally defined, as characteristic of the disciplines, as enabled or constrained by rhetorical situations, and as a perspective-changing activity. For the faculty member, these four ways of discussing critical thinking amounted to an integrated whole that informed his course design. Students, meanwhile, had to navigate among them through various course assignments. Based on my discussion of these different characterizations, I conclude that faculty in upper-division courses like senior capstones can help students recognize, compare, translate, and integrate institutional, disciplinary, rhetorical, and individual conceptions of critical thinking.

Institutional Context and Course Background

This IRB-approved study took place at Great Plains University (GPU, a pseudonym), a state institution in the upper Midwest with about 15,000 students. GPU's general education program, called Essential Education (EE, also a pseudonym), is modeled after the AAC&U's Liberal Education and America's Promise (LEAP) initiative. Both LEAP and EE maintain that principles like inquiry and analysis, critical and creative thinking, or information literacy are not skills to be learned in one shot during lower-division courses, but should "continu[e] at successively higher levels across [students'] college studies" (AAC&U, n.d.-b, "Essential Learning Outcomes"). In EE, students encounter liberal learning principles at multiple points in the curriculum, including the required senior capstones. All GPU capstone courses must include at least one of the EE goals—Thinking and Reasoning, Communication, Information Literacy, or Diversity—while "provid[ing] a culminating experience" for most majors, which means these courses are tasked with students' general education and disciplinary preparation at the same time.¹

After speaking with several faculty members who were planning to teach capstone courses in spring 2014, I found a willing research participant in Jeff Morrison,² professor of political science, who had taught the Political Science and Public Administration (PSPA) Capstone at GPU since 2006. His course interested me because it served these two majors simultaneously. In keeping with the capstone criteria, he promoted students' critical understanding of their discipline, their place within that discipline, and the relationship between the kindred disciplines of political science and public administration.

Essential Education also listed the capstone as an advanced communication course because Professor Morrison attended to students' written and oral communication throughout the semester. He emphasized critical thinking, too, because it was a central departmental student learning outcome. In other words, EE did not officially designate the

PSPA Capstone as a critical thinking course, although, as I will detail below, Professor Morrison used EE's definition of critical thinking throughout the semester. To address these institutional and departmental goals, he assigned several written and oral communication tasks, including

- An essay called "What Is It Like?" This assignment required students to imagine what it must be like to be a student in the other major: political science majors had to imagine what it is like to be public administration majors, and vice versa.
- A simulated academic conference: students had to adapt a paper written for a previous course into an oral presentation on a conference-style panel.
- A peer assessment of two papers, using the EE rubrics for written communication and critical thinking.
- A political skit to be presented at the departmental awards ceremony. This assignment invited students to satirize the disciplines of political science and public administration and the local departmental culture.³

These four assignments followed upon one another in roughly the order presented here, although Professor Morrison introduced the peer assessment project and held a norming session before the simulated academic conference began so students could understand how to evaluate each other's papers and then work independently until the due date later in the semester. In the discussion below, I do not discuss the assignments chronologically, focusing instead on the various themes that appeared in my analysis. These different themes did not align neatly with any one assignment, but rather arose at different times in the semester.

Methods

Because scholars like Condon and Kelly-Riley (2004) maintained that critical thinking and writing are contextual activities, I used ethnographic methods to account for the different cultural contexts influencing participants' understandings of those concepts. In studying the PSPA Capstone, I aimed to capture how Professor Morrison and his students worked on critical thinking and writing at the complex intersection of several overlapping cultures: institutional (in the form of EE), disciplinary (political science *or* public administration), and departmental (political science *and* public administration).

To that end, I conducted regular observations of the course, which met weekly for two hours during the Spring 2014 semester. I noted my impressions about classroom discussions that might not have been apparent in my audio recordings. Occasionally, I sat with students during small group discussions, too.

I also held three interviews with Professor Morrison to discuss his course goals, assignment objectives, expectations for writing, and students' learning over the semester. During an early class period, he gave me time to invite students to participate in focus groups about the course. Of the thirty-two seniors (all political science or public administration majors), four volunteered to participate—two from political science and two from public administration; one public administration major did not complete the study, so I do not include those responses here. All three students were highly motivated. Joy was a political science major in her senior year who had already been accepted to law school. Leslie, a senior

public administration major, had also been accepted to law school. Fernando, a senior political science major, was also quite vocal about his identity as a nontraditional student (he was in his late twenties during the study), a Mexican-American, and an Army veteran; he was also a McNair scholar, a program designed to engage undergraduates from otherwise underrepresented groups in research projects to prepare them for graduate research, although he had not officially decided on his post-graduate plans at the time of the study. This small number of students makes it difficult to generalize their experiences to the entire classroom. Nevertheless, their perspectives are instructive: they indicate what is possible for some students, working in some contexts, as they practice critical thinking. They give us clues about what to look for in and across classes and programs.

Because of scheduling difficulties, I held only one focus group with two participants; the rest were individual interviews. I spoke with each participant three times, asking questions about their learning in the course, their experiences with various writing assignments, their understanding of critical thinking, and how the course writing assignments related to writing in their majors.

I analyzed this data by adapting Barney Glaser and Anselm Strauss's (1967) constant comparative method, the process of "discover[ing] theory from data systematically obtained from social research" (p. 2). I began with open coding of notes and transcripts, using as many analytical categories as I could devise, and recording memos along the way (p. 105). Through this process, I developed sixteen codes. I eventually collapsed this list into thirteen codes because some categories seemed so closely related that they did not need separate codes, such as "Teaching Goals" and "Pedagogy." During this first phase of coding, I identified broad themes across the full data set. During a second phase, I examined the instances of critical thinking more closely, identifying four different ways that participants described it. Those four codes constitute the focus of the discussion below.

To triangulate my observation and interview/focus group data, I also collected writing samples from my research participants and a random cross-section of students (about ten samples per assignment) who volunteered to release their work to me. I analyzed those samples using the genre analysis process that Anis Bawarshi (2003) described, identifying patterns of textual detail across samples and analyzing their connections to the larger contexts in which the genre is used (p. 158). With users' reflections (in this case, Professor Morrison and the students) offering further explanatory detail, I analyzed the mutually constitutive relationships among students' subjective experiences of the course, the texts they produced, and the contexts for their learning, including the course, the department, and the institution.

Categories of Critical Thinking

Before delving into participants' particular perspectives on critical thinking, I want to outline the main categories for describing critical thinking that I identified in my analysis. Depending on the individual, the assignment, and the time of the semester, critical thinking was

- *Institutionally defined*: some discussions of critical thinking explicitly drew upon EE's institutional language. This definition supported various assignments, and students were expected to employ institutional language when evaluating each other's work.

- *Grounded in the discipline*: Critical thinking was described as either inherent to the discipline, or else the institutional language took on disciplinary valences when participants discussed it. This category represents the most overt instances of translation in the course.
- *Rhetorically driven*: Critical thinking was often described as being shaped by rhetorical situations. The rhetorical dimensions of various assignments, and the writing processes they engendered, facilitated or limited critical thinking.
- *Perspective-shifting*: This category points to the results of critical thinking. Participants reported changed understanding of disciplinary content, questions, or problems. While they did not always explicitly state that these changed perspectives were due to critical thinking, their descriptions align with both the institutional and disciplinary motives in the first two categories.

In what follows, I will detail how each category played out in the course. I discuss how Professor Morrison designed course assignments to facilitate students' critical thinking, and I examine students' experiences working on these assignments, and I compare their discussions of critical thinking with his vision.

Facilitating Critical Thinking in Course Design

At base, critical thinking in the PSPA Capstone was institutionally defined, even though it was not institutionally mandated for this particular course. To get the course validated as an EE capstone, Professor Morrison had to demonstrate to a faculty committee that his assignments integrated in-depth work on advanced communication, which EE defines as the ability to use written or oral forms to

- Present information, express ideas, or construct arguments for particular purposes and audiences.
- Use critical thinking skills of analysis, synthesis, and evaluation to create effective written or oral presentations.
- Present research, cite sources, and format documents in ways that are consistent with different disciplinary standards.

As the second bullet makes clear, EE did not necessarily posit a neat distinction between critical thinking and advanced communication, since the latter references the former. In its specific description of critical thinking, the program includes the ability to

- Synthesize and analyze texts, issues, or problems.
- Evaluate the logic, validity, and relevance of arguments.
- Come to reasoned conclusions or resolutions to problems that includes foreseeing ethical ramifications of choices, broader implications of actions, and alternative solutions.

This link between writing and critical thinking has a long history in writing across the curriculum circles, dating early work by scholars like Janet Emig (1997) and Susan McLeod (1992). Condon and Kelly-Riley (2004) have critiqued the "common assumption [. . .] that to

improve students' writing is necessarily to improve their abilities as thinkers" (p. 57). An assessment they conducted at Washington State University found an "inverse relationship" between the two: "the better the writing, the lower the critical thinking score, but the more problematic the writing, the higher the critical thinking score" (p. 61). In other words, rather than assume that good writing means good thinking, we need to be explicit about communicating the relationship between the two.

The PSPA Capstone offers a valuable opportunity to examine the complex relationships between writing and critical thinking in a local context. Because EE linked advanced communication and critical thinking, Professor Morrison's emphasis on both makes sense, even without a programmatic mandate from EE. He also had professional and departmental reasons for folding critical thinking into the course: he was instrumental in crafting the EE critical thinking rubric, and his department identified critical thinking as a central learning goal. The Capstone syllabus explains that upon graduation, "Students will have the ability to think critically and relate theoretical information to practical experiences." For some time, the department had used the capstone to assess majors' critical thinking and communication abilities, and they drew upon EE's vision of liberal learning to do so.

Working with Institutional Definitions of Critical Thinking

For these reasons, Professor Morrison infused the PSPA Capstone with institutional definitions of critical thinking. The peer assessment activity, for instance, required students to use the EE advanced communication and critical thinking rubrics to evaluate one another's conference papers. (I discuss the conference in more detail in the next section.) This peer assessment activity served the department's assessment needs and allowed students to place their work into what Professor Morrison called "a comparative context." Too often, he told me in an interview, "we overemphasize the individual piece on its own merit," whereas peer assessment would allow students to better understand their own communication and thinking abilities relative to their peers. (The rubrics appear in the Appendices.)

To set up this assignment, Professor Morrison held a norming session with students early in the semester so they would know how to use the rubrics when evaluating each other's papers. Before he distributed the rubrics, he defined critical thinking by drawing on the EE rubric's primary categories: he told the students they should be "able to place the problem in a proper context, but then after [they] disassemble it and put it back together to make sense, that analytical process, that then there's a resolution, [they]'re able to go back and speak to that larger issue." Here, he describes critical thinking as a process of identifying a problem-in-context (corresponding to the "Problem" category), analyzing it (corresponding to the "Analysis" category), and then recontextualizing that analysis into a resolution (corresponding to the "Resolution" category).

Professor Morrison expected students to use the institutional language of the EE rubric directly when assessing each other's papers—hence the need for the norming session. "Often times," he told me, "language from the rubric is coming into their justification. That's positive. That means they're saying, okay, this is a standard, and they're applying the standard. When I use the rubric, I end up almost mimicking those phrases where it's weak and where it's strong." In other words, he expected students to implement the rubric's institutional purpose as an assessment instrument, to critique peers' work much as he

himself did. Table 1 includes excerpts from the EE critical thinking rubric and the peer evaluations that take up that language. Closely related language is emphasized with italics.

Table 1 Institutional and Student Language for Critical Thinking		
EE Rubric for Critical Thinking		Student Comments on Peers' Papers
Category	Criterion	
Purpose	Provides a clearly articulated statement that defines the main question, problem or issue	Leslie: "The opening paragraph strongly demonstrates the <i>purpose</i> of the paper and clearly <i>sets up the framework</i> for which the argument is based."
Purpose	Selects and attributes appropriate sources of literature, evidence or academic dialogues in terms of amount and balance	Fernando faults one piece because it was "[n]ot tremendously focused on using <i>literature</i> ."
Analysis	Disassembles and reassembles relevant information in an accurate, critically-oriented, deep way producing a synthesis of the material	Leslie: "While the paper in all was decently developed, the paper lacked <i>complete synthesis</i> ." Joy: "The paper <i>dissects</i> and comprehends a ton of thick <i>information</i> ."
Analysis	Demonstrates a logical progression of thought throughout the writing reflecting information and ideas that are well-structured and prioritized	Leslie: "The <i>progression</i> from one idea to another was a bit hazy, especially towards the last half of the paper."
Resolution	The artifact poses realistic and insightful solutions and/or broader implications	Leslie: "the conclusion would have been stronger if there was some further analysis of what the author felt the <i>implications</i> of the conclusion here" Joy: "There was no real <i>resolution</i> , just <i>restatement of issues</i> ."

As the above table illustrates, EE's institutional documents influenced students' assessments of critical thinking—not because the institution mandated that they come to think in these particular ways, but because the rubrics represented a larger context for students to evaluate one another's work. The rubrics functioned as "a boundary object" (Yancey, 2015, p. 3) that connected the institutional culture of EE with specific course manifestations. Put differently, it constituted Soliday's (2011) "context for genre" (p. 99), allowing students to take on EE's institutional stance by using an institutional genre—the rubrics—associated with that activity.

Disciplinary Grounding for Critical Thinking

While EE's language supported conversations about critical thinking in the PSPA Capstone, Professor Morrison often translated that language into disciplinary terms. In our first interview, for instance, he echoed the language he used to describe critical thinking in class, saying they must "conceive of the problem properly," but then he used more distinctively disciplinary terms, saying they have to "analyze and pull apart the components, find measurements, evaluate those measurements in light of competing hypotheses, and then put it all back together" into a resolution. The language of "measures" and "hypotheses" suggests a disciplinary grounding in his definition of critical thinking, considering both political science and public administration often (although not exclusively) use statistical measures to test hypotheses about political behavior or policy implementation.

This disciplinary translation of institutional language for critical thinking appeared most overtly in Professor Morrison's discussions of EE rubric's resolution category. He found through earlier assessments that political science and public administration students tended to score lower on resolution than other categories, which led him to emphasize it in his teaching. "What I really want to stress to them," he told me in our first interview, "is that they don't have good resolution [in their papers]. They present a problem well. They analyze it pretty well, with some variations. But on average they don't come to strong resolutions. They don't recognize the larger picture." When he discussed the resolution category in class and interviews, he used distinctly disciplinary terms. In the same interview, for instance, he gave me a concrete example: if students were writing about compulsory voting laws, they might not get to a larger question about the function of laws in a complex society: "Is the law something that prescribes behavior—and we expect a result from that prescription—or is the law a reflection of community values and thus really just a mirror of what we all believe collectively?" Such questions are distinctly disciplinary: learners most likely need experience from inside the discipline to understand that these are valid questions in political science and that specific arguments about one kind of law (voting laws) lend themselves to these larger questions driving inquiry in the field.

Like Professor Morrison, students grounded their discussions of critical thinking in the disciplines. Unlike Professor Morrison, however, they did not translate institutional language when discussing its disciplinary nature. Instead, they characterized critical thinking as an inherent characteristic of their disciplines. For example, Fernando told me, "Political science [involves] more critical thinking than other majors" which "don't really go by the textbook" and "don't really want your general input." Joy also suggested critical thinking was a key feature of writing in political science. She contrasted the "What Is It Like?" assignment, a reflective essay, with her usual ways of writing and thinking in the major. While the assignment required her to "reason through what we know about public administration," she explained, "it wasn't like I had to go through and see how the [Lord's Resistance Army] in Uganda and Joseph Kony is similar to something that happened twenty years ago. It wasn't critical thinking in that sense." Here Joy references the paper she would present in the course's simulated academic conference; she explains that critical thinking has a distinctly disciplinary bent. Recall Professor Morrison's earlier explanation that critical thinking involved using appropriate measures to test hypotheses: Joy expressed a similar disciplinary understanding of critical thinking, too. Rather than "reasoning through" one's own knowledge about a phenomenon, political science required her to engage disciplinary content in disciplinary ways, such as comparative analysis. Both students thus recognized

the critical nature of thinking in political science, but neither translated institutional language into disciplinary language as overtly as Professor Morrison.

Rhetorical Situations Drive Critical Thinking

Part of the reason students did not engage in such a translation may be the rhetorical nature of critical thinking practices. The peer assessment activity, as a rhetorical situation, required institutional genres and thus invited them to use institutional language. Other course assignments, meanwhile, required disciplinary communication. Nothing in the course explicitly required them to translate between the two conceptions, except insofar as they assessed instances of their peers' disciplinary writing—whereas Professor Morrison worked at the rhetorical intersection of the institution and the department, so he toggled between the two contexts out of necessity, following the “genre pathways” (Russell & Yañez, 2003, p. 358) across contexts regularly.

That said, Professor Morrison did invite students to engage the institutional criterion of the resolution through disciplinary practice—to follow the genre pathway. To help students understand the discipline-relevant resolutions they might develop in their writing, he crafted the major assignment for the course: the simulated academic conference. He had used the simulated academic conference for several years, partly because he wanted students to partake in core disciplinary conversations, regardless of whether they were political science or public administration majors. He told me that before they enter the capstone, “students don't appreciate what they are actually doing with their research papers. They don't appreciate that they're connecting to a larger discipline, a larger picture, a larger conversation”—essentially another way of saying that they don't come to a satisfactory resolution in their work.

To be clear, Professor Morrison did not attribute students' lack of resolutions to sheer inability. Rather, he saw the rhetorical constraints of schooling influencing their ability to come to an effective resolution—or not. For him, students' lack of connection to larger disciplinary conversations stemmed from their usual rhetorical habits: in the prompt, he explains that when students write in other courses, time constraints and assignment guidelines can lead them to “shortchange broader theoretical points or themes.” Likewise, he told the class that their writing can feel “narrow” because “it's just this little thing and it didn't work out so well, and you're kind of frustrated with it. You learned something but it seems very small.” In other words, he saw students' inattention to larger disciplinary themes as a (necessary) product of their writing processes in college courses. Therefore, according to the prompt, the simulated academic conference encouraged students “to revisit previously written academic work and recognize the larger themes that your paper raises.” To facilitate this work, he required students submit papers early in the semester so he could group them into thematic panels.

The panels themselves also followed a sequence typical of academic conferences. Professor Morrison made brief opening remarks about each panelist, after which students presented their papers. Then, each week, after all panelists had presented, he acted as respondent, encouraging them to envision their places in larger (inter)disciplinary conversations about such topics as citizenship, organizational structure, and executive power. Finally, each session included time for students in the audience to ask their peers questions about their presentations.

By designing the conference in this way, Professor Morrison positioned students as disciplinary participants so they might envision the kind of resolutions that would constitute critical thinking. The conference was thus a productive vehicle for translating an institutional dimension of critical thinking, not necessarily into disciplinary *language*, but rather into disciplinary *practice*.

Students also articulated the rhetorical nature of critical thinking, although not always in disciplinary terms. Fernando, for example, explicitly connected the writing process required for the conference—revisiting and revising a previous assignment—with critical thinking. Before he actually began his presentation, he told me, “It’s going to require you to take some time prior to the class when you have to present,” which “takes some critical thinking” and “a lot of advanced preparation.” Revision was a key part of the puzzle for him, too. In his final interview, he explained, “To go back and revise the paper required critical thinking. If you just write a paper and don’t ever go back and touch it, then that’s not really critical thinking. To go back and think about your work in the past, I think that really helped.” In other words, Fernando seemed to think the assignment, with its emphasis on reflection and revision, necessitated critical thinking. This differs somewhat from Professor Morrison’s vision for the assignment. They both recognized the critical thinking involved in revision, but Professor Morrison emphasized satisfactory, disciplinary resolutions, whereas Fernando focused on developing the presentation, which for him entailed considered attention to his rhetorical purpose and his audience.

Some more detail may clarify what this critical thinking process actually looked like for Fernando as he developed his presentation, which centered on the DREAMers,⁴ the children of undocumented immigrants who grew up in the United States and attended public schools, but now cannot attain an affordable college education because of their undocumented status. Fernando originally wrote the paper for his McNair faculty advisor, but he could no longer access it. He had deleted it. In fact, he told me he often deleted his writing: “I make it a goal to erase all my work from that year so that I force myself to write something over again,” he told me. “If I’ve done something, then it’s done. I don’t want to be lazy and go back to something old and just clean it up for an upcoming assignment.” In other words, Fernando indicated that “cleaning up” his old paper would not be a challenging task, whereas rewriting it would be. The process of rewriting his paper also offered him an opportunity to rethink his audience and purpose. Rather than writing for his McNair faculty advisor, he geared his presentation for his peers.

During his presentation, he shared his background as a Mexican-American, an army veteran, and a nontraditional student, all important identities to him. He explained how he first learned about the DREAMers when he was the student body vice president at his former community college:

My [community college] received a call [about the DREAMers] from [the Hispanic television network] Univision. I gladly took the call. I was the only Spanish speaker in the building [when they called]. The news reporter asked me how I felt about the DREAM act not being passed at the national level. I honestly told them I had no idea about the news and that we did not have a demographic representative at the school. We actually did, but I knew that the undocumented students [. . .] did not like being pointed out.

Here, Fernando offers a narrative about his personal interest in the DREAMers, rather than, for example, a policy analysis of the DREAM Act, which might be a common genre for a political scientist. When I asked him about his approach, he explained, “I wanted to get [the class] to think the way I was thinking in the paper. A lot of people don’t like to talk about controversial things. I love talking about that stuff. How I feel conflicted as a Mexican, how I feel conflicted as an American.” In making these comments, Fernando indicates a rhetorical awareness of audience (his peers) and purpose (sharing his own conflicted stance on the matter). Although he was not particularly vocal in interviews about institutional critical thinking criteria—he never mentioned the production of a resolution—he did associate critical thinking with close consideration of his own rhetorical purpose and his audience’s needs, which arose from his writing process and the rhetorical situation engendered by the simulated academic conference.

The extent to which Fernando’s peers shared this association of rhetorical situation and writing process with critical thinking remains an open question. Both Joy and Leslie made clear choices in response to the rhetorical situation of the simulated academic conference, although in our interviews, neither one explicitly associated those choices with critical thinking. However, if we follow the *Framework for Success in Postsecondary Writing* in understanding critical thinking as “the ability to analyze a situation or text and make thoughtful decisions based on that analysis” (Council of Writing Program Administrators, National Council of Teachers of English, & National Writing Project, 2011, p. 7), then Fernando, Leslie, and Joy all followed similar critical thinking practices when developing their presentations.

Leslie, for example, tailored her presentation to fit the rhetorical constraints of the assignment, with particular attention to the time limit and, crucially, the interdisciplinary audience. Her presentation, an examination of two organizations’ successes and failures “implementing new policy to deal with juvenile delinquency,” was originally written for a public administration course and delivered as a 35-minute presentation. Through strategic cuts, she accounted for this conference’s fifteen-minute timeframe and her new, interdisciplinary audience. In an interview, she told me she “cut out most of the empirical evidence—I stated, oh, I saw decreased rates in this but I didn’t go into how I went through statistically and found these rates . . . I stayed away from specific examples and just gave overarching results from the study,” focusing on the “policy and how it ended up.” Leslie’s approach to streamlining her presentation derived from her sense of the differences between the two disciplines. Public administrators, she reasoned, would find her statistical analyses interesting, whereas political scientists would not. “No one in political science cares about that,” she explained, whereas public administrators “are like, oh, you found that out? That’s fascinating!” As I indicated earlier, some political scientists do use quantitative data in their research. For Leslie, the issue was more rhetorical. She described public administration writing as “dry,” compared to the more descriptive, interpretive, and theoretical writing she saw from her political scientist peers. To address that latter audience, she cut the “dry” parts from her original paper and emphasized the theoretical takeaway so as to interest audience members from the other major.

Like Leslie, Joy made rhetorical choices based on a disciplinary perspective, although she did not identify her audience as a driving force in those changes. Instead, her changes stemmed from her sense of how her discipline drew conclusions from data. To develop her presentation, Joy followed the structure Professor Morrison suggested in the prompt: she

began by describing her paper's original school context, a take-home final exam she wrote for him in another class. The original question was whether the International Criminal Court (ICC) could maintain both peace and justice. In the original paper (and in most of the presentation), Joy argued that the ICC cannot administer both peace and justice. She supported this argument through a detailed analysis of the attempt to prosecute Joseph Kony, leader of the Lord's Resistance Army, a reactionary militia seeking to rule Uganda according to what it claims are Christian principles.

Joy made two key rhetorical choices in her revisions. The first change was in her presentation strategy: she wanted to appear more professional by giving an actual talk, so she used notecards rather than reading the original essay word-for-word. With this change, she avoided simply reading her original paper. An actual talk, she reasoned, would make her presentation more authentic. The second change was argumentative: she qualified her overall claim after returning to it. At the end of her presentation, she told the class, "Based on my data, at the time I didn't think that the ICC was able to administer peace and justice, but that doesn't mean that it's not important or that it doesn't do any good. Through the use of the ICC there is visibility created . . . and it helps transparency." Given the presentation context, she revised her argument, and she even acknowledged that new data might change her conclusions: she speculated that a year later, the situation in Uganda may have changed, in which case perhaps peace and justice could have been achieved. In an earlier interview, Joy had explained that her political science writing revolved around the analysis of complex data sets. Here she demonstrates how new data, and therefore a new conclusion, might be available.

Joy's choices in crafting the presentation grew out of the disciplinary forum of the academic conference and align with Professor Morrison's goals for this particular activity: the new context allowed her to return to, and rethink the purpose of, writing she had done previously. Her acknowledgment of new potential data and conclusions also bespeaks a dawning recognition about the close relationship between writing in political science and the resolutions she might produce. Professor Morrison might suggest that such resolutions evidenced her critical thinking.

Again, neither Leslie nor Joy connected their rhetorical choices to critical thinking directly. However, if we agree with Kathleen Blake Yancey (2015) that critical thinking involves the appropriate use of disciplinary "materials" (sources of data and means of representation) following disciplinary "epistemologies" (the ways of knowing) (p. 13), then both students were thinking critically: they made critical, rhetorical choices about the kinds of data and the kinds of knowledge that would be most relevant in the disciplinary forum for the interdisciplinary audience.

Critical Thinking Changes Perspectives

In Professor Morrison's mind, typical school assignments short-circuited students' opportunity to think critically about disciplinary resolutions. He believed the conference offered them the opportunity to see those resolutions, and thus to change their perspectives on the work they had done in the major(s) all along. On the first day of the conference, he told them it would be "an opportunity to take a deep breath and say wow, this is all about power, this is all about legitimacy, this is all about institutional design, this is all about the importance of decision making, this is all about characteristics that go into good leadership." For him, the simulated disciplinary forum offered a rhetorical situation conducive to broad

disciplinary conversations, and therefore to helping students imagine successful resolutions to their writing.

In keeping with Professor Morrison's vision, Leslie and Joy both articulated changed perspectives on the disciplinary relevance of their own work and their peers' work in the PSPA Capstone. Leslie, for example, saw new conceptual connections when Professor Morrison presented his panel responses: "The critical thinking part came in when listening to other people's papers, especially when he wanted to ask us questions, especially when I was like, what are you talking about, what you just presented, I don't even quite understand. He'd give a 15-minute impromptu presentation on how these are all related to participation in democracy or something and I'm like, how did I not think of that? I spent four years and can't connect three papers up there?" In other words, the simulated academic conference offered her an opportunity to realize the larger implications of writing and research in the field.

Joy, too, came to recognize larger disciplinary conversations represented by the panels. During our second interview, she told me, "During the last panel we had, I was telling myself, these don't even sound alike. These are so different, and then at the end, the common denominator was citizen participation. In every paper it touched base on how citizens participate [in a democracy]." Not only did she clearly understand the common underlying themes after Professor Morrison synthesized the papers, but also she recognized why he did so: "I think he wants us to see that all these papers are so different, but they do have underlying themes, and that papers we've written a long time ago can still be relevant today." In these comments, Joy recognizes these larger disciplinary conversations encapsulated in themes like citizenship. This recognition aligns with the vision of critical-thinking-as-resolution Professor Morrison emphasized throughout the semester, both in principle and in practice

While Fernando chose not to use a disciplinary genre for his presentation, even that choice stemmed from contrasting his understanding of typical political science rhetoric with what he wanted to do instead. Speaking broadly about the projects he read and the presentations he watched during the PSPA Capstone, he told me at the end of the semester, "Some of the papers are really not personal. . . . It doesn't really show what they're passionate about. Young people have this issue where they try to stay detached. They don't want to really share much about themselves so they continue with that pattern." Here, Fernando contrasts himself with his peers ("young people"), whom he criticizes for their dispassionate, detached approach to writing. Therefore, he decided to forgo a detached, analytical stance, a choice that demonstrates his own critical thinking about his rhetorical purpose. He sought instead to change their perspectives on the relationships they might have to disciplinary content and writing. In so doing, he took on a stance more akin to Professor Morrison's than to his peers: he sought to heighten their awareness of how they might relate to their disciplinary writing in deeper, more authentic ways.

Professor Morrison might have promoted even more authentic critical thinking practices by modifying the simulated academic conference so it resembled more closely the ways conference panels often get organized by panelists themselves. Rather than taking sole responsibility for organizing the panels, he might have asked students to identify thematic similarities for themselves. The risk in such a design is that students might default to organizing according to the courses in which the papers originated, but that risk could be mitigated with guidance on Professor Morrison's part. Students might also be tasked with

identifying an outside respondent from the department (or beyond), or else asking a peer from another group to play that role. These self-organizing activities might help students change their perspectives on the rhetorical, disciplinary nature of conference presentations, not just their individual papers. In other words, through small changes in assignment design, Professor Morrison could have put even more intellectual responsibility on students for envisioning critical resolutions via a more authentic enactment of the disciplinary forum.

Conclusion

Professor Morrison had a highly integrated understanding of critical thinking. He began with institutional definitions of critical thinking and emphasized aspects he believed were particularly important—namely, the resolution. Then he grounded that institutional definition in disciplinary language and disciplinary practice. He developed the simulated academic conference to remove the barriers to critical thinking and resolution-building that he believed students experienced in other classes. Finally, he incorporated overt attention to larger disciplinary themes so students could shift their perspectives and come to a new understanding of their relationship to the fields of political science and public administration.

The students with whom I spoke also described critical thinking as institutionally defined, grounded in the discipline(s), rhetorically driven, and perspective-changing, but they did not necessarily have as integrated a vision of these dimensions of critical thinking as Professor Morrison did. Instead, they expressed a spectrum of perspectives on critical thinking that circulated, overlapped, and diverged at different times in the semester.

Faculty in courses like the PSPA Capstone have a difficult job, then, to balance institutional expectations for critical thinking with the discipline-specific needs and expectations for students in their departments. To aid in that goal, they can work with students to clarify the conceptions of critical thinking at work in a course, a discipline, a curriculum, and a program. Yancey (2015) urged us “to assist [students] in looking for both likeness and difference across our cultures” and help them understand “the ways a given culture is both similar to *and* different from other cultures in the academy” (p. 1). She emphasizes comparisons of writing and critical thinking in different disciplinary cultures, which makes good sense in the context of lower-division general education courses. As students move into majors, though, we would do well to extend her logic to comparisons of disciplinary and institutional cultures as well. By attending to the similarities and differences in conceptions of critical thinking in overlapping institutional and disciplinary contexts, students can put themselves in “a comparative context,” to repeat Professor Morrison’s phrasing. They can develop a richer, more integrated sense of critical thinking, the different purposes that thinking may serve, and the myriad ways they might translate that thinking when discussing it with others. In so doing, they can see their writing not as so many disconnected school activities, but rather as pieces of a larger institutional and disciplinary enterprise of critical thinking.

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Notes

¹To be precise, GPU students can technically take a capstone course in any major, not necessarily their own. Generally speaking, however, most students do take their capstone in their home major, often because the major requires it.

²The names of the institution, programs, and all participants have been changed in accordance with the IRB protocol.

³A fifth assignment asked students to visit a lower-division course in U.S. Government to teach other students about the majors of political science and public administration. However, I could not observe those presentations, so I do not discuss them in this article.

⁴DREAM stands for Development, Relief, and Education for Alien Minors, a proposed piece of legislation that would help the children of undocumented workers gain legal residency, and an education, in the United States.

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Appendix A: Rubric for Critical Thinking

	2	1	0
Purpose	<ul style="list-style-type: none"> • Provides a clearly articulated statement that defines the main question, problem or issue • Demonstrates the relevance or importance of the question, problem or issue • Selects and attributes appropriate sources of literature, evidence or academic dialogues in terms of amount and balance 	<ul style="list-style-type: none"> • Identifies several pertinent questions, problems or issues, but does not established a focused position or direction • Identifies only a marginal context for the main question, problem or issue • Selects sources, evidence or dialogues that only support the main conclusions 	<ul style="list-style-type: none"> • Shows no clear sense of purpose. No question, problem or issue is concisely stated or even implied. • Demonstrates no clear sense of importance or relevance of the main question, problem or issue • Omits important sources of literature, evidence or dialogues, whether these sources support or challenge the main conclusions
Analysis	<ul style="list-style-type: none"> • Uses reliable and accurate information/ evidence that is relevant to the main question, problem or issue addressed • Disassembles and reassembles relevant information in an accurate, critically-oriented, deep way producing a synthesis of the material • Demonstrates a logical progression of thought throughout the writing reflecting information and ideas that are well-structured and prioritized 	<ul style="list-style-type: none"> • Information/ evidence is of marginal relevance to the main question, problem or issue addressed in the writing • Full synthesis is not achieved. Information evidence is not disassembled and reassembled in a fully accurate, critical or deep way • Progression of ideas does not fully unfold in a logical manner, or the ideas presented are not well-structured in relation to one another 	<ul style="list-style-type: none"> • Information/ evidence does not clearly relate to the main question, problem or issue addressed in the writing • Synthesis of information is not attempted or lacks accuracy, critical assessment or depth. Attempt to disassemble and reassemble information/ evidence is absent or executed poorly • Logical progression of ideas is absent and no attempt to prioritize information is taken
Resolution	<ul style="list-style-type: none"> • The artifact contains a clearly articulated argument that is strongly resolved with supporting information and conclusion/s. • Conclusions provide a thorough and relevant summary of the question/issue/problem and its analysis. • The artifact poses realistic and insightful solutions and/or broader implications. 	<ul style="list-style-type: none"> • The artifact contains an argument that is minimally resolved with supporting information and conclusion/s. • Conclusions provides a brief or incomplete summary of the question/issue/problem and its analysis. • The artifact poses solutions and/or broader implications that may be simplistic or slightly unrealistic. 	<ul style="list-style-type: none"> • Artifact does not make an argument or does not resolve it with supporting information and adequate conclusions. • Conclusions are missing or irrelevant/inappropriate to the question/problem being explored. Conclusions may not be based on analysis and supporting information. • The artifact does not pose solutions or broader implications, or the solutions/implications may be extremely inappropriate.

Appendix B: Rubric for Written Communication

	3	2	1	0
<i>Sense of Purpose</i>	Writer is sophisticated in his/her ability to signal purpose to reader. Focused and incisive, the paper reflects a writer with a strong sense of what s/he is trying to do or say. The various sections of the paper make sense together and the writer has indicated the larger implications or importance of the written work.	There is a controlling idea that holds the paper together. While the paper might not contain a traditional “thesis statement,” there is a strong sense that the writer has a clear vision of his/her project. The various parts of the paper fit with the writer’s sense of project. The writer has a reason for writing.	While there may be a sense of purpose that holds the paper together, it is often very broad. This lack of focus may result in a very general project; the paper may therefore rely more on summary than on analysis. Writers in this category may discover a sense of purpose as they write, but they haven’t revised the entire paper to reflect this new focus.	Paper seems disjointed or incoherent. Relationship between different sections is unclear or relationship comes only from “stream of consciousness” or tangential connections between ideas. Writer may seem to be engaged in many different projects at once.
<i>Guidance for Readers</i>	The writer demonstrates a sophisticated awareness of his/her reader. Writing flows smoothly from one idea to another. The writer has taken pains to assist the reader in following the logic of the ideas expressed and has taken pains to explain and develop his/her ideas.	Generally, readers feel that the writer has helped them to understand his/her project. Sequencing of ideas within paragraphs and connections between paragraphs make the writer’s points easy to follow. The writer has found a way of developing his/her ideas, providing the reader with the examples, illustrations, and explanations necessary to understand the project.	Writer needs to improve sequencing of ideas within paragraphs and needs to do more to explain the connections between paragraphs. Paper may include examples and illustrations but often lacks explanations of the relevance of those examples; or paper may include explanations without the examples or illustrations the reader needs to fully understand. At times, readers may feel lost and unable to follow the narrative.	The lack of connections between ideas makes reading and understanding difficult. The lack of examples, illustrations, and explanation makes understanding difficult.
<i>Clarity and Conventions</i>	Clarity of ideas is enhanced by writerly expression. Writer seems to be in command of conventions of writing and uses them to rhetorical advantage. Visual presentation of written work, formatting and/or documentation is polished.	Word and sentence choices convey meaning clearly. Writer generally controls conventions of writing. Visual presentation of written work, formatting and/or documentation is consistent and generally follows conventions. Occasional missteps in use of conventions or in presentation do not impede understanding.	Word choice and/or sentence structure gets in the way of clear communication. Writer’s inconsistent use of conventions of writing is distracting to the reader and interrupts comprehension. Visual presentation of written work, formatting and/or documentation is inconsistent and interrupts understanding.	Reader must occasionally guess at reader’s meaning. Writer’s control of conventions of writing is uncertain enough to impede comprehension. Visual presentation of written work, formatting and/or documentation is inappropriate and impedes understanding.