ABSTRACT

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This study investigated the relationship between college freshmen's stage of reflective judgment and the patterns in their written arguments using a mixed-method design with two major and two secondary data collection strategies. The Reflective Judgment Interview (RJI) was conducted with 15 college freshmen enrolled in a composition course that focused on persuasive writing. Participants' essays were examined for patterns in position-taking, evidence-usage, treatment of objections, and rhetorical strategies. Essays were examined "blind" to participants' reflective judgment scores, and then analyses were compared across reflective judgment groupings. Participants' qualitative interviews and self-recorded reflections on Paper 4 were used to supplement analyses of their essays, and to provide information about contextual factors. Based on assessments made by independent raters, four participants were described as using predominantly pre-reflective judgment, and eleven were described as using predominantly quasi-reflective judgment. Qualitative interviews revealed that participants in both groups had received instruction in persuasive writing in high school, had taken advanced English classes, and were familiar with their own writing processes. However, participants rated as using predominantly quasi-reflective judgment tended to adopt balanced positions, differentiate their views from an authority's, acknowledge the ill-structured nature of the rhetorical dilemma, and respond to objections more frequently than their pre-reflective counterparts. At the same time, findings for both groups of students suggested that the writing context did not support participants' use of sophisticated assumptions about knowledge and justification, in that most essays written by participants in both groups included one-sided positions, an uncritical use of

evidence, and superficial attention to the objections of a doubting audience. Based on these findings, the researcher made recommendations for more developmentally-sensitive instruction.

PERSUASIVE DEVELOPMENTS: REFLECTIVE JUDGMENT AND COLLEGE STUDENTS' WRITTEN ARGUMENTATION

By

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CHAPTER I: INTRODUCTION

A body of literature dating back to the early 1980s attests to the types of problems that characterize adolescents' written arguments. As Applebee, Langer and Mullis (1986) reported, the 1986 National Assessment of Educational Progress (NAEP) indicated that "results of student performance on persuasive writing tasks are dismaying," with fewer than one-third of U.S. eleventh-grade students' persuasive compositions rated as "adequate," and over one-third of eleventh-graders' persuasive compositions rated "unsatisfactory," across eleven tasks of varying difficulty (p. 36). Applebee et al. concluded that "while the students were able to understand the assignment and to present a point of view, they generally were unable to support their ideas beyond general statements and personal likes and dislikes" (p. 27). In their 1994 follow-up report on students' writing performances as measured in the 1992 NAEP, Applebee et al. claimed that little improvement had occurred with respect to persuasive writing tasks. In fact, they reported that "even when twelfth graders were given 50 minutes in which to organize and orchestrate their points…only 3 percent of the responses were rated as elaborated or better" (1994, p. 65). Conducted in 1998, the most recent NAEP study of students' persuasive writing found that the majority of twelfth grade students' responses to a persuasive prompt were rated either "Unsatisfactory" (4%), "Insufficient" (21%) or "Uneven" (30%) (White & Vanneman, 2000, p. 5). According to the scoring rubric used in the 1998 study, a "Sufficient" response is characterized by a clear position "with *some* pertinent reasons and/or examples; there is *some* development" (White & Vanneman, 2000, p. 2, [emphasis added]). Thus, essays rated as less than "Sufficient" included virtually no development of the writer's position—and 55% of the students in the 1998 study wrote essays that fell into this category.

Given these findings about twelfth graders' persuasive writing, it is not surprising that some first semester freshmen continue to struggle with persuasive tasks. Research on college students' persuasive writing is much less abundant or systematic, compared to studies of secondary students' writing. However, at least some researchers have suggested that students continue to struggle with the demands of persuasive writing into their college years (Barton, 1993; Hays, 1988; Hillocks, 1995; Dinitz & Kiedaisch, 1990; Moxley, 1993).

A number of possible reasons exist for college students' difficulty with written persuasive tasks. Context-based reasons for difficulty with composing in various genres (e.g. lack of experience with discourse conventions, difficulty in adapting to the academic discourse community, fear of evaluation, etc.) have been explored over the past two decades by researchers and practitioners operating within the social constructionist paradigm. Research on teaching argument has focused on creating more workable instructional models and/or sequences of assignments (Fahnestock & Secor, 1983; Fulkerson, 1988, 1996). However, since the late 1980s and the decline of the cognitivist era in composition studies, little work has been conducted on cognitive developmental factors associated with written discourse, and virtually none has focused on the developmental aspects of persuasive writing, a fact that has relevance because, as Crowhurst (1990) explained, writing arguments is a cognitively demanding task:

> The organization of argument is more difficult than the chronological order typical of narrative… Generating content is especially difficult for universal topics or issues of public policy which require specialized knowledge and vocabulary removed from students' usual experience. Finally, argument requires an ability to abstract and to generalize, particularly for universal topics and general audiences. Writing

> arguments, then, presents both cognitive difficulties and difficulties associated with lack of experience and lack of knowledge. (p. 355)

It is impossible to dismiss the importance of context in the production of *any* written text. However, the cognitive demands that Crowhurst references provide grounds for an explanation that goes beyond context.

Findings in developmental psychology have raised important possibilities about the epistemological nature of students' difficulties with argumentation (Hays, 1988; Kroll, 1978; Kuhn, 1991; Kurfiss, 1988, 1990). This study addressed the paucity of research with respect to these issues by focusing on one particular developmental domain, reflective judgment, and its association with students' persuasive writing practices. To achieve these goals, this study examined the relationship between college students' level of reflective judgment and the patterns in their written argumentation, investigating the ways in which the ability to write effective arguments may represent a function of this developmental domain.

Definition of Terms

Because reflective judgment is a relatively new branch of cognitive developmental research, and because argumentation has a range of possible meanings, it is important to have a clear working definition of these terms in order to understand the rationale of the research.

Reflective Judgment

Reflective judgment refers to the specific domain of cognitive development that describes how people make judgments about complex issues. Evolving from Dewey's (1933, 1938) claim that a person makes a reflective judgment to bring closure to uncertain situations, the Reflective Judgment Model devised by King and Kitchener (1994) details the

epistemic assumptions associated with different problem-solving styles, and posits a stage framework for the development of these assumptions. In many ways similar to Perry's stage model of epistemological development, the Reflective Judgment Model (King and Kitchener, 1994) describes the increasingly complex schema that individuals develop over time to deal with ill-structured problems. There are seven stages in the Reflective Judgment Model; taken together, they describe a sequence of development that privileges an increasingly abstract and integrated knowledge system. Table 1.1 provides a description of each stage.

Table 1.1

The Reflective Judgment Model

Stage		Concept of Knowledge Individual assumes that…	Concept of Justification Individual assumes that…
Pre-Reflective	Stage 1	Knowledge exists absolutely and concretely, and can be obtained with certainty by direct observation or experience.	Beliefs need no justification because what is believed to be true is true. There are no alternative beliefs.
	Stage 2	Knowledge is absolutely certain or certain but not yet available to the individual. Knowledge can be obtained directly through observation or authority figures.	Beliefs are unexamined and unjustified or justified by their correspondence with the beliefs of an authority figure. Most issues have a "right" answer, so there is little or no conflict in making decisions about disputed issues.
	Stage 3	Knowledge is absolutely certain or temporarily uncertain. For issues involving uncertainty, only personal beliefs can be known with certainty, until absolute knowledge is obtained. In areas of absolute certainty, knowledge is obtained from authorities.	Beliefs are justified by reference to authorities' views. In areas in which answers do not exist, beliefs are defended as personal opinion since the link between evidence and beliefs is unclear.

Quasi-Reflective	Stage 4	Knowledge is fundamentally uncertain and knowledge claims are unique to the individual since situational variables (e.g., incorrect reporting of data and lack of access to information) dictate that knowing always involves uncertainty.	Beliefs are justified by giving reasons and using evidence, but the arguments and choice of evidence are unique to the individual, and may involve choosing evidence that fits an established belief.
	Stage 5	Knowledge is contextual and subjective.. Only interpretations of evidence may be known.	Beliefs are justified within a particular context by the rules of inquiry for that context.
Reflective	Stage 6	Knowledge is constructed into individual conclusions on the basis of information from a variety of sources. Interpretations based on evaluations of evidence across contexts and on the evaluated opinions of credible individuals can be known.	Beliefs are justified by comparing evidence and opinions from different perspectives and by constructing criteria-oriented solutions.
	Stage 7	Knowledge derives from a process of reasonable inquiry. The adequacy of constructed solutions is evaluated in terms of what is most reasonable or probable; solutions are reevaluated when relevant new evidence, views, or methods become available.	Beliefs are justified on the basis of a multiple abstract considerations including plausibility, adequacy of evidence, the risk of erroneous conclusions, and the consequences of alternative judgments.

Note. Material in table excerpted and adapted from King, P. & Kitchener, K. (1994). *Developing Reflective Judgment* (pp. 14-15). San Francisco: Jossey-Bass.

Although they resist attaching specific age-descriptors to any of the stages, King and Kitchener (1994) and others (Kitchener, Lynch, Fischer , & Wood, 1993) have found that the median stage score for college freshman is between 3 and 4, a finding that has implications for their ability to make effective arguments in the context of a freshman composition classroom. King and Kitchener contend that

> Basic differences in assumptions about what can be known and how knowing occurs differentiate authority-based thinkers from those who use reflective thinking...
>
> Epistemic assumptions constitute a fundamental difference between children's and adult's problem solving and that it is only in adulthood that individuals hold the

epistemic assumptions that allow for true reflective thinking. (p. 9)

The fact that individuals do not develop the necessary assumptions about knowledge and justification that allow reflective thinking until their adult years raises important questions about the developmental appropriateness of tasks that may demand high levels of reflective judgment—such as argumentation.

Argumentation

As most contemporary texts on argumentation theory assert, argument is a culturally-bounded concept, with different "rules" and "givens" in different contexts. As Beason (1995), observed, most freshman composition textbooks emphasizing persuasive writing eschew formal hypo-deductive logic in favor of a model that corresponds more closely with realistic contexts, a trend which emerges clearly in any review of the most popular persuasive writing texts (Lunsford et al., 2001; Ramage and Bean, 1999; Rottenberg, 1998). All arguments, from this modified classical view, have three major elements: writer, reader, and message. These points of the "rhetorical triangle" are fundamentally interconnected. A high-quality argument typically features a writer with a credible persona (or *ethos*) who uses *pathos* or audience-appeals successfully, while delivering a sound message with strong *logos,* or logical appeal.

Borrowing from philosopher Stephen Toulmin's (1958) description of argument as a system connecting claims, reasons, and warrants, the definition of "sound message" used in this study privileges the arguer's ability to construct solid propositions and back them with reliable evidence. As Fulkerson (1996) notes,

The Toulmin model says that every argument (whether traditionally inductive o

> or traditionally deductive)[1] involves a movement from some premises called data (or grounds) to the argumentative claim. The movement is justified by another, more general, premise that Toulmin designates as the warrant (p. 49).

Yet Toulmin's model of argumentative logic goes further, recognizing the fact that substantial arguments accept their own limits by qualifying their claims and providing conditions of rebuttal (49). In this way, the Toulmin model also acknowledges the importance of connecting to the audience's values and establishing the credibility of the writer, as does the classical model of the rhetorical triangle.

Successful written arguments require a number of important characteristics. According to Coirer, Andriessen, and Chanquoy (1999), the list of skills necessary for writing competent arguments includes idea generation, evaluation, and selection; the ability to use sound reasoning (including the ability to provide sound premises, generate connections between the premises and conclusion, and provide sufficient evidence); and the ability to produce acceptable reasons and identify assumptions relevant to the social context. Ultimately, "a good argument is an argument that is accepted or at least taken into account by the addressee" (p. 9-10). These requirements for successful arguments are stiff, but reflect common expectations for college writers, ideals that are often contradicted by the texts students produce.

This study advanced the hypothesis that reflective judgment has an impact on an individual's ability to construct credible arguments. By investigating participants' developmental levels of reflective judgment, and examining the textual and rhetoricalpatterns in their writing, this study addressed these possibilities. King and Kitchener's theory of

[1]It should be noted that the term "traditional" here refers to the Western concept of argument, particularly as it

reflective judgment was important to this study because it describes the domain of development that is most closely associated with argumentation. Because it refers to an individual's concept of knowledge *and* concept of justification, it may have considerable implications for an individual's ability to master the logical context of argument, and meet the kinds of requirements that Coirer, Andriessen, and Chanquoy (1999) discuss.

Assumptions and Rationale for Study

This study was motivated by a commitment to improve university-level writing programs. One of the major goals of the study involved generating a clearer picture of freshman students' compositional needs as they relate to argument, and, ultimately, finding ways to design and differentiate instruction to meet those needs. As a former instructor in a program that requires students to take on complex argumentative tasks, I undertook this study with the assumption that many (though certainly not all) college freshmen have difficulty performing these tasks, a premise backed by my own experiences, and by the findings of previous studies of undergraduates' writing (Barton, 1993; Hays, 1988; Hillocks, 1995; Moxley, 1993). Believing that the aim of education should be emancipatory, and that argumentation represents a critical literacy competency, I embarked upon the study with the assumption that college students should have the opportunity to learn this skill. Related to the conviction that students deserve better instruction than they often receive, is my firm belief that programs and institutions benefit from information about the effectiveness of what goes on within them, a fact that has obvious repercussions for students.

This study draws on a variety of critical frameworks, and spans different philosophical camps. Examining the ways in which we perceive knowledge and

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is described by Aristotle.

communicate that knowledge through texts is a necessarily complex process that requires us to draw on assumptions of various theoretical perspectives. This study utilized a number of assumptions within the postpositivist paradigm[2], including the belief that language is a social artifact, writers and their writing are socially constructed, and that written argumentation, like all literacy practices, is culturally bound. However, it also examined these assumptions in view of the possibility that some traits of human development are universal—or at least consistent across cohorts. The developmental model selected for study stemmed from the organismic paradigm in developmental psychology, which relies on the belief that development proceeds through stable universal stages, while also assuming experience plays a crucial role in development.[3] Thus, there was a certain positivistic dimension to the study, as well. In this sense, the study was characterized by a theoretical eclecticism. This eclecticism was reflected in the methodology, which used a psychometric instrument (the Reflective Judgment Interview), as well as documents gathered in a naturalistic context, participants' self-recorded reflections, and semi-structured qualitative interviews.

Purpose

This study relied on multiple methods to investigate the relationship between college freshmen's assumptions about knowledge and justification and the arguments they produced within a naturalistic classroom setting, focusing on a small selection of students in a first-year composition/argumentation course at a large land-grant university. The purpose of this study was to explore the connection between one dimension, or domain, of cognitive development (the development of reflective judgment) and written argumentation. More

[2] Within the field of composition, this would be referred to as the social constructionist paradigm. In the field of developmental psychology, it would be termed the contextualist paradigm.

specifically, this study represented a descriptive analysis of the argumentative writing of college freshmen across reflective judgment levels typical among college-age populations. The goal of this project was to offer a developmental perspective on the persuasive writing practices of college-age students that takes into account the complexities and nuances embedded in individual students' negotiation of complex writing tasks. Ultimately, the study was designed to help future researchers and instructors create more supportive and developmentally appropriate curricula to facilitate college students' acquisition of argumentative writing skills. In brief, the study was intended

1. To contribute to a deeper understanding of reflective judgment and its association with college freshmen's performance on tasks requiring the negotiation of ill-structured problems in writing.
2. To examine the contribution of contextual elements to individuals' use of reflective thinking in their writing.
3. To clarify the goals and challenges of argumentation instruction at the college level by elucidating the cognitive-developmental perspectives of students in these programs.

The first two goals of the study relied on the assumption that cognitive developmental level has something to do with the ways in which we perceive and interpret our world, and that context plays a role in development. As reflected in the third goal, the fundamental purpose of the study involved generating an empowering student-centered curriculum in college composition. Composition instructors sense that argumentation instruction, while an important subject of study for freshman writers, poses real challenges for students.

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[3] This paradigm is most closely associated with the work of developmentalists such as Piaget, William Perry,

Developmental and epistemological reasons for this phenomenon may exist. Therefore, it was important to investigate the possibility that there may be a mismatch between the kinds of epistemologies students bring to the persuasive writing context, and the kinds of epistomologies this context demands and encourages.

Guiding Questions

This study relied on three major guiding questions:

1. In what ways do college freshmen's written arguments reflect the assumptions about knowledge and justification described by their reflective judgment ratings?
2. What kinds of reflective judgment are encouraged in the persuasive writing classroom context through textbooks, assignments, and the instructor's feedback?
3. Building on the answers to the preceding questions, how can we (re)design curriculum and instructional practices to meet the critical literacy *and* cognitive developmental needs of freshmen writers?

The first of these questions involved whether college freshmen in the study used the same kinds of reflective judgment in their written arguments as they used when making judgments about other ill-structured problems. This question addressed how well students generalized their functional level of reflective judgment usage, as measured in the RJI, to a "real-world" situation that would appear to demand a strong capacity for reflective judgment.

In order to tease out the potential association between reflective judgment development and writing behaviors, the second guiding question investigated the kinds of

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Lawrence Kohlberg, Carol Gilligan, and Jane Loevinger.

reflective judgment privileged by the classroom context. This question addressed the ways in which the instructional context was—or wasn't—facilitating students' full use of their reflective capacities, as well as the degree to which the instructional context made developmentally-appropriate demands on incoming freshman.

The final guiding question built on the answers to the preceding questions. One of the desired outcomes of this study was more information about what we can do to help students use their full range of cognitive skills to negotiate ill-structured problems. While few would propose eliminating argumentation instruction at the college level, the study revealed new insights into ways that instructors and program administrators can create better experiences for students in the persuasive writing classroom.

Limitations

As a descriptive analysis of the relationship between students' uses of reflective judgment in their persuasive writing, this study did *not* investigate ways to "improve" or accelerate students' development of reflective judgment. As Vygotsky (1962) tells us, finding ways to support students' cognitive and personal development is an important goal of all student-centered instruction. However, pushing students to forge new developmental connections is a questionable goal, ethically speaking, and was outside the scope of this research, in any case. This project was conducted from the standpoint that instruction should be informed by a sensitivity to students' developmental orientation. However, the ultimate goal of this study was to suggest instructional practices that provide a better match between students' current levels of development and the critical literacy skills deemed important by the academic community.

Additionally, this study did not provide an exhaustive investigation into the context supporting participants' writing. While the methods used included interviews to solicit information about the participants' history and perceptions of themselves as writers, this information was intended to supplement or counterbalance inferences and conclusions about participants' use of reflective judgment. Many other studies have pursued the important goal of dissecting the numerous contextual factors involved in the writing process, but such a purpose was outside the scope of this study.

Significance of Study

This project's significance for theory has multiple layers. Chapter Two provides a more detailed discussion of the ways in which this study addresses the gaps in cognitive developmental literature on written argumentation. In brief, this study extended the body of applied research on students' epistemological frameworks; it is one of the relatively few studies to investigate the relationship between individuals' cognitive developmental levels, and their negotiation of meaning in a complex discipline-specific task. Because virtually no studies of reflective judgment's relationship to writing behaviors exist, King and Kitchener's model provided a new way of examining students' production of persuasive texts.[4] Thus, this study represents one of the very first investigations of the connection between reflective judgment and literacy practices, and the first study of reflective judgment and its potential impact on individuals' written argumentation.

[4] Kroll (1990) evaluated the reflective judgment and epistemological frameworks of college freshmen as expressed in their writings during a unit on the Vietnam War, but used neither Perry's nor King and Kitchener's metric to determine the relationship between "optimal" and "functional" levels of development. Additionally, Audrey Friedman (2000) argues that inquiry-based literature instruction can help promote reflective judgment, and offers a dilemma worksheet based on Steinbeck's *Of Mice and Men* as an example. However, these are the only studies, to date, that appear to unite this developmental domain and language arts instruction.

The educational significance of this study stems from its commitment to improving writing instruction at the college level. The study also has significance for practice. Despite the fact that a growing body of literature attests to the fact that individuals continue to grow and develop as adults (Arlin, 1993; Kegan, 1995; Kitchener & King, 1994; Loevinger, 1987), we tend to treat the "student body" as a monolithic entity—many institutions not only assume that there are no differences between incoming students, they have also understood students as changing little between their entry and exit from college. A developmental pattern in college students' persuasive practices may indicate that more attention needs to be given to the creation of developmentally-sensitive curricula and instructional strategies.

However, this study also may be of interest to English teachers at the secondary and middle school levels. For example, in its push for accountability and standardized testing, North Carolina has field-tested persuasive writing prompts at the tenth-grade level, and currently requires students to be ready to respond to a persuasive prompt at the seventh-grade level, as well. Instruction in written argumentation has been a core part of the standard course of study from grades 6-12 for several years (NC DPI, 1999). However, the competencies paradigm in which state assessments are grounded may neglect the developmental dimensions of student learning. The goal of this project was to create a study which offers a developmental perspective on the persuasive writing practices of college-age students, but this perspective may have ramifications for students at lower grade levels.

Summary/Overview

The demand for a clearer understanding of student needs as they pertain to persuasive writing instruction motivated this study. The following chapter provides the theoretical rationale for this study. As the discussion in Chapter II illustrates, our picture of students'

developmental frameworks and their relationship to student writing is at present blurry. While reflective judgment is only one of many factors that may have an impact on student argumentative writing, investigating its relationship to the kinds of argumentative strategies students use may help us in our quest to generate effective instructional designs. Chapter III describes the theoretical rationale and methodological procedures involved in the study of reflective judgment and argumentation discussed in the introduction. Chapter IV provides a thick description of the findings for each of the guiding questions. Chapter V summarizes the study's methods and findings, and provides recommendations for future research and practice.

CHAPTER II: REVIEW OF LITERATURE

Given the interdisciplinary and eclectic nature of the research agenda, the literature review for this study includes a discussion of the available information on students' written argumentation, especially the persuasive writing of high school and college students. The organismic paradigm in developmental psychology also represents another important point of discussion, and provides a context for the subsequent review of cognitive-developmental research in composition. Next, the Reflective Judgment Model will be explored as a promising avenue for research on students' writing. Finally, this review examines the criticisms leveled at cognitive-developmental research in composition, and discusses the ways in which this study addressed these criticisms.

Students' Persuasive Writing: What We Know

Characteristics of Secondary Students' Persuasive Writing

Although students' persuasive writing abilities have not been studied as extensively as their narrative, descriptive, and general analytical writing abilities, available studies conducted over the past two decades indicate that the overall quality of students' persuasive writing is relatively poor, compared to results for descriptive, narrative, and expository writing. Results from the National Assessment of Educational Progress (NAEP) consistently indicate that secondary students' persuasive writing skills are weak (Applebee et al, 1986, 1994; White & Vanneman, 2000). Because the NAEP provides the only nationally representative assessment of American students' writing achievement, these results have been of particular interest to researchers investigating the specific characteristics of secondary students' persuasive compositions. Overall, these studies identify several problematic features.

First, persuasive compositions tend to be shorter than other types of compositions (Crowhurst, 1986; Freeman & Pringle, 1984, 1985). This finding suggests that students have difficulty generating persuasive content and elaborating their ideas, an interpretation supported by research pertaining to students' difficulty with managing evidence and supporting their points of view (Crowhurst, 1988; McCann, 1989). Crammond's (1998) study of 101 students at grades six, eight, and ten found that students had difficulty locating the warrants underlying an argument, a problem that had implications for their ability to develop their premises. McCann's (1989) study of student argumentative writing at grades six, nine, and twelve found that twelfth grade students scored lower than both sixth and ninth-graders in stating propositions; also disturbing is the fact that McCann found "no significant difference among grades in the use of data. Students at each grade had difficulty citing evidence to support claims" (p. 68).

Researchers have also commented on students' difficulty managing the structure of argumentative writing (Freedman & Pringle, 1985; Hillocks, 1995). Durst, et al. (1990) found that high school juniors and seniors who had been instructed to use a five-paragraph theme structure when using arguments could produce relatively coherent persuasive essays; however, these students had difficulty finding an intuitive structure for their arguments. Students' difficulty with producing persuasive texts that are organized at the "macro" level seems to parallel another theme in the literature, the relative lack of coherence within persuasive compositions, compared to other types of student writing (Crowhurst, 1987; Gorman et al., 1988). Although "syntactic complexity, measured by T-unit and clause length, is greater in argument than in narrative or descriptive writing" (Crowhurst, 1990, p. 350), students tend to make more mechanical and usage errors when writing persuasively.

Finally, researchers have pointed out students' difficulty in responding to opposition. In contrasting the audience-awareness requirements of narrative and argument, Freedman and Pringle (1985) noted that "telling a story is a solo, whereas having an argument is necessarily a duet at least" (p. 78). A number of studies indicate that students have difficulty in constructing this "duet." Knudson's (1992) study of 200 students at grades four, six, ten, and twelve indicated that students at each grade level had relatively weak uses of data and warrants, and failed to state or respond to opposing views. Similarly, Crammond's (1998) study of students at grades six, eight, and ten found that students may prefer arguments for which the audience shares the writer's beliefs about the context, or underlying principles of the conflict. As a result, students may have difficulty responding to true controversies in which the audience does not share the same belief structure.

College Students' Persuasive Writing

Although much less abundant or systematic, studies of college students' persuasive writing practices reflect the findings of research on secondary students' written argumentation. Testifying to the need for instruction better suited to students' needs, a number of articles from the early to mid-1980s addressed the best way to teach the logical context of persuasive writing. Noting that college freshmen often struggle with the logical context of arguments, Fahnestock and Secor (1983) proposed an explicit sequence of assignments for teaching argument that has since been widely adopted in college textbooks on persuasive writing, and Fulkerson (1988) proposed using the Toulmin schema as a means of teaching the fundamentals of argument. To test Fahnestock and Secor's belief that college students need explicit instruction in the conventions of argument, as well as students' implicit knowledge of Toulmin criteria, Moxley (1993) developed an instrument that used the

Toulmin schema to measure basic, average, and advanced college writers' knowledge of argumentative discourse. Although he found that most advanced and average freshman English students could correctly rank sample argumentative passages, he also found that "many of the basic writing students, some of the freshmen, and a few of the advanced composition students had difficulty ranking and critiquing the sample passages" (1993, p. 10). Moxley's findings support the contention that college students still require explicit instruction in the basic conventions of argument, and that this need may cut across skill levels.

Available evidence about undergraduates' persuasive writing suggests that students experience difficulty in assembling written arguments into their college years. Kellogg (1991) found that, compared to narrative and descriptive writing, the persuasive writing of college students exhibited the least cohesion and fluency. Evidence suggests that post-secondary students also struggle with the "macro" aspects of writing arguments. Hillocks' examination of 400 arguments written by high school and college students found that "many students fail to provide grounds in support of claims even though possible grounds are available to them, explicit statement of warrants is extremely rare, and the consideration of counterarguments is virtually nonexistent" (1995, p. 163). Echoing this finding, Anderson et al.'s (2001) recent study of 30 undergraduate psychology students indicated that participants could make appropriate judgments about some types of evidence, but tended to support their arguments through generalizations, even when they had been exposed to various types of evidence on their topics.

Although some studies (Black, 1989; Hays, Brandt & Chantry, 1988) indicated that the way in which audiences were described to students (e.g., the degree of specificity or level

of hostility) can have an impact on students' ability to write persuasively, most echo Hillocks' belief that students continue to have difficulty with responding to audiences into their college years (Hays et al, 1988). For example, Cooper et al. (1984) reported that only 16% of college freshmen participating in their study took into account an opposing viewpoint when writing arguments. Interestingly, in their study of 87 students in an intermediate composition course, Redd-Boyd and Slater (1989) found that "even when assigned a real audience, some experimental subjects imagined a different one" (p. 99), a problem that interfered with their ability to imagine and respond to potential counterarguments. Generally, studies of college students' ability to adapt to audiences when writing persuasively reflect the findings of studies on secondary students' persuasive discourse.

Other studies have investigated the attitudinal patterns that appear in college students' persuasive discourse. In his study of undergraduates' researched arguments, Slattery (1991) found that particular "postures" were associated with particular writing behaviors. More specifically, Slattery found that students who maintained a dualistic or dogmatic attitude toward their subject tended to use only those sources that supported their arguments—and even misread and/or distorted information found in their sources to support their point of view, while students who approached their subjects relativistically tended to use sources indiscriminately. Focusing specifically on the differences between expert and student writers' use of metadiscourse markers in their persuasive writing, Barton (1993) found that student writers seem "to assume unquestioningly that knowledge arises from shared social agreement, with the use of generalizations as the primary technique for articulating this agreed-upon knowledge" (p. 765), an epistemological stance that may prove problematic for students attempting to address controversial issues or negotiate the dynamic created by a

skeptical audience when writing persuasive compositions. Both Barton and Slattery's findings suggest that some college students, like their high school counterparts, have trouble producing the kinds of persuasive discourse valued by the academic community.

These findings raise questions about why students—even college-age students—seem to find written arguments harder to negotiate than other kinds of writing. As Ruth Knudson (1992) argued, "It is not clear to what extent students' difficulty with persuasive writing tasks results from a lack of logical thinking skills and to what extent it results from problems with instruction" (p. 6). Echoing Thomas McCann (1989), Dinitz and Kiedaisch (1990) noted that there are three types of context-based answers to this question, the most obvious answer having to do with the fact that students tend to have little exposure to explicit rhetorical models prior to their entry into freshman English, a problem recognized by nearly all researchers, even those whose explanations for students' difficulties with argumentation point to non-contextual factors (p. 211). Another context-based explanation pertains to the potential artificiality of the rhetorical situation. As Dinitz and Kiedaisch observed, "Most of the writing students do in high school is to the teacher as audience" (p. 211), and students' perceptions of their teachers' expectations may distort their ability to make claims of their own. Dinitz and Kiedaisch identified students' difficulty with adapting to the academic discourse community as a third context-based explanation; civic argument assigned within an academic context may require "students to write a paper which ignores the conventions of the academic community in a course which exists within this community" (p. 211), which could be confusing for beginning writers. Any or all of these contextual factors may depress students' ability to write effective argumentative prose.

However, one of the reasons why incoming freshmen have had so little experience with persuasive texts (and thus may experience greater difficulty with adapting to their conventions) is that written persuasion has been considered too difficult for younger students. As Crowhurst explained, writing arguments "presents both cognitive difficulties and difficulties associated with lack of experience and lack of knowledge" (1990, p. 355). Context (e.g., lack of experience with the task and/or discourse community) clearly plays a role in students' difficulty with writing arguments, and most students almost certainly need more direct instruction in persuasive writing (Knudson, 1992, 1998). However, if students find the work too cognitively demanding, as Crowhurst suggests, then students' experiences with rhetorical models have to be deferred—creating a dangerous cycle in which some students may never encounter instruction in this critical literacy skill.

It is impossible to dismiss the importance of context in the production of *any* written text. Yet the cognitive demands that Crowhurst references provide grounds for a less context-based explanation, one that draws upon work outside the discipline of composition studies for answers. Findings in other fields—particularly in developmental psychology—have raised important possibilities about the sources of students' difficulties with argumentation. To examine these possibilities, it is necessary to explore cognitivist work on students' persuasive writing abilities, and investigate the ways in which the cross-pollination of composition and psychology has generated a number of intriguing hypotheses about the relationship between students' development and their writing.

The Developmental Paradigm

Cognitivist work in composition can be divided into roughly two major categories, process model research, and developmental research. In the heyday of cognitivism during

the mid-1970s through the mid-1980s, both claimed to draw upon contemporary research in psychology, particularly developmental psychology, and indeed there is some degree of overlap between the two, as we can see in the work of researchers who have investigated the development of individuals' processing strategies (Emig, 1971; Flower & Hayes, 1979). However, these two major strains of cognitivist work have connections to two different paradigms in developmental psychology, and are associated with two different sets of philosophical assumptions. Understanding developmental research on students' writing and, more specifically, their written argumentation, requires some clarification of these assumptions.

At the most basic level, theories of human development attempt to address how human beings change over time. Yet the field of developmental psychology, like other disciplines, is characterized by a diversity of paradigms and perspectives, each of which change the texture of this basic question, and pursue it in different philosophical and methodological directions. The mechanistic tradition in developmental psychology (Pepper, 1961), often associated with figures such as B.F. Skinner and J.B. Watson, is closely aligned with Enlightenment ideals of positivism and empiricism as exemplified in the "hard" sciences. As Goldhaber (2000) observed, according to this paradigm, all behavior can be explained as resulting from a set of causal variables; within the mechanistic tradition, we are the "sum of our parts" (p.21). Although it represents a distinct rejection of radical behaviorism (perhaps the most influential mechanistic theory of this century), "within mechanism, the information processing perspective has become the mainstream approach to the study of cognitive development, at least among American psychologists" (Goldhaber, 2000, p. 108). Focused on describing a "map," or set of operational variables that

characterize the processes and subprocesses governing how we store and retrieve knowledge, information processing theory became the major theoretical framework for much of the body of work by influential cognitivists like Flower and Hayes, whose research relied on mechanistic assumptions about writing behavior as a product of material and efficient causes.

However, most research into the connection between development and writing seems to rely on an "organismic" world view (Pepper, 1961), which is qualitatively different from the mechanistic tradition governing most process–model research. If the mechanist paradigm is affiliated with Enlightenment science, the organismic paradigm has ties to the rationalist world view. As Case (1992) argued, rationalist theories locate the source of human knowledge in the activity of human reason; developmentalists who share this philosophy presume that development leads "to a restructuring of the rational framework by means of which facts are gathered and interpreted" (p. 162). Organismic, or rationalist, theories of development are, thus, substantially different from mechanistic, reductive, causal-factor models. As Goldhaber (2000) explained,

> The root metaphor for the mechanistic perspective is the machine. The implication is one of prediction and stability. Mechanists have a strong belief in the universality of laws governing behavior and the value of reductionism as a strategy for understanding natural phenomena. The root metaphor for the organismic perspective is the living organism. The implication is one of ordered change over time. Organicists, too, have a belief in universal patterns, but ones that are meaningful only at a holistic level of analysis. (p. 47)

Unlike mechanistic ways of understanding development, the organismic paradigm emphasizes change as a qualitative process in which individuals are not passive recipients, but rather active constructors of their realities, attributing meaning to their experiences, and reorganizing their understanding of the world in a sequential, progressively more complex way. According to Goldhaber (2000), within this worldview, development proceeds through a series of syntheses, each leading to a more integrated understanding of the world (p. 39).

The most famous and influential organicist is Piaget. His own work has had a fairly limited impact on the research into writing development in late adolescence/adulthood, probably because his view of development suggested that we stop developing after the acquisition of formal operations, which typically emerges in the adolescent years. Nevertheless, the basic tenets of his stage theory have had an enormous impact on the field of development psychology, and consequently, on the work of compositionalists who draw upon research emerging from this field. In brief, the assumptions of Piagetian-oriented stage theory models include:

1. The belief that development is best understood as a qualitative process involving the progressive, active construction and reconstruction of levels of conceptual understanding (Goldhaber, 2000, p. 46).
2. The belief that development is a universal, unidirectional process typical of all humans (Goldhaber, 2000, p. 46).
3. The belief that individuals actively attribute meaning to their experiences (Goldhaber, 2000, p. 46).
4. The belief that development proceeds through a series of syntheses, each leading to a greater potential for effective adaptation to life experiences (Goldhaber, 2000, p. 46).

5. The belief that stage development is cumulative; transitions between stages may involve periods of "non-optimal" functioning, as individuals assimilate new domain information into developing cognitive structures (Case, 1992, p. 157-166).

Although the second assumption implies that there is a hierarchical element in development, the fourth assumption suggests that an individual's position on any developmental continuum is only important in the sense that it has an impact on her ability to adapt to her environment. In other words, from the Piagetian point of view, the only time a developmental "lag" presents a problem is when we are confronted with a task that is significantly more complex than our cognitive schemas for handling it, as Goldhaber observed (2000, p. 45). Most major theories of adult development in various domains (e.g., Perry's work in epistemological development, Kohlberg's work in moral development, King and Kitchener's work on reflective judgment) share these basic organismic stage theory assumptions, and the impact of these assumptions has been significant for compositionalists interested in the patterns and themes that emerge in individuals' writing over time.

Lev Vygotsky's work has also contributed important concepts to the study of development's role in language use by expanding its constructivist dimension. In particular, his idea of the "zone of proximal development" emerged as a means of explaining the role of contextual factors in development. As Goldhaber (2000) explained, Piaget assumed that human development was produced by the coalescence of organism and environment; however, in his view, all sensory-intact humans experience the world in the same ways (p. 188). In other words, he believed that development is a product of the individual's interaction with the *physical* world, and that factors like home environment and education have little effect on how we grow and mature. Vygotsky's work allowed developmentalists

to renegotiate Piaget's view of the environment by differentiating between "elementary" or spontaneous development, and "scientific," or instructionally-assisted development. As he contended in *Thought and Language* (1962),

> It stands to reason that in the higher processes emerging during the cultural development of the child, formal [instruction] must play a role that it does not play in the more elementary processes…For each subject of instruction there is a period when its influence is most fruitful because the child is most receptive to it…It has been called the *sensitive period* by Montessori and other educators…But the existence of an optimum time for instruction in a given subject cannot be explained in purely biological terms, at least not for such complex processes as written speech. (p. 97, 104)

For Vygotsky, and for neo-Piagetians like King and Kitchener, only when we consistently meet with the appropriate environmental stimuli, and only when we are in the right "zone" of readiness, can we expect to see development, especially when dealing with higher-order cognitive abilities, like writing.

The influence of Piagetian stage theory and Vygotsky's work on development have proven to be powerful forces in the field of composition. Compositionalists who draw upon organismic assumptions do so in one of two major ways: by proposing stage models of writing development,[5] and/or by investigating the impact of domain-specific development (e.g. epistemology) on competence in writing. Research into the production of written arguments tends to share the latter focus. The following discussion examines some significant examples of developmental research in composition and, more specifically,

written argumentation, focusing on the ways in which compositionalists have applied organismic stage theory to the study of writing development.

Applications of Developmental Models to Composition

One of the questions driving developmental research in composition relates to the issue of domain interdependency; that is, whether development in one domain is a necessary condition for development in another (Schommer & Walker, 1995). Cognitive developmental research on student writing tends to operate on the assumption that there is a dependent relationship between the cognitive developmental level of individuals and the way they create and interact with texts. One of the most influential voices in developmental research in composition, James Britton connected writing to cognitive development in a way that resonates with the rationalist perspective, arguing that we generate "representations" of our world, and then interpret our experiences through these representations, or "world pictures" (1982, p. 101). Influenced by Piagetian stage theory, Britton (1975) argued that students are only beginning to formulate "world pictures" that are complex enough to allow them to deal with persuasive and speculative discourse by the time they reach the college years. As Piagetian-based stage models suggest, our relationship with the world moves from egocentric to outward-centered, from simple to complex. According to Britton, for the beginning writer, "this business of meeting the needs of a reader is one of the real difficulties of coping with writing," often because the ability to negotiate complex abstractions (like an imagined reader) has not spread through the necessary skill domains (Britton, 1982, p. 97). Britton applied Piaget's notion of decentering to students' ability to negotiate abstract issues and handle audiences effectively, and proposed a stage model of writing development in

which "expressive writing should be regarded as a matrix from which the other…categories would develop" (p. 124), including persuasive discourse, which Britton considered a type of "transactional," or higher-order writing function. Although Britton's work did not explore the development of specifically argumentative writing abilities in depth, his notion that self-oriented writing develops first, while more abstract types of writing develop later, represents an important position taken by many of his fellow developmentalists.

Following Britton's lead, a number of researchers have stressed the relationship between an individual's developmental level and her perception of audience. Like Britton, Kroll (1978) investigated the application of Piaget's stage theory, but focused more heavily on the relationship between individuals' representations of the world and their implication for the textual treatment of the imagined reader. Kroll's work, conducted primarily with young children, produced evidence that "decentration in writing tended to lag behind decentration in speaking," a finding that takes on significance because, as we might expect, "writers who can decenter their perspective, taking the view of a hypothetical readership, are more likely to display audience awareness than writers who are embedded in their personal view of reality" (1978, p. 279). Kroll's contribution was significant—not because his findings were surprising or dramatic—but because his conclusions have important implications for the ways in which we construct arguments. According to Kroll, how we negotiate the abstractions involved in taking on multiple points of view and locating weaknesses in our own claims would seem to have strong ties to our ability to imagine the Other. Due in part to Britton and Kroll's work on the subject, the impact of development on writers' treatment of audience became a major focal point of research in the field, with a number of other

researchers echoing their positions and interests (Bradford, 1983; Hays et al., 1988; Knudson, 1992; Kurfiss, 1988, 1990; Lunsford, 1979).

Developmental Models and College Students' Persuasive Writing

A number of studies of college students' writing have suggested that the ability to fulfill the demands of written argumentation is, in part, a developmental function of students' emergent epistemologies (Hays, Brandt, & Chantry, 1988; Walker, 1986). Miller's (1980) investigation of the relationship between Kohlberg's stages of moral development and college students' rhetorical maturity resonates with the results of Kroll's studies with younger children. The results of a study of 30 classes of open-admissions freshman writers led Miller to believe that persuasive writing was more developmentally challenging to these students than were other genres. According to Miller, students who scored below 15 on the English ACT *and* students who scored 15-23 experienced comparable difficulties in assembling their arguments, leading Miller to claim that experience with academic writing did not seem to be the determining factor in students' performance. Miller assigned students one of the problems on Kohlberg's Defining Issues Test, and found that their responses reflected moral reasoning characteristic of either stage three or stage four. Finding that students' moral development scores on the Kohlberg scale predicted audience-adaptability patterns in their persuasive writing, Miller concluded that

> the movement from ego-centric, to explanatory, to persuasive discourse is indeed a movement from the writer's assumption of union with an audience to the writer's recognition of another as an audience, and finally to the writer's analysis of a distant, unfamiliar, universalized series of values as an audience. (p. 124)

For Miller, the qualitative differences in how her students imagined and reacted to the limits of their own claims reflected the developmental progression proposed by Piagetian developmentalists (in this case, Laurence Kohlberg, specifically). Additionally, Miller observed that "given an unprecedented level of difficulty to deal with in the form of a newly complex rhetorical situation, a writer's ability to transcend and control rhetorical strategies disintegrates" (p. 124). This statement reflects the developmental assumption that individuals may function well below their "optimal" levels, if domain-knowledge or supportive conditions are limited, a finding that resonates with Vygotsky's predictions about the context or "zones" of development.

Although it used Perry's schema of epistemological development instead of Kohlberg's theory of moral development to explain students' difficulty with creating persuasive texts, Hays' (1988) study of college students' written arguments corresponded with Miller's findings. Hays' study involved 136 randomly selected students from three grade levels (high school senior, college freshman/sophomore, and junior/senior) and three academic areas (the liberal arts, business, and engineering/computer sciences). All students wrote two essays in which they were asked to present and support their positions on recently enacted drunk driving laws; no time limit was placed on the writing, although all writers turned in their essays within two weeks of being assigned the prompt. The students' papers were rated "blind" by three reviewers using a criteria-referenced rating instrument that assigned scores for four areas: "Quantity and quality of ideas, organization and focus, clarity and effectiveness for readers, and correctness and felicity of syntax and usage" (p. 44). The researchers then randomly chose a subsample of papers from 52 students, and sent copies to a team of developmental psychologists trained to use the Perry Scheme rubric. By cross-

referencing the papers' Perry scheme ratings with their holistic quality ratings, Hays was able to predict patterns in students' persuasive writing.

Responding to a three-year colloquy on the topic in *The Journal of Basic Writing*, Hays argued that results of her large-scale studies revealed that "some student-writing problems result from more than just lack of familiarity with the academic discourse community" (1988, p. 43). In fact, she found that students whose writing was rated as dualistic "interpreted the paper topic differently than did early multiplists, and they, in turn, understood it differently than did late multiplists" (p. 49). Ultimately, Hays argued, the average student's Perry schema position is a better predictor of her ability to conceptualize hostile audiences and generate abstract chains of reasoning than her level of education, a finding that caused Hays to reject a purely context-based explanation of persuasive writing performance.

In this sense, Hays' work dovetailed with Perry's predictions about the existence of universal patterns of epistemological development; however, she also stressed the importance of contextualizing her findings, and pointed to the role of experience/environment in development:

> I am not arguing that the Perry Scheme reflects universal socio-cognitive development. Rather, it demonstrates that a particular context--the American college or university—requires students to make sense out of multiple and often conflicting views about reality. In coming to terms with these varying perspectives, students construct new and more complex socio-cognitive structures. These structures in turn influence ways in which students respond to the college environment, and so on. (1988, p. 51)

From Hays' perspective, the tension between internal 'world pictures' and external challenges to those pictures produces development. For Hays, as for other organicists, development is a bi-directional process, and experience is an essential aspect of development. Just as our schemas for dealing with complex problems guide how we deal with these problems, but eventually change to accommodate the demands of higher-order cognition, the cognitive structures we use to create argumentative texts are changed by the experience of writing these texts.

Building on Hays' research involving Perry's epistemological schema, Dinitz and Kiedaisch's (1990) study of eighteen-year-old freshman writers suggests that students who are working through Relativism may have difficulty meeting the specific demands of persuasive writing. The researchers assigned a class of freshman writers the task of persuading "other members of your workshop group to change their minds and/or behavior on any topic of your choice" (p. 209-210). Students were led through various audience "profiling" activities, and were required to exchange drafts and rate them on a scale of 1-5 for their persuasive qualities. The researchers found, however, that students had difficulty taking part in the activity;

> many first-year students seemed unable or unwilling to make writing choices based on what would influence their audience...Other students didn't want to 'force' their ideas on anyone; they felt more comfortable presenting both sides of the issue and letting their classmates make up their own minds. Some students seemed uninterested in finding out what their peers thought about the topic [and] seemed to make writing choices based on the subject matter rather than the audience. (p. 210)

Given these preliminary findings, the researchers performed close readings of students' papers, focusing on their epistemological patterns.

In their view, the average college freshman's difficulty with argument may stem from the cognitive dissonance associated with the progression to "committed relativism," the stage of epistemological development in which individuals are able to recognize multiple points of view, but can identify one as better than another. According to Dinitz and Kiesdaish, the problems college students experience in generating compelling persuasive arguments may be a function of their difficulty in making a commitment to a particular position; from the student's view, the assignment "might offer practice in using authorities to support an argument, but one conclusion might seem just as good as another. If everyone has a right to her opinion and no opinion is better than another, why try to persuade at all?" (1990, p. 214). However, like Hays, Dinitz and Kiesdaish assumed that the instructional context can have an important impact on students' ability to produce these texts, and encouraged teachers to create authentic contexts for students persuasive writing, and reflect on their own developmental processes to find ways to support their students' developmental transitions. Thus, Dinitz and Kiedaisch, like other developmentalists in the organismic tradition, proposed a strong link between students' writing and their world views, and posited that developments (in which the instructional context plays a part) in their world views may lead to reciprocal changes in their writing.

The Reflective Judgment Model

As Joanne Kurfiss (1988) contended, students' difficulty with writing arguments "can be better understood by considering the assumptions about knowledge, truth, authority, and inquiry implicit in the process" (p. 51). King and Kitchener's Reflective Judgment Model

(1994) represents a promising tool for investigating those assumptions. To examine how the development of reflective judgment, in particular, may have an impact on the ways in which individuals confront issues involved in argumentation, it is necessary to understand the basic assumptions of this developmental stage model.

Assumptions of the Reflective Judgment Model

Like other developmental models within the organismic paradigm, King and Kitchener's model of reflective judgment assumes that humans "actively interpret and attempt to make sense of what they experience" (1994, p. 226). In contrast to behavioral, or mechanistic models of development, organismic models posit that individuals are active participants in their meaning-making processes, filtering and encoding the information they process. As Case (2000) explained, "Organicists don't deny the existence of a real world independent of our awareness of it. Rather, they suggest that our knowledge of the physical and social worlds is always a unique representation or construction of that real world" (p. 38). The motivation for this active process is internal, rooted in the individual—rather than externally driven, as mechanistic theories of development might suggest.

Additionally, the Reflective Judgment Model assumes that our "ways of making meaning develop over time" (King & Kitchener, 1994, p. 227). The basic concept of development involves a fundamental relationship between change and time, and is predicated on the belief that our ways of interpreting and processing our world are not static. This change tends to be gradual, although individuals may experience rapid increases in the maturity of their thinking if exposed to life-altering events. Thus, development is not a function of intelligence, but a function of experience. For King and Kitchener, the

development of reflective thinking is also a directional process that moves through a set of qualitatively different and increasingly complex stages.

As a model of epistemic development, the Reflective Judgment Model also posits that "how individuals interpret events is affected by their epistemic assumptions" (1994, p. 226). King and Kitchener argue that the ways in which individuals negotiate ill-structured problems are characterized by a stable "internal logic", a rubric that is based upon their assumptions about knowledge. This internal logic is a key aspect of individuals' meaning-making, and develops over time.

Similarly, this model assumes that "interactions with the environment strongly affect an individual's development," and that "Development in reflective thinking occurs within the context of the individual's background, previous educational experiences, and current life situation" (1994, p. 228). These assumptions draw heavily from Dewey's (1933, 1938) constructivist philosophy, and from Vygotsky's (1962) concept of the zone of proximal development, both of which maintain that we learn best when our environment offers a balance of demanding and supportive conditions, and that the *interaction* between individuals and their environments guides those individuals' developmental trajectories. Development in reflective thinking occurs within the context of an individual's background (including previous educational experiences), and current life situation. While cognitive development is an "internal" process, it is triggered by outside factors. In other words, our thinking is the sum of our cognitive processes, but those processes are the holistic product of our experiences and environmental influences.

The model is also predicated on the belief that "development is stimulated when an individual's experiences do not match expectations" (1994, p. 228). As in other Piagetian-

oriented stage models, the mechanism for developmental change is the individual's need for equlilibrium, and growth occurs when the individual is faced with new challenges, and must find a way to reestablish this equilibrium (Piaget, 1985). Thus, we reassess ourselves and our thinking when pushed to the limits of our abilities. When we encounter unexpected circumstances and environments, we evaluate our means for dealing with these unanticipated events, and may experience the opportunity to develop new ways of thinking and understanding ourselves and our environments.

Additionally, the model's creators argue that "individuals use a range of developmental stages within each domain of development" (1994, p. 227). There are three major developmental domains, physical, cognitive, and affective/social. Each of these overarching areas in which individuals experience change have numerous facets (e.g. , moral development and epistemological development), which are also termed domains of development. King and Kitchener contend that individuals use a range or "wave" of developmental stages within these domains, that people use different repertoires of skills when dealing with issues about which they are knowledgeable, and with unfamiliar problems (1994, p. 227-228). As Fischer (1978) explained, there can be a difference between optimal and functional levels of development, depending on the supportiveness of the conditions in which we operate. Thus, we cannot claim that individuals are *at* a given stage of development; rather, we claim that people seem to have *access to* particular stages, and may choose to use different stages, based on the kinds of contexts they encounter.

Research on the Reflective Judgment Model

Because the Reflective Judgment Model posits a developmental progression in an individual's thinking over time, longitudinal studies using this model have been of particular

importance. The major longitudinal study of reflective judgment development was conducted over the span of ten years, with assessments occurring in 1977, 1979, 1983, and 1987 (Kitchener & King, 1990). The original sample included three groups organized by age and educational level, twenty 16-year old high school juniors, forty 21-year-old college juniors, and twenty third-year doctoral students (mean age=28). The groups were matched on the basis of gender and scholastic aptitude. Participation in the retests was fairly high—74%, 69%, and 66%, respectively (King & Kitchener, 1994, p. 128).

The ten-year study provided confirmation for many of the model's claims. Importantly, "a pervasive pattern of upward change was observed"; in fact, the RJI scores of virtually all participants (92%) increased between the original assessment in 1977 and the final assessment in 1987. Further, between each assessment interval, scores for two-third of the participants increased (King & Kitchener, 2002, p. 45). The study indicated that these changes generally followed the sequence of stages described in the model, and that individuals tended to use reasoning characteristic of "adjacent" stages when negotiating ill-structured problems; the researchers found few instances of stage skipping or regression (King & Kitchener, 2002, p. 45).

Cross-sectional studies of the RJI scores of high school and college students have consistently found that students at different ages and levels of education have qualitatively different assumptions about knowledge and justification. In reviewing cross-sectional studies on 1,500 students ranging in age from their middle teens to middle adulthood, King and Kitchener claim that the average RJI score for high school students is 3.2, indicating that these students "consistently evidenced pre-reflective thinking, such as believing knowledge was certain, making decisions about the problems presented based on what they 'want to

believe' or 'what felt right'" (King & Kitchener, 2002, p. 46). For college students, the mean RJI score increased from 3.6 to 4.0 between the freshman and senior years. While this change is small, in absolute terms, King and Kitchener claim that "the shift to Stage 4 reasoning is noteworthy because it signifies…the acknowledgement that uncertainty is a natural part of the knowing process, and that evidence should play an important role in decision making" (2002, p. 46). At the same time, however, the authors maintain that "Stage 4 reasoning does not reflect the sophistication of reasoning that is commonly expected of college students" (2002, p. 46), an issue that may be problematic when students are graded on their ability to negotiate ill-structured dilemmas within the academic context. Because individuals using Stage 4 reasoning to work through conflicts have a limited ability to evaluate arguments and evidence or understand the difference between interpretation and bias, these students may be at an especial disadvantage when writing persuasively.

Investigations into the factors most closely associated with reflective judgment stage have found that age and educational level are the most consistent predictors. Schoff (1979) compared college seniors with two groups of students (both comprised of adults) that were entering college for the first time. Schoff's analyses indicated that the college seniors scored significantly higher than freshmen who were the same age or older than the seniors. Subsequent cross-sectional studies of college students (Lawson, 1980; Pirtilla-Backman & Kajanne, 2001; Strange & King, 1981; Glatfelter, 1982; Schmidt, 1985) have investigated the effect of combinations of factors, especially age and educational level, on RJ scores, and have generally concurred with Schoff's original findings.

The Reflective Judgment Model and Writing

Longitudinal and cross-sectional research on this model is abundant; however "application" research on this model is rarer, especially with respect to literacy studies. Still, a few researchers have proposed connections between the domain of reflective judgment and patterns in argumentative writing. In "Developing Reflective Thinking and Writing," (1990), Davidson, King and Kitchener theorized about this stage model's implications for persuasive writing ability. These authors contended that persuasive writing

involves becoming familiar with the positions taken and arguments used to support these positions, weighing and interpreting the evidence for each position, deciding which position to endorse, choosing to emphasize some pieces of evidence while deemphasizing others, refuting contradictory evidence or interpretations, and so on.…[,] a task which is very difficult for individuals using reasoning characteristic of the early reflective judgment stages. (p. 280)

The ability to negotiate ill-structured problems is connected, inevitably, to the kinds of experiences students have had with such problems. The ability to write persuasively will always be context and experience-dependent, as critical theorists would suggest; naturally, we would expect people who write arguments frequently to demonstrate greater facility with this skill. Nevertheless, an individual's use of "pre" or "quasi" reflective judgment may have a significant effect on the quality of arguments she creates. Thus, some of the demands of persuasive writing may pose a cognitive mis-match that even students with considerable writing experience may find difficult to accommodate.

Echoing this position, Moshman and Franks (1989) offered some intriguing speculations about what one might expect to see in the writing of students with access to different levels of the reflective judgment stage model, predictions displayed in Table 2.1.

Table 2.1

Moshman and Franks' (1989) Proposed Stages of "Reflective Writing"

Level of Reflective Judgment	Concept of Writing
Stage 1	Communication is direct. What I write is what you read. We both know how things are. No need is seen to take the reader's point of view, to define terms, to express ideas clearly, or to justify assertions.
Stage 2	A good paper identifies the proper authority on the topic and presents his or her views. Legitimate experts cannot differ. No need is seen to seek different sources and/or to evaluate sources critically.
Stage 3	The more sources you have the better. The more evidence you can present, the closer you are to the truth.
Stage 4	My writing is my personal statement. I don't judge your work, and you have no right to evaluate my ideas or my style of expressing them.
Stage 5	There is value in arguing a point of view or telling a story from more than one perspective. Different rhetorical strategies are appropriate for different writing tasks.
Stage 6	Good writing involves integration and rational evaluation of diverse sources. The inevitability of subjectivity does not place the writer beyond legitimate criticism.
Stage 7	Quality of distinct types of writing (e.g. poetry, essays, scientific reports) can be rationally evaluated and improved through the use of defensible criteria and through feedback from diverse sources.

(Excerpted and adapted from Moshman and Franks, 1989, p. 20-21.)

To date, no work has been done with Moshman and Franks' (1990) proposed framework, and only one study involving reflective judgment and students' writing has been reported. [6] This study (Kroll, 1990) evaluated the reflective judgment and epistemological frameworks of college freshmen as expressed in their writings during a unit on the Vietnam War, but used neither Perry's nor King and Kitchener's metric to determine the relationship between "optimal" and "functional" levels of development.

One researcher (Henderson, 1994) proposed administering cognitive measures to college freshmen to see what model of cognitive development--Perry's epistemological schema, Basseches' model of dialectical thinking, or the Reflective Judgment Model--represents the best predictor of competence in argumentation. However, the results of this proposed study are unavailable, as yet; no other information exists on the applied uses of the Reflective Judgment Model in composition studies. Thus, this study attempts to address the scarcity of information on this topic and examine its relevance for teachers of writing—and particularly for teachers of persuasive writing.

Criticisms of Cognitive Developmental Studies

Before discussing the ways in which this study contributes to the body of research on cognitive development and composition via its use of the Reflective Judgment Model, it is important to note that cognitive developmental work in composition has met with challenges, particularly in the past two decades. Despite the fact that most organismic research in composition attempted to account for the role of experience in writing, and despite the fact that it encouraged teachers to dismiss negative stereotypes of students as simply naïve or,

[6] I am aware of only one other study that links the framework proposed in the Reflective Judgment Model to literacy issues. Audrey Friedman (2000) argued that literature represents a vehicle for encouraging reflective

worse—"lazy"—this research became the target of significant criticism. This critique, fueled by the growth of social constructivism and a concomitant concern about the empirical methods of cognitivist research, focused on several related issues. In particular, the movement's emphasis on universal developmental sequences, and its tendency to sell itself as the solution for "cognitively deficient remedial writers" were identified as major ethical problems (Bizzell, 1984; Rose, 1988). Additionally, critics questioned the movement for its seeming inapplicability; researchers who focused exclusively on the maturationist aspects of developmental theory and ignored its constructivist dimensions emphasized the "impossibility" of teaching writing at all, drawing criticism from the field as a whole.

Pointing to the fact that William Perry used an all-male, all-white sample of Harvard college students in developing his framework for epistemological development, Patricia Bizzell (1984) was among those who questioned the Piagetian-type stage model's claim to universality. Others in the field echoed her skepticism, and expressed concerns about the ways in which the claims of developmentalists could be politicized, to the detriment of students. As Mike Rose (1988) maintained, some danger is involved in using cognitive-developmental theories to explain differences in students' performances, because "social and political hierarchies end up encoded in sweeping cognitive dichotomies" (p. 324).

Rose's concerns about applying theoretical universal sequences to real (and often at-risk) individuals were well-warranted. Although many developmentalists turned their attention to "regular" students (e.g., Hays, 1988), developmental work in composition often targeted remedial writers, a focus that emerged early on in the movement as researchers turned to developmental sequences to explain students' difficulties with certain types of

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thinking about ill-structured problems; her study focused on the ways in which a dilemma worksheet based on

writing tasks. Critics of this focus found ample ammunition in the attitudes implicit in the work of researchers like Bradford (1983), whose description of the "embarrassing egocentrism" of remedial writers, who "produce embarrassingly personal pieces impossible to grade" (p. 21) embodied a clear and troubling subject/object dichotomy. By positing a directional view of development, Piagetian stage models lent themselves to highly politicized and potentially unethical and/or offensive usages; by applying these models to remedial writers, developmental researchers implied that some students are "more equal," cognitively speaking, than others.

A related problem for developmental research in composition pertained to the way in which researchers and practitioners understood its application to pedagogy. Despite the fact that developmental compositionalists like Andrea Lunsford often cited Vygotsky's contention that "the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the *ripe* as at the *ripening* functions" (Vygotsky in Lunsford, 1979, p. 40, [emphasis added]), their work was often misconstrued as advocating a rigid sequence of assignments tailored to "fit" students' developmental levels. Bizzell, in particular, spoke of her fear of "using Perry's scheme as a blueprint for writing curricula" (1984, p. 452), given the possibility that teachers may misidentify students' epistemological positions, or create assignments that match, but do not challenge these positions. This fear was fueled by inconsistencies in the positions staked out by early work in the field, some of which adopted a mechanistic, as opposed to a

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Steinbeck's *Of Mice and Men* promoted reflective inquiry.

constructivist or organismic position.[7] This kind of pessimistic assessment of student potential for growth and change undermined the movement's ethical dimension and applicability, and contributed to the backlash against cognitivist work in composition.

However, developmental research in composition and, by extension, developmental research on persuasive writing practices, still offers a number of intriguing possibilities for continued investigation. Precisely because work carried out in this field has often failed to address issues involving ethics and individual variability to the satisfaction of the research community, research using a more qualitative approach may be key in establishing the field's commitment to *all* students' learning and development. Though some developmental research in composition may have, as Karen Schriver suggested, "encouraged researchers to pay more attention to 'sites of failure' than to 'possibilities for improvement'" (1992, p. 194), this attitude is not a necessary or inherent property of a developmental orientation. Rather, developmental research's true focus extends to the ways in which we structure and operate within our contexts; it comprises

> how we come to construct knowledge, that is, how we attach meaning to the objects, people, and events that define our individual realities. It is a process fueled by a need common to all organic forms at all levels of organization…the need to maintain an equilibrium between self and surroundings. (Goldhaber, 2000, p. 218)

Given this focus, research carried out from this perspective can and should adopt the same concern for facilitating student learning as research conducted from other theoretical traditions—and this study represented one attempt to enact this concern.

[7] Kellog Hunt's (1965) study of syntactic structures, which at one point compares students to centipedes, is an example of the reductive, rigidly maturationist perspective held by some early developmental researchers in composition.

Due to their quantitative focus, early studies of the impact of developmental level on writing performances often lacked depth, relying on a single writing sample, and failing to account for context or students' perceptions of their own writing (Hays, 1988; Miller, 1980) Interestingly, with the exception of Miller's (1980) study of Kohlberg's stages, studies of the developmental aspects of students' persuasive writing generally neglected to administer empirical measures of cognitive development (Dinitz & Kiedaisch, 1990; Hays, 1988; Kroll, 1990), but instead made inferences about students' developmental level based on their writing. Additionally, qualitative studies of the developmental aspects of student writing are rare, and tend to be characterized by either a limited case study approach or the rejection of parsimonious theoretical models.[8] By adopting a qualitative methodology and by concentrating on a single domain of development, this study applied developmental theory to the study of writing in a new way. In brief, this study embodied an attempt to move beyond the debate over cognitivist research and into the wide expanse of unanswered questions and unexplored territory that surrounds the relationship between students' thinking and writing.

Summary

This study was designed to expand and improve upon the body of literature that examines the developmental aspects of writing, and, more specifically, the association between college students' levels of reflective judgment and their persuasive writing behaviors. My interest in the relationship between reflective judgment stage and competency in written argument stems from the basic premise that writing is a complex cognitive activity that has ties to a number of developmental assumptions about knowledge and justification.

[8] Herrington and Curtis' (2000) longitudinal study of the writing development of four college students, though powerful, is an example of the former. Richard Haswell's (1990) longitudinal study of college students' writing

Indeed, the demands that persuasive writing places on an individual's epistemological framework seem significant. The organization and use of evidence in argumentative writing require a constant awareness of the values of the intended audience as well as an understanding of the limitations, or "conditions of rebuttal," of one's own point of view.

Immature understandings of knowledge and justification may place limitations on a student's degree of success in generating competent persuasive writing; the standards we use to make refined judgments about the strength of our own arguments may be heavily influenced by the development of our own "thinking about thinking." Similarly, students' widely documented difficulties with accommodating audiences (Barritt & Kroll, 1978, Lunsford, 1979, Redd-Boyd, 1989) may stem from the developmental challenges confronting writers moving from egocentric to multiperspectived ways of understanding the world. From this view, epistemological maturity seems to be an important factor in how we develop arguments. Because reflective judgment comprises our assumptions about knowledge as well as our assumptions about justification, it may be the developmental domain most closely associated with argumentation, and therefore merits study.

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development is a particularly striking example of the latter. His broad theoretical orientation relies on a synthesis of a number of developmental theories from the organismic paradigm.

CHAPTER III: METHODOLOGY

Research Goals and Questions

The purpose of this study was to investigate the relationship between the reflective judgment levels and persuasive writing behaviors of college freshmen, in order to generate more effective and supportive curriculum and instructional practices at the college level. The study was guided by three major questions:

> Question One: In what ways do college freshmen's written arguments reflect the assumptions about knowledge and justification described by their reflective judgment ratings?
>
> Question Two: What kinds of reflective judgment are encouraged in the persuasive writing classroom context through textbooks, assignments, and the instructor's feedback?
>
> Question Three: Building on the answers to the preceding questions, how can we (re)design curriculum and instructional practices to meet the critical literacy *and* cognitive developmental needs of freshmen writers?

Three major data collection strategies were used to address these questions. After discussing the sampling procedures, I will describe these strategies, detailing their advantages, workability, and limitations, before addressing validity and ethical issues associated with these procedures. Because the data collection strategies represent a mixed methodology, the logic underpinning the study design will be discussed first.

Rationale for Mixed Methodology

The use of mixed method research still represents a potentially problematic issue for some researchers in both qualitative and quantitative fields; the arguments against this

"blend" of approaches stems from the assumption that each method represents a paradigm utterly antithetical to the other (Lincoln & Guba, 1985). However, there is a growing sense of the compatibility of these genres, and a growing number of researchers with one foot in both paradigms (Brewer & Hunter, 1989; Creswell, J.W., 1994; Patton, 2001). Even so, the use of a mixed methods approach still requires explanation, and since this study draws upon both qualitative and quantitative methods, I open this chapter with a discussion of my rationale.

Literacy researchers have used successful mixed method approaches for decades (Cheng, 1996; Idol & Kroll, 1987; Freedman, 1996), as have other researchers interested specifically in cognitive issues related to reading and writing (Hays, 1982; Palincsar & Brown, 1984). Because language represents a fundamentally complex and slippery subject of study, purely quantitative measures rarely yield rich information about its use, while purely qualitative measures may fail to represent cross-case trends and patterns. Growing contemporary interest in this type of design in the field of literacy studies suggests that many researchers will continue to blur the distinctions between qualitative and quantitative paradigms (Kirsch & Sullivan, 1992).

However, the best grounds for including both qualitative and quantitative methods in a single study may involve the fact that combining methods serves the goals of generating knowledge and collecting diverse information (Goodwin & Goodwin, 1996). As explained in Chapter II, there are no studies, to date, that use mixed method approaches to study reflective judgment and writing. This study combined methods in order to extend the scope and depth of inquiry (Goodwin & Goodwin, 1996). Similarly, this study provided the opportunity to gauge the ability of the RJI to predict an individual's performance on a real-world task; the study

design affords the ability to assess this quantitative measure's efficacy and usefulness. There is no other way to probe these issues in a satisfactory way without using a mixed methodology. Ultimately, the explanatory power of a mixed method approach outweighs the challenges its use poses. As Lancy (1993) argues, the rejection of a mixed methodology is unsound, given the many ways in which the qualitative and quantitative research overlap, and given the many uninvestigated questions and issues confronting us in all fields.

Sampling

Study Site

The study site for this project was "Southern Central University" or "SCU," a large land-grant institution in a mid-size southern city. According to 2002-2003 enrollment data, the university has an undergraduate enrollment of 22,780, and a first-time freshman enrollment of 3,732. The ratio of males to females in the 2002-2003 first-time freshman class was 58% males to 42% females (Common Data Set, 2002, np). Of first-time freshmen students enrolled at SCU, 11% were African-American, 4% were Asian-Americans, 1% were Native Americans, 2% were Hispanic, 82% were White, and .6% were non-resident aliens (Common Data Set, 2002, np).

Participant Selection

The population sampled in this study were college freshmen enrolled in English 111Z, the first course in the English department's freshman writing program, a class that emphasizes written argumentation. The sampling procedure had two parts, both of which were criteria-based. The first segment of the sampling procedure involves the selection of an instructor. The original design involved selecting three instructors using the same textbook

and sequence of assignments; working with three instructors was envisioned as a way of reducing bias, with respect to the effect of context on student performance. However, changes in program curriculum and funding during the weeks prior to the fall semester complicated this process, as many instructors had not ordered textbooks or created their syllabi, or had changed the focus of their classes to reflect new departmental curriculum guidelines that would be in place in the spring. In the end, one instructor was selected for participation; her rich experiences with teaching this course, as well as her outstanding teaching record, made her an ideal candidate for this study. While the issue of bias was not resolved by this solution, the fact that all participants had the same instructor made it easier to describe the contextual issues involved in these participants' construction of their written arguments.

Participant selection also involved a criteria-driven process. Eighteen year-old student participants were selected on the basis of their a) willingness to participate in the study and b) performance on the instructor's diagnostic assignment. After giving a ten-minute presentation in each of the instructor's three sections of English 111Z, I passed around a study announcement and sign-up sheets for interested students, detailing the expectations and benefits involved in participation in the study. Then, using the list of interested students, the instructor used departmental writing standards to group these writers into two different categories, "challenged" and "proficient," according to their performance on a diagnostic assignment completed as part of the course's regular requirements.

It is important to note that none of these students would be considered "basic" writers. The class in which they were enrolled was not a remedial writing course. The challenged/proficient categorization was not approached as a definitive "sorting" device,

given the expectation that all students would make progress as writers during the semester. Instead, this procedure provided a means of assuring a level of representativeness in constructing the sample, so that participants with different levels of initial proficiency with writing would be included in the study. The reason for creating performance categories stemmed from the need to expand upon existing developmental research on college writers, much of which has focused upon the development of "basic" writers (Lunsford, 1979, 1985; Shaughnessy, 1977). Again, students enrolled in English 111Z were not considered remedial students. However the range of SAT Verbal scores (470-660) used to place students in this course can be associated with a fairly wide range of writing abilities. By requesting the instructor to assign students to initial performance categories, this range was more accurately reproduced. The instructor's diagnostic assignment and the departmental writing standards are included in Appendix 7.1.

After the instructor sorted interested students into these groups, I telephoned and/or emailed these students and reiterated the details involved in participation, and confirmed their continued interest in the study, making sure that these students were at least eighteen years of age, freshmen, and first-time enrollees of English 111. Of the 41 students who signed up to participate in the study, 15 were eventually selected for participation. Of the 15 students in the sample, nine were males and six were females, a ratio that roughly approximates the ratio of male and female freshmen at SCU, according to 2002-2003 enrollment figures (Common Data Set, 2002, np). Out of 52 students enrolled in Ms. Stone's sections, only 15 (29%) were females, so the ratio of males to females within the sample over-represented females in Ms. Stone's classes. Six of the 15 participants were initially categorized as "challenged," and nine were described as "proficient," based on the

instructor's assessment of their performance on the class diagnostic. Three participants were minorities (one African-American, and two Asian-Americans). Two of the students were 19, and the rest were 18 years old.

Data Collection

In the following discussion, the data collection methods and their rationales will be examined in detail. Before entering into this discussion, however, it may be helpful to review the overarching connections between the study's guiding questions and methodology.

Table 3.1

Relationship Between Guiding Questions and Methods

Guiding Question	Reflective Judgment Interview (and follow-up email)	Semi-structured interviews of students and instructor	Student portfolios	Students' self-recorded reflections
Question 1: In what ways do college freshmen's written arguments reflect the assumptions about knowledge and justification described by their reflective judgment ratings?	X	X	X	X
Question 2: What kinds of reflective judgment are privileged in the classroom context?		X	X	
Question 3: Building on the answers to the preceding questions, how can we (re)design curriculum to meet the critical literacy and cognitive needs of freshmen writers?	X	X	X	X

Reflective Judgment Interview

The Reflective Judgment Interview (RJI) is a semi-structured procedure whose purpose is to elicit a descriptive stage score. The stage score is derived from the analyses of two trained raters, who review the interview transcripts separately. During the spring and summer of 2002, I underwent training and received official certification to administer this interview.

During the 2002 fall semester, I conducted the RJI with all 15 participants; each interview generally took about one hour. In all, 60 problem transcripts (four per student) were generated and sent to trained raters to be scored. After receiving the scores from trained raters in March 2003, I contacted participants via email to ascertain whether they felt that the reflective judgment stage described by the score accurately represented how they make judgments and form opinions. Their reactions were recorded and included in the analyses.

Developed by King and Kitchener in the 1980s and tested extensively in the 1990s, this measure of cognitive development in the domain of reflective judgment is a psychometric instrument that uses a semi-structured interview format to elicit responses. The prompts used in this interview include "dilemmas" concerning relatively well-known conflicts. Typically, the interviewer reads aloud each issue, or ill-structured problem, while the participant follows along on a typed card. (See Appendix 7.2 for a full description of all the interview prompts). As King and Kitchener (1994) note, this procedure makes it possible to use the interview with individuals for whom reading is difficult (p. 263). After reading a prompt aloud, I asked the participants to state and justify their own point of view about the issue by responding to six follow-up questions. These questions are listed in Appendix 7.2. The participants' recorded responses were then transcribed and sent to two certified raters for scoring, in accordance with the scoring procedures developed by the creators of the stage model.

One advantage in using this interview procedure includes the ability to refer to the extensive body of cross-sectional and longitudinal research that has been conducted on it, speaking to its reliability. This interview represents an assessment tool with a rich history. The stage model it is built upon is, in itself, fairly simple and streamlined, with clear

connections between the stage model and the interview design. This interview, in brief, requires the participant to "spontaneously produce responses based on his/her existing repertoire of cognitive skills" (King and Kitchener, 1994, p. 103). Because describing these skills was a major goal of my study, this instrument represented a crucial means of addressing my research questions. Additionally, surprisingly few cognitive-developmental studies of writing have employed actual measures of participants' cognitive development; furthermore, no studies of the connection between students' reflective judgment and writing exist. Thus, by including students' reflective judgment scores, this study made several important contributions to the field.

Review of Documents

Once considered to be a secondary means of obtaining data, the review of documents now occupies a position of primacy in qualitative research similar to the powerful position it has always held in historical and literary studies (Bogdan & Bicklen, 1998). As Marshall and Rossman (1999) note, "the review of documents is an unobstrusive method, rich in portraying the values and beliefs of participants in the setting" (p. 116). In this study, I examined authentic writing samples produced in a naturalistic context by participants enrolled in English 111Z. These collections of student writings contained six major writing assignments, as well as drafts, and instructor comments.[9] Participants' essays were photocopied after the instructor had graded them, but before she passed them back, in most cases.

Most cognitive-developmental studies of writing have relied on "single slice" writing samples, usually timed writings produced in an artificial setting (Hays, 1982, 1988; Miller,

1980). The rationale for collecting a naturalistic portfolio of students' work, rather than a single writing sample gathered in a controlled setting was two-fold. First, a collection of writing samples generates a more complete picture of the student as a writer. Because the study examined multiple examples of each participant's written argumentation, there was a smaller chance that confounding factors such as performance anxiety or time limitations could interfere with students' written productions. As Fischer (1987) and others have observed, the difference between functional and optimal performance within a skill domain can be significant. As K. Schriver (1992) explained, even experienced writers create lower-quality work if they are unfamiliar with their topic, because "the role of the writer's domain-specific and situation-specific knowledge—topical, personal, social, contextual—is crucial to effective composition within any given context" (p. 195). By examining essays produced within the supportive structure of an authentic learning context, I was able to draw conclusions about the developmental patterns within these essays with greater assurance. Secondly, the fact that the writing samples were produced as students received explicit instruction in argumentative discourse was important, as it enabled a more thorough examination of how students' persuasive writing patterns change or remain stable over time, giving a better impression of which writing practices may be functions of long-term development, and which may be functions of the writing context.

Semi-structured Interviews

In addition to the reflective judgment interview, qualitative interviews were conducted with the participating students to solicit information about the participants' perceptions of themselves as writers, their beliefs about the course, their experiences with

[9] Because one essay was not made available for photocopying, the number of essays collected totaled 89, not

writing, and their goals for the class. An interview was also conducted with the instructor to provide information about her philosophy of pedagogy and assessment, and her beliefs about the purpose of the course, and her students' level of preparation for the class. Appendix 7.2 includes the questions used in these semi-structured interviews.

These interviews took about 30 minutes each. The instructor was interviewed in her office during the first week of the semester. Interviews with students were scheduled during the first month of classes at times participants identified as convenient. All student interviews took place in the campus library.

While this study did not represent an extensive investigation into the context of students' written arguments, it is important to recognize that students' written productions are, in fact, culturally, historically, and personally situated. The purpose of these interviews was to supplement the written evidence in the portfolios, and create a means of checking the appropriateness of inferences and conclusions about this evidence. As Hillocks (1999) noted, teachers' beliefs about their students' abilities can have an important impact on their expectations, assignments, and curricula. Therefore, the interview with the instructor was designed to elicit information about her philosophy of pedagogy and assessment, and her beliefs about her students' preparedness for the course, and served as a means of triangulating analyses of her comments and handouts. Interviews with students helped determine the level of effort and motivation students contributed to the course, as well as the "history" they brought to the class, and provided more context for conclusions about the patterns within their writing.

90.

Self-recorded Reflections

Students were also asked to review their fourth essays, from introduction to conclusion, providing information about their meanings and intentions as writers, and their beliefs about the quality of their work. Participants were provided with hand-held tape recorders so they could answer these questions orally, without using a written medium. Appendix 7.3 includes the directions students were given for their self-recordings.

By having the opportunity to reflect on one of their essays, participants were able to clarify their own perceptions of their rhetorical strategies and purposes. These data were important in triangulating my own analysis of the participants' writings and provided more information about the schema underlying the participants' argumentative tactics. These self-reflections, like the semi-structured interviews, were designed to provide triangulation for inferences and conclusions about students' written productions and the meanings they assigned to them. Because language is "slippery," these data were important in elucidating students' textual intentions, and the reasoning used in their arguments. Additionally, by reviewing a paper that they had already written for an authentic context, students were provided with the opportunity to a) reflect and improve on their writing, and b) generate richer explanations of their beliefs about what they have written.

Data Analysis

The analysis of data, like the data collection itself, comprised both quantitative and qualitative elements, in order to address the guiding questions posed at the outset of the study. The 15 complete transcripts of the RJI were analyzed by two certified raters according to standardized protocols developed by the instrument's creators, King and Kitchener.

Ultimately, this analysis yielded a set of overarching stage scores that corresponded with the developmental levels described by the Reflective Judgment Stage Model.

According to the rules for scoring as described in *Developing Reflective Judgment* (1994), each response to each problem was independently rated. For each of the seven stages associated with the model, the scoring rules are divided into two major sections, each of which is subsequently divided into three subsections (p. 264). Table 3.2 depicts the scoring foci raters used for each level in the stage model.

Table 3.2

Themes Used in Scoring the RJI.

Nature of Knowledge	Nature of Justification
View of knowledge	Concept of justification
"Right vs. wrong" knowledge	Use of evidence
Legitimacy of differences in viewpoints	Role of authority in making judgments

As King and Kitchener (1994) explained, responses to the follow-up questions for each interview prompt were rated by referring to one of the subsections in the scoring guide. For example, a respondent's view of knowledge emerged from the questions regarding whether or not she "knows for sure" about the issue. Raters gave responses stage scores based on their fit with that section of the scoring rules. Raters assigned scores to participants' responses to each dilemma; because there are seven questions per prompt, seven initial scores were given for each problem.

Raters then summarized the scores for each transcribed prompt-response into a three digit code that reflected the different stages that the participant seemed to be drawing on in

her response. This procedure, King and Kitchener (1994) contended, "is based on the assumption that no single stage score best represents the person's response to that problem; further, it allows for subject variability seen in the transcript to be reflected in the overall rating of that transcript" (p. 265). If only one stage were used in rating the responses to a problem, all the digits were the same. If not, then the stage that occurred more frequently was used twice in the code. For example, if all answers to a prompt reflected Stage 4 reasoning, then the score for that overall response was 4-4-4. If a participant used Stage 3 reasoning on five of her answers and Stage 4 reasoning on two, the score was 3-3-4. After a participant's transcripts were evaluated by the two independent raters, they were submitted to the primary researcher. Any transcripts for which raters' mean scores were discrepant by one stage or more were reevaluated by the independent raters.

The qualitative data analysis in my study, though not guided by the same clearly defined "rules" as the analysis of the RJI transcript, was no less careful or intense. As Marshall and Rossman (1999) noted,

> Data analysis is the process of bringing order, structure, and interpretation to the mass of collected data. It is a messy, ambiguous, time-consuming, and fascinating process…In qualitative studies, data collection and analysis typically go hand in hand to build a coherent interpretation of the data. The researcher is guided by initial concepts and developing understandings but shifts or modifies them as she collects and analyzes the data. (p. 150-1)

In this case, the process of bringing order to the data was carried out over the course of the Fall semester, as students turned in their papers to their instructor, and during the spring semester, when participants' RJI scores became available.

The qualitative analytical process involved a systematic and intensive consideration of the data. Participants' writing portfolios were analyzed in two major ways. First, I looked for themes and patterns within each individual case, focusing on participants' performance on each major assignment; this segment of the analysis was conducted "blindly," without knowledge of students' RJI stage scores. The second step of the document analysis involved clustering participants by their RJI scores, and looking for similarities and differences among writers in each group.

During the first stage of the analysis, I made extensive notes on every draft and final copy, describing the content of each paper, as well as my impressions of the essay as I read it. Then, I used two rubrics to systematize the recording of these impressions. The first rubric outlined ways in which stages of reflective judgment might be manifested within students' writing behaviors, in terms of position-taking, evidence usage, response to opposition, and management of rhetorical strategies. The categories described in this rubric were drawn directly from King and Kitchener's (1994) discussion of the characteristics of stage-related thinking. These categories were used to create the second rubric, which provided a checklist of stage-related characteristics.

The second rubric was used to streamline the analytical process by allowing each paper to be assigned a holistic stage evaluation (pre-reflective, quasi-reflective, reflective), which took into consideration the relationship between different parts of the text and their relative importance within the argument as a whole. If more than one type of reasoning was apparent in an essay, it was assigned a predominantly pre or quasi-reflective rating, but the use of other stage-related thinking was also noted. If an essay appeared to use a balance of stage-related characteristics, this feature was also noted.

The evaluative rubric also allowed holistic ratings for different coding categories to be summarized and represented in a more systematized fashion, and enabled a more efficient comparison of the specific characteristics of essays written by students with different reflective judgment ratings. First, codes were assigned to specific characteristics of essays related to position-taking, evidence-usage, treatment of objections, and rhetorical strategies. Then, these characteristics were rated holistically for each essay, taking into account the overall focus of each argument and the relationship among its various parts. After the RJI scores were made available in March, 2003, ratings for each of the items on the rubric were tallied for each group of participants. Appendix 7.4 includes the rubric used to examine student writing, as well as the original rubric drawn directly from King and Kitchener's description of the stages of reflective judgment development.

The first issue addressed in the evaluative rubric pertained to position-taking. Each essay was coded as using either a one-sided, balanced, or integrated position. As Stiff (1994) explained, a one sided-position refers to an argument that only presents evidence in favor of one view. In this study, an argument was labeled as using a balanced position if it offered evidence for more than one view. An argument was coded as presenting an "integrated view" if it offered evidence for more than one view, *and* presented a judgment based on criteria such as "the plausibility of an argument, or the utility of a solution" (Kitchener & King, 1994, p. 67). Instances in which participants differentiated their views from the views of authorities or recognized the ill-structured of the problem under discussion were also coded and then rated holistically.

The second issue addressed in the rubric involved participants' use of evidence in their arguments. The use of evidence was examined by identifying supported and unsupported

propositions, and then the evidence usage was rated holistically. Additionally, the evidence used was coded as credible or not, within the context of the assignment. Instances in which the writer appeared to use evidence critically, paying attention to its credibility and/or viability were also marked and rated holistically.

Thirdly, participants' treatment of alternative views and potential objections was assessed holistically, after reviewing the results of coding procedures. Any recognition of an objection or an alternative view was coded. If the writer developed this acknowledgment into a response or rebuttal, this strategy was also coded. Alternatively, any concessions of objections were coded, and their use was noted on the evaluative rubric.

Lastly, participants' rhetorical strategies were examined and rated holistically. First, the logical value of essays were examined by coding logical fallacies that appeared in the essays. Essays that were determined to be substantially impaired by logical problems were rated as using logic "to connect claims and reasons" unsuccessfully. Writers' use of pathetic appeals were also noted, as were any attempts to build credibility. These attempts were noted on the evaluative rubric. Vande Kopple's (1997) taxonomy of metadiscourse was used to identify and code qualifiers, and their use was rated holistically as consistent or inconsistent.

In summary, each paper received ratings for four major writing behaviors: position-taking, evidence-usage, treatment of objections, and rhetorical strategies. These ratings were based on coding procedures, and on holistic assessments of each overall argument. Appendix 7.7 includes examples of three essays that were rated holistically and the rubrics used to describe their characteristics.

Additionally, participants' writing history interviews and narrative reflections and the instructor's feedback on Paper 4 were used to help check for alternative explanations by providing more information about the writer's intentions and perceptions of contextual issues related to the curriculum, assignments, and the instructor. In particular, I examined the participants' narratives for clues about contextual, affective, and phenomenological factors involved in the production of writings in these students' portfolios. The instructor's comments on Paper 4 were categorized according to the kinds of issues the instructor was responding to within a participant's essay, such as the use of evidence or mechanical/grammatical problems. During these processes, the use of constant comparison (Glaser and Strauss, 1967) undergirded the search for salient themes in the participants' responses and instructor's comments.

Validity Issues

Quantitative Validity Issues

Studies of the internal consistency of the Reflective Judgment Model have focused on the validity of its assumptions about cognitive development, as well as the way in which it builds upon existing models of development, including Piaget's model of concrete and formal reasoning, and Fischer's (1980) model of stage-progressive cognitive development. Reliability and validity issues associated with this instrument include issues of internal consistency, interrater reliability and agreement, and test-retest reliability. Studies that have specifically investigated the internal consistency of the RJI have reported high levels of reliability, with a median coefficient alpha of .77 (coefficients ranged from .47 to .99), indicating that the four interview problems measure the same construct (King & Kitchener, 1994, p. 112-113). Additionally, coefficients of interrater reliability for this instrument have

averaged in the high (.70)s, while almost half of the studies reviewed in the 1994 version of the RJI reported agreement levels of at least (.80), which suggests that trained raters can assign stage scores to transcripts in a consistent fashion (King & Kitchener, 1994, p. 114). Similarly, the test-retest consistency of the RJI is between .71 and .87, and the consistency of respondents' scores across problems is .75 (1994, p. 113-114). These figures—especially the last—reflect the fact that we use different levels of reflective judgment depending on our familiarity with the subject. People tend to be more familiar with some prompts than with others, which is why the interview uses more than one prompt-issue, and relies on scores from *all* prompts in calculating a respondent's overall stage score, so that the "wave" of reflective judgment stages used by respondents can be represented more accurately. Overall, the research on this instrument suggests that it is a reliable instrument for making claims about individuals' preferred ways of thinking about ill-structured problems.

Qualitative Validity Issues

According to Denzin and Lincoln (1998), constructivist criteria for qualitative research "translate internal and external validity, reliability, and objectivity into trustworthiness and authenticity" (p. 277). In this study, I add to these criteria others that Denzin and Lincoln associate with the poststructural perspective, including caring, subjective understanding, and the construction of dialogic texts. The validity of this study draws from the experience I gained from a pilot study using many of the methods described here, upon my own awareness of my role as the researcher, and upon the incorporation of multiple perspectives during data analysis, including the participants' own points of view.

Pilot Study

During the spring of 2001, I conducted a pilot study to test the viability of some of the methods employed in this study. This pilot study focused on the relationship between one participant's level of reflective judgment and his ability to create a competent written argument. During this case study, I conducted the Reflective Judgment Interview, reviewed an argument written by the participant, and analyzed his self-recorded reflections on that interview. I also submitted copies of his argument to three college-level instructors who used a rubric adapted from Durst et al. (1992) to evaluate the participant's essay; I used their commentaries as part of my review of documents. Finally, I contacted the participant to share with him his RJI score, as well as my other findings. In brief, the pilot study suggested that the participant's preferred stage of reflective judgment may have a significant relationship with the way in which he managed evidence, dealt with opposing points of view, and established a claim. The pilot study provided an opportunity to field-test and refine many of the methods used in this project.

Multiple Perspectives

The application of multiple lenses to a research problem represents one of the most important means of assuring a study's quality. As Denzin and Lincoln (1998) noted, "The combination of multiple methods, empirical materials, perspectives, and observers in a single study is best understood, then, as a strategy that adds rigor, breadth, and depth to any investigation" (p. 4). The RJI requires the use of multiple perspectives (at least two raters) when scoring a participant's transcribed responses; the certified raters are "blind" to participants' identities. Although the results of the RJI were necessarily a function of the

interview context, as is always the case with researcher-driven sources of data, the possibility that I could manipulate or misinterpret a respondent's score was minimal.

Additionally, the evaluative rubric used to assess participants' writings was examined and tested by an outside reader who was certified to conduct and score the RJI. This reader used the streamlined checklist to evaluate a 10% sample of the writings collected from participants in the study. Based on his assessment of the instrument's usability, revisions were made to the rubric to ensure the accuracy and dependability of the analyses of student writing created by using this tool.

Member Validation

The member validation that occurred within the context of the study created a system of checks and balances for inferences and conclusions about students' texts. Because the most serious threat to the validity of any study occurs when the researcher fails to consider alternative explanations of the phenomenon in question, member validation represents an extremely important method for testing researchers' claims and for gathering new evidence. Lincoln and Guba (1985) proposed this strategy as possibly the most essential technique for ensuring credibility. As Seale (1999) noted, "If approached with a readiness to revise claims in the light of what is revealed, rather than an attempt to confirm mutual value positions between researcher and researched, it can enhance the credibility of a research report, giving it greater sophistication and scope" (p. 71). In this study, member validation occurred at three separate points.

The first type of member validation involved the RJI. After the RJI was scored by trained raters, participants were emailed their transcripts and were given the results of the assessment, in order to determine how well they believed the RJI described their thinking.

These online discussions were designed to provide supplementary information about the participants' perception of the usefulness of the RJI in describing their preferred levels of reflective judgment.

Secondly, participants' self-recorded reflections on Paper 4 provided more information about the writers' intentions in their written arguments. The use of member validation in this part of the study was intended to alleviate some of the difficulties associated with document analysis. Hodder (1998) noted that, as Derrida and others have shown,

> meaning does not reside in a text but in the writing and reading of it. As the text is reread in different contexts it is given new meanings, often contradictory and always socially embedded…[When words are] transformed into a written text the gap between the 'author' and the 'reader' widens and the possibility of multiple reinterpretations increases. (Hodder, 1998, p. 111)

By giving participants the opportunity to clarify and/or reaffirm their perspective, the potential for erroneous interpretations decreased. Additionally, because sophisticated cognitive operations can be masked when respondents are engaged in an activity outside their "comfort zones" (as may be the case for less proficient writers, particularly), giving respondents the opportunity to clarify their reasoning created an opportunity to identify new subtleties or strategies in students' writings that may have been difficult to recognize, otherwise.

The use of semi-structured interviews of the participating instructor and students functioned as a third source of member validation. In this case, the instructor's interview provided additional information about her pedagogical intentions in her assignments and

comments. This information was important to the study; how instructors understand their role in students' textual productions, and how they understand the purpose of the assignments they require students to perform may have an impact on what students produce. Similarly, students' interviews furnished a richer context for interpreting their written documents, and gave participants a greater voice in identifying their strengths and needs as writers. Participants were emailed their interview transcripts at the end of the semester, and were given the opportunity to update their responses, in case their perceptions of their skills or the course had changed after taking English 111Z.

Reliability/Generalizability

Traditionally, the notion of reliability and generalizability imply quantitative notions of replicability. As Bogdan and Biklen (1992) argued, qualitative researchers do not assume that study results can be replicated exactly or that researchers maintain exactly the same perspectives across time. Instead,

> In qualitative studies, researchers are concerned with the accuracy and comprehensiveness of their data. Qualitative researchers tend to view reliability as a fit between what they record as data and what actually occurs in the setting under study, rather than the literal consistency across different observations. (Bogdan & Biklen, 1992, p.48)

In this study, as for most qualitative investigations, the extent to which results can be generalized across contexts was limited. In qualitative research, external validity issues revolve around a study's comparability and translatability (LeCompte & Preissle, 1993). If another study context is sufficiently comparable, and if methods and meanings used in the

original study are sufficiently clear, hypotheses formulated in the original context may be applicable in another.

To enable such comparisons to be made, I endeavored to make the constructs and techniques used in the study as open and accessible to readers as possible. Because, as LeCompte and Preissle (1993) note, "each individual informant has access to unique and idiosyncratic information" (p. 335), ensuring reliability necessitates describing those involved in the study. The participants were college freshmen enrolled in the Freshman Writing Program, and represented a typical case sample of students enrolled in that program, in terms of race and gender. A profile of these participants will be provided in Chapter IV.

LeCompte and Preissle (1993) also identify analytic constructs and premises and methods of data collection and analysis as important elements in assessing reliability, claiming that replication of a study may be impossible if the researcher fails to carefully define the theoretical constructs, definitions, or units of analysis informing the research (LeCompte and Preissle, 1993, p. 335). Although potentially the most serious constituent elements of reliability, these issues were addressed with relative ease in this study. As Miles and Huberman (1994) note, the most basic solution to this potential problem entails transparency of method (p. 200). This "transparency" involves maintaining careful records of ongoing research, and crafting lucid and explicit descriptions of the theoretical approaches informing the research, as well as detailed accounts of the processes involved in data collection and analysis. To this end, over 300 pages of descriptive notes were made on the students' papers, prior to the use of the evaluative rubrics, and a research log detailing each step of the study was maintained from beginning to end.

Ethics

Recent critical conversations regarding ethics in qualitative research have focused on the ways in which dissolving the traditional subject-object paradigm opens up the possibility for more ethical research by posing challenges to our understanding of the "proper" relationship between researcher and participant. As Lincoln (1990) noted, under the subject-object dualism of the logical positivist system, "research subjects were treated as something between priceless Ming vases sent for cleaning, and children" (p. 289). Qualitative research (in varying degrees, depending on the research project and methodology) "thrusts upon the respondent two new roles: that of agency, self-determination, and participation in the analysis and reconstruction of the social world; and that of collaborator in both the processes and products of inquiries" (Lincoln, 1990, p, 290). The new roles of the respondent as described by Lincoln demand that we reconsider our understanding of the relationship between the researcher and respondent and the ethical dimensions of that relationship.

In this study, the use of a mixed methodology implied a potentially more complex considerations of ethics, given the fact that one data collection strategy involved the administration of an evaluative measure of cognitive development to participants. To some degree, assigning participants a reflective judgment score opens up the thorny issues surrounding the "detached," and potentially problematic subject-object relationship between the researcher and participant.

While it was not possible to completely eradicate this or other ethical issues raised by the methods I used; I did, however, explicitly acknowledge their existence, and carefully followed standards established for the protection of participants. Lecompte and Preissle (1993) identify four major sources of ethical tensions that researchers must negotiate: risk

and vulnerability, disclosure and informed consent, loyalty and responsibility, and ownership of information (p. 105-110). In view of these four major ethical themes, two major dimensions of my study require special consideration and discussion: my relationship with the institution within which the study was conducted, and, more importantly, my relationship with the participants.

The purposes of my study dovetailed with the goals and visions of the study site—to better understand and educate the students it serves. I was also employed for four and a half years at the study site, and the rapport I developed with administrators and instructors was helpful in assuaging concerns and questions about the study. However, the fact that I no longer teach in the department freed me of any conflicts of interests I might have experienced, had I conducted this study while still employed with the university.

Because the information gained from individual participants formed the "meat" of the study, the ethics of my relationship with them and the ways in which I involved them in the study were more complex. I will therefore treat the themes suggested by Lecompte and Preissle (1993) separately in my discussion in this section.

Risk and Vulnerability

Because the participants involved in my study were students, it was important to ensure that they felt no extra pressure to participate or to "give me what I wanted." Though there was no actual "risk" attached to students' participation, I knew that they might perceive that there was. Therefore, when making the initial class presentation, and in subsequent contact with students, I stressed that their participation in the study had no bearing on their performance in English 111Z. By creating an atmosphere of respect and

cordiality, I generated a rapport with the participants that grew throughout the research process, minimizing their sense of vulnerability.

Disclosure and Informed Consent

Closely connected with protecting participants from risk, disclosure represented a vital issue throughout an ethical qualitative research process. Prior to asking participants to sign my official consent form, I gave participants the same "cover story" given to the program administrators, describing the exact nature, purpose, and methods I used in the study. After they signed up for the study, I called each of the prospective participants, and discussed their questions about the study, so they could determine whether or not the study represented something they wanted to involve themselves in, given that a wider audience would eventually read the transcripts and written documents they provided as the study continued.

Additionally, participants received information about the RJI scores assigned to them. Measures of cognitive development (like many other quantitative measures) are often criticized for being dehumanizing, in the sense that the respondents' score becomes a signifier for the respondents themselves. However, I believe that this erasure of individuality did not occur within the context of this study; whether or not participants *agreed* with the way in which the Reflective Judgment Interview described their personal epistemology was an important consideration. Similarly, participants were given copies of the transcripts of their qualitative interviews, and were given the opportunity to update their responses at the end of the semester to reflect any changes in their perspectives that might have occurred since the beginning of the semester. Finally, participants were able to reflect on one of the

documents they produced in class (Paper 4) after some time had passed, and raise any issues they wanted in their comments.

Loyalty and Responsibility

Because I had no outside funding agency, my loyalty was to my participants and to my research. As the research findings were compiled, I represented my participants as faithfully as possible, including their suggestions, feedback, and criticism whenever feasible.

Ownership of Information

None of the information used in the study was included without the participants' express understanding. In giving respondents their transcripts and written documents, and in asking them for feedback on each leg of the study, I attempted to nurture the participants' sense that they were, with me, owners of the research. Ultimately, of course, this study represented an important academic undertaking for me—but unmasking the process of the creation of this research for the participants allowed them to partake in that process and, thus, the ownership of the study itself.

Compensation

Not all researchers provide tangible compensation to participants, preferring instead to trade services. However, I chose to compensate the participating instructor and students monetarily because providing tutoring or other services might have confounded the results of the study. Because instructor support was key to the success of my study, the participating instructor received compensation ($100) for nominating students, and taking the time to arrange for photocopying student papers and drafts. I provided monetary compensation to students ($20/student). Students were also furnished with a report of their RJI score, at a cost

to the researcher of $24 per complete transcript. Copies of the student and instructor consent forms are located in Appendix 7.5.

Limitations of the Study

As an exploratory investigation into the relationship between college students' reflective judgment levels and written arguments, this study did not use a large sample of participants, but focused on multiple writing samples from participants taught by one instructor at a single research site, using qualitative interviews and participants' self-reflections to triangulate analyses and conclusions. It is possible that a study conducted in a different context could produce different results. Additional studies in different settings using a larger and more diverse sample of participants would be necessary to determine whether the results of this study are generalizable to other contexts.

Additionally, a full investigation of the role of the writing context was beyond the scope of this study. The study relied on interviews and artifacts; observational methods were not employed, so it was not possible to ascertain the effects of daily class activities on the texts students produced. Also, the investigation of the instructor's feedback was limited to her response to participants' fourth essay; more extensive examinations of the instructor's feedback on all essays and drafts were not included in this study. Investigating the relationship between reflective judgment and non-western forms of argument was also beyond the scope of the study, as were ways of "accelerating" the development of reflective judgment through the study of persuasive writing.

Summary

This study used a cognitive developmental model to frame a qualitative investigation into college students' persuasive writing practices. The goal of the project was to examine

the intricacies embedded in individual students' negotiation of complex writing tasks in light of their developmental implications. Because so few cognitive developmental studies in composition have examined phenomenological or contextual factors (e.g. perception of self as writer, influence of task on performance), and because few qualitative studies of literacy have addressed cognitive developmental issues, the need for this type of study was pressing.

The methods selected for use in this study represented a new but dependable approach to studying cognitive developmental issues in student writing. The data were examined using both quantitative and qualitative analysis procedures, and validity issues related to both the quantitative and qualitative paradigms were addressed. Attention was paid to ethical considerations during each stage of the research process.

CHAPTER IV: RESULTS AND DISCUSSION

The following discussion presents the findings from the methods described in Chapter Three. First, more detailed information on the participants is provided. The rest of the chapter is divided into three major sections that correspond with three guiding questions posed at the outset of the study. In each of these sections, findings related to the research question are presented, discussed, and summarized.

Participants

Instructor

The original design of the study called for the selection of three instructors using the same texts and sequence of assignment. However, this was not a feasible option, given changes in the Writing Program's curriculum and staffing prior to the opening of the fall semester. Reductions in staff and the introduction of new curriculum goals complicated the selection process. No three instructors were using the same persuasive writing texts, and none were following the same series of assignments in their courses. As a result, one instructor, "Ms. Stone," was selected for participation, based on her years of experience teaching the course, as well as her impressive teaching record.

As a teaching assistant, Ms. Stone won a graduate teaching award for her work in the Freshman Writing Program at the study site. Having completed her M.A. in 1999, she now teaches four courses per semester as a full-time lecturer. In the fall of 2002, Ms. Stone taught three sections of English 111Z, and one section of English 110, a preparatory writing course. Ms. Stone consistently receives strong student evaluations, and is respected by her colleagues as an accomplished instructor, having taught the departmental Freshman Writing sequence multiple times. She readily agreed to participate in the study, and welcomed me into her

classroom on several occasions to make announcements and distribute information and materials to study participants.

Student Participants

Participants signed up for the study following a presentation made in their English 111 classes by the researcher. Out of 51 students in these classes, 41 signed up for the study. After the instructor sorted interested students into two performance categories, "challenged" and "proficient," interested students were contacted and questioned about their age, status as freshmen, enrollment in English 111Z, and sustained commitment to the project. Of the 41 students who signed up for the study, 15 were selected for participation. The participants were given the option to select pseudonyms for themselves; those students who did not choose an alias were assigned one.

All of the participants were second-generation college students and/or had siblings enrolled in college. Many of the students had family ties to the university, with one or more parents having attended college at the study site; one student, Phil, stated that a building on campus was named after his grandfather. Each of the participants was enrolled as an in-state student. Although some of these students were not originally from this state, having moved to North Carolina at some point during their school years, all except Phil, who had attended a private school, had taken the North Carolina 10th grade Writing Test. Thirteen participants (including all of the writers in the "challenged" category) also indicated that they had taken AP or other advanced English courses, as well. Ten of the participants, including two who had been designated as "challenged" on their initial assessment, indicated that they felt confident about their writing abilities. Several students indicated that they had professional or recreational writing experience. Chris, one of the "challenged" writers, had been on the

staff of his high school newspaper, and Van noted that he had written a number of business communications during his summer internship. Leah, Melanie, and Myron also volunteered that they enjoyed journaling or writing fiction in their spare time, though they engaged in these pastimes sporadically. All except three students indicated that they had been exposed to persuasive writing in the past (one of these students was unsure), during either their high school or middle school years. Thus, the participants' preparation for college English courses, while not identical, had many common elements, including considerable writing experience. Table 4.1 provides a profile of the participating students.

Students in Ms. Stone's course were asked to write six major papers over the course of the semester, each of which dealt with the course's overarching topic, terrorism. One of these essays involved summarizing and responding to Noam Chomsky's *9-11* (2001), and another asked students to evaluate Eqbal Ahmad's *Terrorism: Theirs and Ours* (2001). The other four essays required the use of outside research to support different categories of claims (definition, causal, and proposal). The definition essay was broken into two different assignments, one of which was an in-class essay. The last two assignments of the semester required students to explore one or more causes of a specific terrorist event, and propose a solution to the cause(s). More detailed information about contextual issues will be provided later in the chapter within the discussion of the second research question, which explored the relationship between the writing context and participants' use of reflective judgment in their writing. Appendix 7.6 includes the assignment sheets for each paper.

Table 4.1

Participant Profile

Student	Gender	Race	Initial performance category	Exposure to North Carolina Writing Standards?	Exposure to advanced English courses?	Exposure to persuasive writing?	Confident about writing abilities?
Chris	Male	White	Challenged	Yes	Yes	Yes	Yes
Dawn	Female	White	Challenged	Yes	Yes	Yes	No
Kendra	Female	African-American	Challenged	Yes	Yes	Yes	No
Leah	Female	White	Challenged	Yes	Yes	Yes	Yes
Mike	Male	Asian-American	Challenged	Yes	Yes	Yes	No
Phil	Male	White	Challenged	No	Yes	No	No
Aaron	Male	White	Proficient	Yes	Yes	Yes	Yes
Carrie	Female	White	Proficient	Yes	Yes	Yes	Yes
Jeff	Male	White	Proficient	Yes	Yes	Yes	Yes
Jesse	Male	White	Proficient	Yes	?	Yes	Yes
Melanie	Female	White	Proficient	Yes	Yes	No	Yes
Myron	Male	White	Proficient	Yes	Yes	Yes	Yes
Shawna	Female	White	Proficient	Yes	?	?	Yes
Tony	Male	White	Proficient	Yes	Yes	Yes	No
Van	Male	Asian-American	Proficient	Yes	Yes	Yes	Yes

Question One: In what ways do college freshmen's written arguments reflect the assumptions about knowledge and justification described by their reflective judgment ratings?

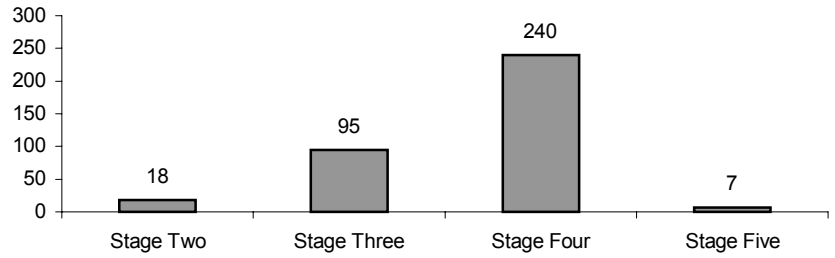
The first question addressed in this study pertained to the similarities and differences between participants' developmental levels of reflective judgment, as measured by the RJI, and the patterns that emerged in their written arguments. To answer this question, the Reflective Judgment Interview (RJI) was conducted with all participants, and the patterns in their essays were examined through the use of a holistic rubric. Participants' position-taking, evidence usage, treatment of their audiences, and rhetorical strategies were examined across reflective judgment groupings. To supplement these analyses, qualitative interviews were conducted, and participants were asked to reflect on their fourth essays. These additional data sources were intended to help ensure the accuracy and dependability of inferences drawn about the relationship between the participants' reflective judgment levels and their rhetorical choices.

Reflective Judgment Scores

The reflective judgment scores assigned to students by the two independent raters ranged from Stage 2 to Stage 5. Figure 4.1 illustrates the distribution of scores for the 60 interview problems completed by participants in the sample. Because each participant completed four interview problems, and each problem was assigned three scores by two independent raters, a total of 360 scores were assigned to participants in the sample.

Figure 4.1

Frequency Distribution of Reflective Judgment Scores for Sample



As this distribution of scores reflects, students in the sample used a variety of reasoning patterns to negotiate the ill-structured problems encountered in their interviews, ranging from the highly dualistic pre-reflective Stage 2 to the criteria-oriented quasi-reflective Stage 5. Scores were clustered in the quasi-reflective Stage 4 and, to a lesser degree, in the pre-reflective Stage 3.

Because RJI means for small samples are less useful than for large samples, and because a single stage score often fails to capture the full "picture" of individuals' reasoning about different kinds of ill-structured problems, King and Kitchener (1994) recommend using the frequency distributions of individuals' scores on all four problems to represent the "wave" of their stage development (p. 265). An examination of these individual frequency distributions revealed that there was considerable overlap between the reflective judgment development of individuals in the sample; that is, most students in the sample used the same kinds of reasoning on the RJI, primarily stages three and four (See Figure 1). These distributions indicate that most of the participants in the sample were engaged in the transition between pre-reflective and quasi-reflective thinking.

There was, however, some degree of variability in these participants' RJI scores. Of the 15 participants, 4 used predominantly pre-reflective (stage 3) thinking, and 11 used predominantly quasi-reflective (stage 4) thinking, with 5 students engaging in some stage 5 thinking. Table 4.2 illustrates the distribution of reflective judgment scores assigned to individual participants.

Table 4.2

Distribution of Individual Reflective Judgment Scores

Participant	Stage Two	Stage Three	Stage Four	Stage Five
Dawn	4	13	7	0
Kendra	2	14	8	0
Phil	4	11	9	0
Jesse	3	10	11	0
Leah	0	8	16	0
Mike	0	8	16	0
Shawna	4	4	16	0
Carrie	0	4	17	3
Van	0	5	18	1
Jeff	0	4	19	1
Tony	0	5	19	0
Melanie	0	3	20	1
Myron	1	3	20	0
Aaron	0	2	22	0
Chris	0	1	22	1

Out of the original 60 problem-transcripts (4 problems per participant), 15 problems (25%) required a second round of scoring, and 6 (10%) required a third round of scoring. After the third round of scoring, all discrepancies between scores were eliminated. King and Kitchener (1994) note that interrater agreement for the RJI is usually calculated for the first round of ratings, because this procedure gives the most conservative estimate; in this case, the level of interrater agreement was .75, which is consistent with the findings of other

studies using this instrument. Cronbach's alpha was used to examine the level of internal consistency of the instrument for participants in this sample, based on the first round of scores. Using this measure, the internal consistency (alpha) of the RJI in this study was .86, and the interproblem correlations ranged from .49 to .79. Again, these results are consistent with the findings of other studies using the RJI.[10]

Participants were contacted via email and informed about their RJI ratings, and what these ratings meant. Only six participants responded to the follow-up email. However, those who responded indicated that these ratings accurately represented their own view of their reasoning patterns. Leah observed that "I find it VERY reflective of what my actual thought processes are" and Aaron claimed that his ratings were "a dead-on hit." In his response, Mike noted that

> Although I am usually skeptical about evaluations such as these, the one that you conducted, to me, seemed like the best way. I feel that your method of allowing me to speak my mind about certain questions allowed you to understand me more.

Patterns Across Reflective Judgment Groupings

To examine the potential association between persuasive writing behaviors and reflective judgment level, participants were grouped according to the reflective judgment stages used most heavily in their interviews, as indicated by the frequency distributions of their scores. The first group included participants with score distributions indicating that

[10] All participants responded to the Pyramids, News Stories, and Creation prompts. However, for their fourth problem, six responded to the Alcoholism prompt, and nine responded to the Chemicals prompt. Chronbach's alpha for the first three problems was .85. The alpha for all four problems among participants responding to the Alcoholism prompt was .92, and .72 for participants responding to the Chemicals prompt. The alpha of .86 reported in the text reflects the weighted average for both groups.

they used predominantly pre-reflective thinking in their interviews, and the second included participants who used predominantly quasi-reflective thinking.

Again, all individuals in each group received some stage three ratings, and all received some Stage 4 ratings. However, due to the fact that they received predominantly pre-reflective ratings on the RJI, participants in Group One may have been more likely to assume that knowledge is certain and that absolute answers exist for most problems. These participants may have been more likely to justify their beliefs as corresponding with an authority's view or, in the absence of clear answers, as personal opinion. King and Kitchener (1994) predict, for individuals who use stage three reasoning, it may be difficult "to make decisions without absolutely certain knowledge and without understanding that belief and evidence are separate entities that must be coordinated in the process of justifying beliefs. To the outsider, such views often appear arbitrary, unjustified, or unstable" (p. 57).

Because the participants in Group Two were rated as using predominantly quasi-reflective (Stage 4) thinking on the RJI, King and Kitchener suggest that these individuals may be better able to recognize that "in some areas knowledge will never be certain. Even though evidence may exist about an issue, it offers no certainty; thus any conclusions must be idiosyncratic" (p. 61). Compared to participants in Group One, participants in Group Two may be better able to differentiate their views from authorities, given that individuals using Stage 4 thinking "often dismiss the views of authorities as biased, assuming that experts evaluate evidence the same way they themselves do, or that experts' opinions are no different from their own" (p. 59). Further, these participants may be more likely to justify their beliefs "by giving reasons and using evidence, but the arguments and choice of evidence [may be] idiosyncratic—for example, choosing evidence that fits an established belief" (p. 61).

The following discussion investigates how these assumptions about knowledge and justification emerged in participants' written arguments by comparing data collected for participants in each group. To determine these participants' attitudes towards writing, previous experience with writing, and awareness of their own rhetorical processes, participants' qualitative interviews were examined across reflective judgment groupings. Next, patterns in participants' position-taking, evidence usage, treatment of their audiences, and rhetorical strategies were examined across the two groups. Finally, participants' self-reflections on their fourth essays were reviewed to ensure the accuracy and dependability of the inferences made about the relationship between participants' reflective judgment stage and writing behaviors.

Group One-Qualitative Interviews

In their qualitative interviews, participants were asked questions involving their beliefs about their writing abilities, their past experiences with writing, their impressions of English 111Z, and their goals for the course. Themes related to the participants' impressions of the course and the instructor will be discussed in response to question two, which dealt with the contextual issues and their influence on participants' use of reflective judgment in their essays; no differences emerged across reflective judgment groupings in terms of participants' perceptions of the course itself.

All participants in Group One indicated that they had done a substantial amount of writing in high school. Participants described these experiences similarly, suggesting that most of them had been taught to write by performing primarily literary analyses: "We did nothing but read books, and then we'd write about the book afterward, on a certain prompt."

Writers in this group described completing between eight and thirteen major papers in their last year of high school.

Overall, Group One participants' qualitative interviews revealed a relatively strong level of knowledge about the writing process, and a sense of awareness about their own rhetorical practices. When explaining how they prepared to write papers in English 111Z, Group One participants described spending a considerable amount of time on various parts of the writing process, especially prewriting. As Dawn noted, during the weeks prior to turning in her first draft for class, "I was just kind of listening to other peoples' opinions, and gathering thoughts." Although she didn't feel confident about her performance on her first paper, Kendra noted that "I was working on that paper at least two or three hours a day this last week, trying to get it."

Three of the four writers in Group One expressed some level of insecurity about their own writing skills. As Kendra exclaimed, "it's my opinion that writing just comes to you, and that you either have it, or you don't. And I don't have it!" At the same time, three of these students claimed that they felt the demands of the class were within their skill range. Although he also claimed that "English is awful," Phil observed that he felt that the writing he was being asked to do in English 111Z was fundamentally similar to the requirements of his high school courses: "Well, I mean, I know how to write a five-paragraph essay. That's all it really is." Similarly, during his qualitative interview, Jesse observed that writing papers for English 111Z was "really the same as high school. It's not too much different," and Dawn, who earned a B- on her first essay, noted that "I've gotten a little more confident, now that I got my B- !"

No clear pattern emerged in terms of the types of academic writing Group One participants preferred. Dawn indicated that she liked assembling research papers: " I actually enjoy doing research papers, only I don't know why! I just do! I like doing the research; it's fun." However, the other students suggested that they preferred to avoid writing analyses of other texts. For example, Jesse indicated that he only enjoyed writing about "something that's in the front of my mind. Not something that doesn't apply to me. I don't really like writing too much about symbolism and all that stuff." Phil stressed that he disliked having to interpret texts or compile research in an essay, and stated that his preferred genre of academic writing would be "book reports…because it's a summary."

Interestingly, the participants in Group One tended to ascribe their successes or failures in writing to the help (or lack thereof) of outside authorities. For example, when Phil was asked if he'd ever written a paper he was proud of, he responded that he had written a strong paper in his 9th grade English class, due to "the teacher. I liked my freshman teacher a lot—and then it just sort of went downhill from there. I didn't have a very good sophomore teacher, or I guess, junior." These participants also expressed some consternation over some of the differences between their college instructor's expectations, and the expectations of teachers in their high schools. Dawn remarked that what Ms. Stone had taught them about writing in English 111Z "for the most part, is completely opposite of what we're taught in high school." The participants in Group One appeared to view the criteria that they used to shape their writing as largely externally-imposed, a perception that seemed to cause them some degree of frustration.

In discussing their personal goals for the course, Group One students differed in their aspirations. Two students viewed the course as an opportunity to pick up basic studying and

writing skills; Dawn claimed that she hoped to gain "time management" skills and "confidence in my writing" from English 111Z, and Phil simply hoped to be able to learn "how to write a better paper." However, Kendra and Jesse also looked forward to learning better argumentation skills, specifically. Jesse, in particular, referenced his goal of being able "to give my opinion, and display facts on why I believe my opinion—not just state my opinion. Back it up with facts and details, things like that."

Group Two-Qualitative Interviews

Like the participants in Group One, participants in Group Two indicated that they had done a substantial amount of writing in high school. Recalling her experiences in high school, Leah said, "We'd have to write an essay, my freshman year, almost either once a week or once every day. Then in AP, it was every day. And my sophomore year, it was a different one each week. But man, it was a lot of writing." Similarly, Mike observed, "we did a lot of in-class essays. And basically the whole year was just learning how to write and read books and write essays on it. So we did a whole lot of writing." Like the writers in Group One, Group Two writers seemed to have written mostly literary analyses in high school. Overall, the participants in Group Two described their training in very similar ways. As Chris noted,

> Probably, freshman and sophomore year, everything was geared towards…I'll just come out and say it—we were basically forced to write 5-paragraph papers for the North Carolina State writing test, where basically it's…you've have an introduction with a thesis statement that says exactly what you're going to do, and that's exactly what you say in the body of your paper.

Six participants in Group Two mentioned writing research papers as a memorable—if not enjoyable—part of their high school experiences. Participants seemed to view the process of creating research papers similarly, in that each described past research efforts as involving essentially deductive processes. As Melanie noted, "I've done many research papers throughout the years…It's mostly going by facts, and proving which opinion you choose." As Jeff observed, doing research involved procuring "additional information to back up how I feel."

The responses of Group Two students also suggested that they brought a significant level of knowledge about writing and their own rhetorical processes to English 111Z. As Shawna commented, "I get distracted easily. So I'll sit there and write a little while, and then I'll go do something else, and then I'll come back and write a little." Van noted that when writing "a draft…it's impossible for me to just sit down at one sitting and do it." These writers seemed familiar with the concept of revision, and were making attempts to revise their work for English 111Z. Recalling his work on his first paper, Mike estimated that "I think I revised, like, almost the whole essay." Describing his personal writing processes, Chris said, "Basically what I'll do is I'll go in and sit down, and I'll just type out something, let it sit for a day, let everything rest. I'll go back, and rework it, I'll go through the grammatical things—and it will progressively take less time."

Overall, writers in this group seemed more confident about their writing abilities than Group One participants, though the range of confidence levels was considerable. None of the writers in the group described English as his/her best subject. Mike, who was born in Vietnam noted that, for him, "Writing has always been something that's really difficult." Tony, one of the writers in the group who described himself as lacking confidence in his

writing, noted that "I mean, I can keep up. I can get the job done, but it won't be perfect, or as good as somebody else could do." Citing greater interest in other subjects, Carrie said, "I think overall, English [111Z] would be a lot easier for me if I put more work into it." Although Myron described himself as essentially disconnected from the kinds of writing he was asked to do in high school, observing that "I didn't put very much thought into the research papers. It was pretty much a one-day thing," he insisted that he was very familiar with

> the stuff that we've been taught since like middle school—thesis statements, and transitions, and topic sentences, and restating your thesis in the conclusion. I mean, it seems like I've heard that so many times, I just—every time I hear it now, it's like Clockwork Orange. You hear Beethoven, you just freak out.

Like Myron, most students in Group Two indicated that they felt confident enough about their writing abilities to have little concern about passing English 111Z. As Shawna noted, "I usually have to wait until the last minute to get anything to come out of my head. But I think I can usually do pretty good."

Compared to writers in Group One, writers in Group Two identified different preferences, in terms of the kinds of required assignments they would rather complete. The students who preferred writing in a particular academic genre seemed to favor essays that involved defending a point of view. For example, Van stated that the best assignments were "more open-ended, 'prove *your* point,' as Ms. Stone is having us do now. And I enjoyed that sort of writing more than 'examine this point of view, and report on that,' or summary." Although Tony observed that "Personally, I'd probably prefer not to write," he identified research papers as his preferred trope, because he would "be able to find information and

incorporate that into my paper." Similarly, Chris observed that "I guess, early on I established a mindset of writing from a journalistic point of view, writing from a fact-analysis point of view, just because really for me, it was the easiest way to write."

Like the students in Group One, many of the writers in Group Two emphasized the role that authorities played in their writing products. As Jeff noted, "I've learned in class that you do have to write to the teacher." However, students in this group did not express the same level of frustration expressed by participants in Group One over the different expectations different instructors may have; rather these students appeared to accept these differences as a fact of life. As Leah observed, "Every teacher has a different style that you have to pick up."

Overall, the Group Two participants' goals for the course seemed very similar to the goals mentioned by participants in Group One. Some students, like Melanie, were looking forward to learning "Mostly just good writing skills, because I'll probably be writing research papers for other classes that aren't about writing, so the teacher is not going to be trying to fix that—they're just going to be expecting a good paper, that you already know how to write." However, other students, like Mike, anticipated learning specific persuasive techniques: "I just hope I can be a better person at, like, arguing and convincing people why they should see it my way."

Holistic Ratings

Holistic ratings for the essays were based on a rubric that used King and Kitchener's (1994) model of reflective judgment as the basis for evaluating participants' position-taking, evidence-usage, treatment of objections, and rhetorical strategies. (Appendix 7.4 contains a copy of this rubric). The rubric, which provided a means of describing and tallying specific

characteristics of essays in the sample, was constructed and revised with the assistance of another individual who was certified to administer and score the RJI. After he rated a 10% sample of the essays, changes were made to the rubric to ensure more consistent ratings, and I rated the remaining 90%. Each of the essays was rated before the participants' reflective judgment scores were made available, so that knowledge of the RJI ratings would not influence any conclusions about the participants' essays.

Appendix 7.7 includes an example of an essay that was rated as having predominantly pre-reflective characteristics, one that was rated as using predominantly quasi-reflective characteristics, one that appeared to have a balance of pre and quasi-reflective characteristics, and the evaluative rubrics used to make these assessments.[11] In each essay, the writer was attempting to generate and support a definition of terrorism. In the essay rated as having predominantly pre-reflective characteristics, the writer lifted his definition from the *American Heritage Dictionary.* His first sentence indicated that generating a definition of terrorism might be inherently difficult: "Terrorism is a term that many experts have spent a large part of their life trying to define." However, the writer ultimately treated the conflict as closed, and essentially solved by the existence of a dictionary definition. Within his argument, he adopted a one-sided position, did not recognize exceptions or objections to his claims, and did not seem to acknowledge the difference between claims, evidence, and evaluations of evidence; he tended to treat his sources as having the "last word" on the debate. The writer did not use non-controversial examples to support his definition of

[11] Each of the essays in the appendix was written for the mid-term exam. Essays in Appendix 7.7 are typed versions of participants' hand-written essays with the original surface features (e.g., spelling and punctuation) left intact.

terrorism, as the assignment required, but instead quoted from class texts to show that his definition was legitimate.

In the essay rated as having predominantly quasi-reflective characteristics, the writer appeared to acknowledge the fundamental difficulty of getting people to agree with a single definition, and conceded that her view may not be acceptable to everyone: "I would like to provide my own definition, agreeing that it may or may not be found in conjunction with so many others." Throughout the essay, the writer appeared to be using her own ideas, and supporting them with evidence from outside sources, though she too appeared to view her evidence as "fact." Although she did not offer evidence for an alternative view, the writer explicitly addressed her conditions of rebuttal, noting that "some will not agree with the [definition] I have provided…Someone will always disagree."

In the essay rated as using a balance of pre and quasi-reflective characteristics, the writer seemed to have some sense of the ill-structured nature of the conflict, at least before he began his argument:

> In a world of spin and manipulation words can sometimes hold several meanings. Terrorism is one of these words. Lacking a universally accepted definition it has become a word that can be spun to mean good or evil. The definition I am offering is based from other writers and diplomates point of view which I gathered through research.

However, later on, the writer's view of the problem seems less complex, less aware of the inherent difficulties of arriving at a single definition: "The U.S. Supreme Court can decide when and when not terrorism is unlawful or unjustifiable." As his last sentence suggested, the writer felt that he had solved the problem, has "proven" his case: "My definition should

be considered a valid universal definition." Additionally, when wrestling with the fact that some people would consider the assertion that the U.S. is a terrorist state, the writer's position seemed arbitrary: "If you immediately brand terrorism as unlawful people are less likely to accept the common definition because they know the U.S. is responsible for some form of terrorism and to be thought a crimanal [sic] without due process admits guilt and doesn't seem fair." Although the writer offered non-controversial examples for some elements of his definition, and seemed to have a critical perspective on one of his sources' statements, he also adopted an uncritical stance with respect to some statements made by other sources.

The following discussion focuses on holistic ratings across reflective judgment groupings, in order to illustrate the degree of correspondence between participants' reflective judgment levels, as measured by the RJI, and the assumptions about knowledge and justification that appeared in their essays.

Group one: Holistic ratings.

Of the 24 papers written by students in Group One, 21 (88%) received predominantly pre-reflective holistic ratings. Five of the essays rated as predominantly pre-reflective were rated as having some quasi-reflective characteristics. The remaining three (13%) essays were rated as using pre- and quasi-reflective thinking about equally. Table 4.3 shows the ratings assigned to the essays written by students in this group.

Table 4.3

Holistic Ratings of Group One Essays

Group One Participant	Paper 1 Summary/ Response	Paper 2 Evaluation	Paper 3 Definition	Paper 4 Definition	Paper 5 Causal	Paper 6 Proposal
Dawn	Pre	Pre	Pre	Pre & Quasi Balance	Pre & Quasi Balance	Pre *(& Quasi)*
Kendra	Pre	Pre	Pre	Pre	Pre	Pre *(& Quasi)*
Phil	Pre	Pre	Pre	Pre	Pre	Pre *(& Quasi)*
Jesse	Pre	Pre	Pre	Pre *(& Quasi)*	Pre & Quasi Balance	Pre *(& Quasi)*

Group two: Holistic ratings.

Participants in Group Two manifested many of the same writing behaviors as participants in Group One, in that they tended to generate one-sided arguments, use questionable evidence, experience some difficulty in differentiating their views from the views of authorities, and take a limited view of the possible objections a skeptical audience might raise. However, there were also some intriguing differences in the consistency of these patterns across each case; students in Group Two appeared to use a wider range of strategies for generating and sustaining their arguments. Overall, 37 (57%) of the 65 papers written by participants in this group received predominantly pre-reflective holistic ratings. However, 16 (23%) were judged to have a balance of pre- and quasi-reflective characteristics, and 12 (20%) were assigned predominantly quasi-reflective ratings. Table 4.4 illustrates the holistic ratings assigned to papers written by students in this group.

Table 4.4

Holistic ratings of Group Two Essays

Group Two Participant	Paper 1 Summary/ Response	Paper 2 Evaluation	Paper 3 Definition	Paper 4 Definition	Paper 5 Causal	Paper 6 Proposal
Leah	Pre	Pre *(& Quasi)*	Pre *(& Quasi)*	Pre *(& Quasi)*	Quasi *(& Pre)*	Pre & Quasi Balance
Mike	Quasi	Quasi	Quasi (& Pre)	Pre *(& Quasi)*	Pre & Quasi Balance	Pre *(& Quasi)*
Shawna	Quasi	Pre	Pre	Pre & Quasi Balance	Missing Data	Pre *(& Quasi)*
Carrie	Pre	Pre	Pre	Pre & Quasi Balance	Quasi	Pre *(& Quasi)*
Van	Pre	Pre & Quasi Balance	Pre	Pre	Pre & Quasi Balance	Pre & Quasi Balance
Jeff	Pre & Quasi Balance	Quasi *(& Pre)*	Pre	Pre	Pre	Pre & Quasi Balance
Tony	Pre	Quasi *(& Pre)*	Pre	Pre & Quasi Balance	Quasi	Pre
Melanie	Pre	Pre	Quasi (& Pre)	Pre & Quasi Balance	Pre *(& Quasi)*	Pre
Myron	Pre	Pre *(& Quasi)*	Pre	Pre & Quasi Balance	Pre & Quasi Balance	Pre
Aaron	Pre *(& Quasi)*	Quasi *(& Pre)*	Pre & Quasi Balance	Pre *(& Quasi)*	Pre & Quasi Balance	Pre & Quasi Balance
Chris	Pre *(& Quasi)*	Pre *(& Quasi)*	Pre	Pre	Quasi	Pre *(& Quasi)*

Patterns in Student Papers

To examine the specific characteristics of essays written by students who were rated as using different levels of reflective judgment, patterns in position-taking, evidence-usage, treatment of objections, and rhetorical strategies were examined for each group. Table 4.5 compares the characteristics of papers written by participants in each group, as well as the number of writers in each group who wrote at least one essay that had these characteristics.

Table 4.5

Paper Characteristics

Characteristic	Number of Papers With Characteristic		Number of Writers With Characteristic in *at least one* Essay	
	Group One	Group Two	Group One	Group Two
One-sided	22/24 (92%)	43/65 (66%)	4/4	11/11
Balanced	2/24 (8%)	18/65 (28%)	2/4	10/11
Integrated	0/24 (0%)	4/65 (6%)	0/4	4/11
Differentiated view from view of authorities	2/24 (8%)	25/65 (38%)	2/4	10/11
Recognized ill-structured nature of conflict	5/24 (21%)	26/65 (40%)	3/4	11/11
Provided evidence for major claims	20/24 (83%)	58/65 (89%)	4/4	11/11
Used Credible Evidence Within Context of the Assignment	12/12 (24%)	52/65 (80%)	4/4	11/11
Used evidence critically	1/24 (4%)	5/65 (8%)	1/4	5/11
Acknowledged existence of objection(s)	11/24 (46%)	51/65 (78%)	4/4	11/11
Responded to Objection(s)	4/24 (17%)	25/65 (38%)	3/4	10/11
Conceded Objection(s)	1/24 (4%)	14/65 (22%)	1/4	7/11
Used logic to connect claims and reasons	11/24 (46%)	43/65 (66%)	4/4	11/11
Used Pathetic Appeals	13/24 (54%)	35/65 (65%)	4/4	10/11
Used Ethical Appeals	14/24 (58%)	53/65 (82%)	4/4	11/11
Used Qualifiers	2/24 (8%)	17/65 (26%)	2/4	8/11

The following discussion reports the results of these examinations for each group, describing how these characteristics were manifested in individual participants' essays by citing examples from their arguments.

Position-taking: Group one.

The way in which the writers in Group One adopted and supported positions appeared fairly stable across the sample. Of the 24 essays written by participants in this group, 22 (92%) were rated as having essentially one-sided positions, presenting evidence for only one view within their arguments.

Additionally, writers in Group One tended to build their positions by identifying with authorities in uncritical ways; these writers appeared to view their sources as incontrovertible, and failed to differentiate their views from those of the authorities they cited in many cases. Of the 24 essays produced by writers in this group, 22 (92%) appeared to rely on uncritical identification with the views of authorities, especially Chomsky and Ahmad, whose texts were used as class readings. For example, in her second paper, Dawn claimed that "Ahmad's essay is objective in the fact that he does not hold an opinion for either side," despite the fact that Ahmad's essay was in fact highly—and openly—critical of U.S. foreign policy and actions in the Middle East. Many writers in the sample tended to simply reiterate their sources' views, instead of responding to them. In his first paper, which required students to respond to Chomsky's views, Jesse's approach typified the response of students in Group One. After repeating Chomsky's views in the "response" section of his essay, Jesse continues to reiterate Chomsky's views in his own words, apparently without recognizing that the author was making an *argument*: "Chomsky uses these historical events to explain American intervention, America's ideas of political correctness, as well as to help the reader understand possibilities [about] why the terrorist attacks occurred." Here, Jesse seemed to assume that Chomsky, an authority, fulfilled a benign explanatory function, and like Dawn, he did not view this authority's arguments as open to questioning.

In generating their positions, the writers in Group One typically failed to recognize the ill-structured nature of the dilemmas they encountered in their assignments, judging from their response to these assignments. Of the 24 essays written by students in this group, 19 (79%) did not acknowledge or address the ill-structured nature of the rhetorical situation in any way. In other words, these writers tended to view the conflicts they addressed in their essays as already closed or as easily resolvable. In many cases, the writers did not seem to recognize that the assignments necessitated a response to a *conflict*; their responses implied that no conflict existed, and that their arguments should be treated as fact. Interestingly, in his fifth essay, Phil noted that "many have tried and failed to come up with an adequate explanation for the root causes of the 9/11 attacks. The truth is, there are many reasons for the endless mortal enmity felt toward the West by a significant chunk of the Islamic world," a view that would seem to indicate a more complex view of the conflict. However, this quote was lifted verbatim from one of his source—unaccompanied by a citation—which problematizes any attempt to characterize his view as truly attuned to the ill-structured nature of the problem. Jesse's claim about his ability to solve the mystery surrounding the Columbine school shootings reflects his sense that this conflict involves essentially "knowable" issues: "I think that I can provide the answers to 'why' the boys committed the crime that they did, and why it was their faults, but not just theirs, but the faults of the average lifestyle that we all live everyday." Phil's approach to the definition argument required in Paper 3 was representative of writers in this group:

> The definition of terrorism has long been disputed. And for a long time was very vague up until now. Terrorism is "the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population or

any segment thereof, in furtherance of political or social objectives" (Terrorism Files 1).

Although the assignment asked students to generate their own definitions due to the inadequacy of existing definitions, these writers tended to use definitions articulated by other sources, and treat them as inherently sufficient, effectively shutting down the possibility of alternative responses to their arguments. Another common approach used by these students was the selection of topics that were inherently non-controversial. For example, rather than address the *causes* of the 9/11 attacks in her fifth paper, Kendra chose to focus on the *effects* of the attacks—a much less controversial issue which allowed her to fulfill the terms of the assignment, while side-stepping the need to address the complexities of the rhetorical dilemma.

Position-taking: Group two.

Like the participants in Group One, Group Two writers tended to use relatively uncomplicated approaches in their position-taking in at least some of their essays. Of the 65 essays written by students in Group Two, 43 (66%) appeared to adopt an essentially one-sided position, providing evidence for only one view; this pattern occurred in at least two of the essays written by each of the 11 participants. However, 18 (28%) of these essays used a balanced position, in that the writers presented evidence for more than one view; 10 of the 11 writers in this group used a balanced position in at least one of their essays. For example, in Jeff's first essay, he spent the majority of his argument building his case against Chomsky's claims; however, he devoted a long paragraph to the discussion of Chomsky's reasons for his argument, and evidence suggesting Chomsky's view is right. Additionally, four essays (6%) appeared to develop positions built upon a synthesis of views by using

criteria to construct a judgment. An example of this pattern occurred in Carrie's fifth essay, in which she explored multiple potential causes of the 9/11 attacks on the U.S., but suggested that the American presence in Saudi Arabia is the "main reason," because the direct links between this cause and the attack can be established more clearly. No writers in Group One used this strategy to develop their positions.

As did the writers in Group One, many of the writers in Group Two built their positions upon an uncritical identification with the views of authorities. Overall, this tendency occurred in 62% of essays. This pattern was most apparent in the first two essays in the sequence, which required students to respond to a text, but did not require them to use outside sources to construct their responses. Of the 22 essays written to fulfill the first two assignments, only six included a clear distinction between the writer's view, and the views of Chomsky or Ahmad. Group Two participants tended to adopt the same views as their sources, even when they felt some discomfort with the views of those sources. For example, in her first essay, Leah noted that she "was not thrilled with [Chomsky's] lack of sympathy to the thousands of innocent Americans" who died on 9/11/02. However, she went on to respond to Chomsky's argument by reiterating his own views: "The United States was wrong in its doing. Not to forget the incident in Beirut and in Turkey that killed millions more ([Chomsky] 49)." Similarly, in Melanie's first essay, she noted that Chomsky's "response is found in agreement with my own thoughts," but later suggested that her own view was *formed* by reading Chomsky.

However, in 25 of the 65 essays (38%), Group Two writers clearly differentiated their view from an authority's (e.g., their sources' views), and 10 of the 11 writers in this group manifested this ability in at least one paper during the semester. For example, in Aaron's

second essay, he took issue with Ahmad's argument, contending that his view is "oversimplified, and his reasons for terrorism are unrealistic justifications based on slandered history." This represented a qualitatively different approach than that used by any of the participants in Group One; though Group One students may have disagreed with an authority, they were did not treat the views of Chomsky, Ahmad, or other outside sources as anything but factual.

Participants in Group Two, like those in Group One, appeared to have some difficulty recognizing or responding to the ill-structured nature of the conflicts addressed in their essays. Like their counterparts in Group One, participants in this group tended to ignore or circumvent the rhetorical and epistemological complexities implied in their assignments. Group Two students often presented their claims as all-sufficient, or sidestepped controversial issues, as Van did in his fourth essay, which argued that an attack on a train carrying Hindus—an event widely accepted as terrorism—fulfilled the criteria for his definition of terrorism. In addressing actual conflicts, some of the positions adopted by writers in Group Two seemed to use highly pre-reflective thinking, as did Tony's claim in Paper 1: "You should always believe your government because in most cases they know more about what's going on in the world than the common person does."

However, more students in Group Two acknowledged the complexity of bringing closure to these conflicts; in 26 of 65 cases (40%), Group Two participants indicated that they had some knowledge of the uncertainties involved in solving the problems addressed in their arguments, resisting the tendency to make "all or nothing" judgments, or allowing for the possibility of some doubt, with respect to their own positions. This knowledge was reflected in statements like one made in Melanie's third paper: "Terrorism is a working term

used daily by so many different people in so many different ways that no one definition can be one hundred per cent accurate. Someone will always disagree." More writers in this group generated positions that paid some degree of attention to the difficulty of "knowing for sure," as Mike did in his sixth paper: "There is no real resolution to bin Laden's madness even if we do can capture him. …I have no resolution for the matter at hand." Although they were not consistent in doing so, each of the 11 writers in this group explicitly acknowledged the ill-structured nature of the problems they addressed in at least two of their essays written for English 111Z.

Evidence: Group one.

All writers in Group One used evidence to support some of their major claims. Additionally, 20 (83%) of the 24 essays written by students in this group used at least some evidence to support some of the major points in their arguments. However, the use of evidence by students in Group One tended to be questionable in several respects.

Even though all participants in Group One used examples or material from outside sources as evidence in all of their essays, they tended to have some trouble recognizing where additional support was needed, and sometimes used evidence to support non-essential propositions, rather than major claims, a pattern that resulted in frequent generalizations. For example, in his sixth paper, a proposal to allow the CIA to collect intelligence without having to use warrants, or show probable cause, Phil cited seven sources, only two of which were used to support major points in his argument. As a result, important sections of his argument were left unsupported, except through additional generalizations: "If you look at the horror and tragedy it could prevent, you will see that this operation is a very crucial one. War cost

billions of dollars and hundreds of lives…We must allow the United States to watch and listen in on any one they feel is a threat to American lives."

Furthermore, 12 (50%) of the 24 essays written by Group One participants used questionable evidence, in that the credibility of their sources was unclear or doubtful. For example, Kendra cited her sister, a high school student, as a source in her fifth essay, which discusses the effects of the World Trade Center attacks on New York City. Similarly, in her fourth paper, Dawn cited the Nuremburg Files, an online list of abortion providers maintained by a violently anti-abortion group, as a "neutral" source. Each of these students tended to use source material that was out of date and/or inappropriate for the context of the assignment in at least two of the six essays they wrote for class.

Additionally, Group One writers appeared to have some difficulty in assembling their evidence critically, instead assuming that their evidence was indisputable. In 23 (96%) of 24 cases, the writers in this group indicated that the evidence they were using or were responding to was essentially "true" or factual. In Jesse's second paper, the only essay a writer in Group One produced that questioned the validity of a source, the writer did not take issue with Ahmad's *claims* so much as he criticized the author himself through some comments that border on ad hominem attacks: "An opinion is formed of Eqbal Ahmad as a person who promotes terror because of the way he takes up for other terrorists." However, this writer never actually critiques Ahmad's views. His statement, "Many of the facts written in the essay are controversial," implied his stance throughout the essay; though Jesse did not agree with all Ahmad's claims, he had trouble treating them as anything but *fact.*

Evidence: Group two.

All Group Two participants, like their counterparts in Group One, used some form of evidence in each of their essays. Like Group One participants, Group Two writers appeared to have some problems in discerning when to use evidence, what kind of evidence to use, and how to use it critically. Of the 11 writers in Group Two, six used evidence in their essays to support minor propositions, but failed to use it to support their major claims in at least one assignment. For example, in his fifth essay, Chris's major claim was that "Poverty is not a root cause of terrorism; it is the idea of intellectual property rights that is the root cause of the September 11 attack," and he went on to use six outside sources in his essay—but without using them to support this central claim. Still, most of the essays produced by writers in Group Two included at least some evidence to support some of the major claims; only 7 of 65 essays (11%) did not.

Most of the evidence used in essays written by Group Two participants seemed credible; in 52 of the 65 essays (80%), writers appeared to use trustworthy information to support their claims. Compared to writers in Group One, these participants appeared more discerning in their use of outside information and examples. Nevertheless, of the 11 writers in Group Two, 9 used questionable examples or materials from outside sources in at least one essay. Like the writers in Group One, most Group Two participants experienced at least some difficulty in discerning what kinds of information would help them build their cases. For example, in her fourth essay, which argued that abortion clinic bombings are *not* terroristic, Shawna cited heavily from an anti-abortion website. Other students had some difficulty in judging what kinds of evidence would be appropriate in an academic setting. For instance, in his first essay, Jeff used some quotations from Chomsky to illustrate his

conditions of rebuttal, but used some very dubious evidence—including a quotation from John Travolta in *Swordfish*—in the body of his essay to support his own point of view. While most of the students in Group Two appeared to have done substantial research for several of their papers, they were not always consistent in selecting relevant or high quality materials to use as evidence. An example of this pattern is found in Mike's fourth essay, which argued that the Reign of Terror during the French Revolution was a terrorist event, cited material from the State Department website, as well as from HistoryWiz, a website with dubious academic credibility.

Like the participants in Group One, Group Two writers appeared to have difficulty in assembling their evidence critically, treating the evidence they incorporated or responded to as essentially "fact." In 60 of 65 cases (92%), the writers in Group Two indicated that the evidence they were using or were responding to was "true," and this pattern occurred for each of the writers in the group in four or more of their essays. For example, in his evaluation of Ahmad's essay in Paper 2, Myron suggested that Ahmad's views would be more appropriate for both a pre and post 9/11 audiences. However, during his evaluation argument, the writer seemed to assume that Ahmad's views were inherently true, and did not seem to view Ahmad as making an argument himself, paraphrasing his essay when he was intending to evaluate it, and apparently conflating Ahmad's argument with his own: "Ahmad gives examples such as Pakistan and Columbia, two countries with large amounts of drug trafficking as well as large amounts of terrorism (18). If the drug problems in these areas could be reduced, then terrorism could indirectly be lessened."

Still, 5 of the 11 writers in this group did treat their evidence critically in at least one of the essays they wrote for English 111Z. Additionally, the ways in which some of these

writers used evidence suggested a more complicated view of the relationship between evidence and conclusions. For example, in Leah's sixth paper, which argued that violent video games led to the Columbine High School shootings, the page reference for one of the quotations Leah used as evidence for her view was the same as one of the page references for a quote supporting the main argument in her fifth paper—in which Leah claimed that video games *were not* to blame for the shootings. Similarly, in his second essay, Tony appeared to be attempting to view Ahmad's argument from the position of a general American audience, which resulted in a simultaneous exploration of Ahmad's argument as both true and *not* true. Though the subjective treatment of evidence by members of this group did not always result in strengthening the participants' arguments, it may point to the emergence of an interpretive view of evidence at the quasi-reflective stage.

Treatment of objections: Group one.

The ways in which Group One writers characterized and responded to potential objections were strikingly similar. For the most part, writers in Group One did not address their conditions of rebuttal in a sustained way. In 11 (46%) of 24 cases, these writers made no mention of alternative views, or objections to their claims. In the essays that did make some mention of potential objections, the writers tended to relegate these discussions to their introductions, as a means of setting up their thesis, as Kendra did in her sixth paper, which proposed that the U.S. adopt a policy of isolationism to avoid terrorist attacks: "Though the expansions of American interest, power, and technological advances makes isolationism impossible for the United States, I have come up with a proposal that will prevent further occurrence of terrorism in America." Like Kendra, Group One writers tended to allude to potential counterarguments against their cases, but rarely developed their discussion of these

objections beyond one sentence (or in the case of Kendra's sixth paper, one subordinate clause).

When Group One writers did acknowledge objections, they tended to do so in a dismissive fashion, as Phil did in Paper 1, in his statement that Chomsky's views on terrorism "may not sit well with the closed-minded American patriot." In only five essays (21%) did the students in Group One elaborate on the reasons why some readers might object to their arguments. Only one of these essays included a concession of a contested point.

In some cases, Group One participants indicated that there might be some disagreement about their claims, but tended to make a number of problematic assumptions about their audience's reasons for disagreeing with their claims, or the claims of their sources. For example, in her second paper, Dawn indicated that the only reason why skeptics might disagree with Chomsky was based on their inability to move beyond the biases developed in their early education: "People like to think that we are supposed to be superior because they have grown up knowing that other countries get attacked and not us." Similarly, Jesse argued in his second paper that, prior to 9/11/01, audiences wouldn't understand Ahmad's claims because they had no way of verifying them personally: "there is no way that we as a pre 9/11 audience could possibly understand Ahmad's book, Terrorism: Theirs and Ours…because we hadn't been in the situation before where these things applied to us."

Treatment of objections: Group two.

Compared to writers in Group One, Group Two participants seemed more consistent in their ability to recognize different ways of looking at the conflicts they addressed in their essays. Of the 65 essays written by Group Two participants, 51 (78%) acknowledged

possible objections or alternative views in some way. Although in the majority of cases, this acknowledgment was made in one or two sentences, all participants in Group Two made some mention of the way that other readers might view their arguments, in at least two of the essays they wrote for English 111Z, and three students mentioned alternative views in all their essays.

Though all Group Two writers made some mention of possible objections in two or more of their essays, they were not always systematic in their response to these objections. Ten writers in Group Two rebutted objections in 25 (38%) of their essays, and seven writers conceded contested points in 14 (22%) essays. However, in at least two essays, each of these writers simply alluded to alternative views, and did not take them up in any sustained way; this pattern occurred in 26 (40%) of 65 cases for this group. When these writers did respond to objections, they often did so in ways that seemed erratic. For example, in Leah's sixth paper, which proposes banning the sale of violent video games to minors in order to prevent violent outbreaks like the Columbine High shootings, the writer considers a number of alternative solutions, and rejects them as less viable/effective. However, the writer tends to ignore a number of major objections to her case, including the perspective that *she herself* maintained in her fifth paper, which argued that social stereotyping was the major cause of the Columbine massacre.

In general, Group One and Group Two writers seemed to hold many of the same pre-reflective assumptions about the reasons why an audience might disagree with their views. For example, in Aaron's first essay, he takes issue with Chomsky's views, criticizing Chomsky as biased, and referring to his arguments as "Chomsky's liberal bureaucratic pacifist rhetoric; in the 60's he would have been called a hippy." Similarly, in Carrie's

second essay, she seems to assume that not having direct experience with the topics Ahmad covers would represent the source of disagreement: "How are we…to fully appreciate an argument based on a subject foreign to our personal experiences?" Melanie's discussion of alternative views in her fifth essay is typical of the approach taken by students in Group Two, in that she assumes people would only disagree with her argument about the CIA as the cause of terrorism in Nicaragua because they are uninformed about the CIA's role: "it only goes to prove that the people of the U.S. are very unaware of all that their government does."

However, the Group Two writers who made concessions appeared to be using some Stage Four thinking, insofar as they seemed to be relying on fairly idiosyncratic thinking to sustain their positions, but also felt compelled to recognize arguments that were probably stronger than their own. An example of this pattern occurred in Jeff's first essay, which devotes an entire paragraph to his conditions of rebuttal. After disagreeing with several of Chomsky's main arguments, Jeff observed that

> There is no specific right and wrong answer to any of these events, and everyone is entitled to their own view…Many people feel that war is against human rights whereas I think that the best shall prevail in survival of the fittest. There are many ways to look at one subject and no one person is right or wrong, but everyone does have their own opinion on each topic.

In his next paragraph, Jeff goes on to reiterate his views, without referencing his reasons for maintaining his position in the face of reasonable opposition.

Rhetorical Features: Group one.

Four rhetorical features of participants' essays were investigated during these analyses, including the participants' uses of *pathos*, *ethos*, *logos*, and qualifiers. The results

of these analyses indicated that these writers tended to be inconsistent in their uses of *pathos* and *ethos*. In 13 (54%) of 24 cases, these writers used some form of implicit or explicit pathetic appeal, and in 14 (58%) of 24 cases these writers used ethical appeals to build their credibility. Interestingly, in six of the cases in which these participants used pathetic appeals, they did *not* make an effort to build or sustain an ethical persona, and in six of the cases in which these participants attempted to build an ethical persona, they tended to avoid making pathetic appeals—or in some cases, made comments that could alienate their audiences. For example, in his second essay, Jesse appealed to his audience through emotionally-loaded images related to 9/11: "Extreme feelings of sorrow and unbelief are still a dark cloud that hangs over our country." However, he went on to make some ad hominem attacks against Ahmad, implying that he is a promoter of terrorism—which tended to undermine his own ethos. Conversely, in Kendra's second essay, she attempted to build a credible persona by drawing a number of parallels between Ahmad's warnings about terrorism and the Bible, specifically the Ten Commandments. In doing so, however, this writer made a number of problematic assumptions about her audience's values and beliefs, and may have alienated her audience through statements such as "To ask bluntly, why would one read a Bible in hell[;] it could have helped you before, but it does little good for one now." In general, these writers tended to make implicit appeals to their American audiences and establish a bond with them by referring to the U.S. by the first person plural ("us"/"we"), but often had difficulty controlling their tone, which had a damaging effect on their arguments. For example, in her first essay, Dawn argued that Americans needed to move past the 9/11 tragedy: "We cannot replace the people that were lost but we can remember them in memorials and pictures.

People die everyday. It is something that would have had to of been dealt with sooner or later."

The way these writers managed issues of *logos* was somewhat more consistent, in that each of the writers in this group attempted to build arguments based on facts and reasons; all the writers in this group used at least some evidence in each of their essays, though not always in support of their major claims. An examination of the logical value of their arguments, however, revealed that these writers had some problems in using logic to link their claims, reasons, and evidence. Of the 24 essays written by writers in Group One, only 11 (46%) appeared to be free from major logical fallacies. Five of these essays used problematic logic, but were not rated as substantially hampered by logical fallacies.

Problems with logic were particularly noticeable in the first two papers, which asked students to respond to or evaluate a text. The requirements of these papers—especially the fact that students were not asked to use outside sources to help bolster their critiques—seemed to open the door for the use of circular reasoning. In using Chomsky and Ahmad's texts to back their assessments of these texts, students tended to assume that these writers' premises were "true," as Jesse did in his discussion of Chomsky's text in Paper 1:

> Another point that I thought seemed rather note worthy was that Chomsky thought that the media was exploiting things that shouldn't be said, while keeping secret the facts that would leave America feeling down-trodden. There are the examples such as the air-drops of food rations, blankets, medical supplies, and bedding that U.S. forces have sent to Afghanistan. This assistance gives Americans the impression we are lending a helping hand.

The "examples" supporting Chomsky's point that Jesse discusses here were actually found in Chomsky's text; the writer is using Chomsky's text to support his reaction to the text, which results in a circular reasoning pattern, that " X is true because of X."

However, problems with logic also occurred in essays written later in the semester. For example, the fourth assignment required writers to use criteria for their definition of terrorism established in Paper 3 to define a particular incident as terroristic (or not); this assignment followed the classical "Is X a Y" typology. In establishing her criteria for her definition, Dawn used the example of Neal Horsley's creation of "The Nuremburg Files," a website targeting abortion providers, to help establish her criteria. However, she then went on to "match" Neal Horsley's activities with her definition—though she assumed that these activities were undisputed examples of terrorism when she used them to establish her definition. Thus, her argument essentially concluded that "X is an X."

The most common logical problem in each of these essays, however, was the persistence of hasty generalizations, or conclusions drawn with too little supporting evidence. For example, in his fourth paper, Phil argued that

> Terrorism is also an act in which the security of a government is violated or intimidated. For instance when Cuba was pointing nuclear weapons at the United States. This is terrorism because it intimidates the U.S.'s sense of security.

This pattern occurred throughout the series of essays produced by each writer. A closely related pattern involved these writers' use of arguments from irrelevant premises. In her sixth paper, Dawn argued that the U.S. should not hesitate to intervene in world affairs in a "peacekeeping" capacity:

> Prior to the end of the Russo-Japanese War, in 1904, Syngman Rhee was forced to leave his country where he fled to the United States…When he arrived to the United States he asked for Americans to help save his country from Japan but no one would. This clearly shows that there are countries that want our help. We do not always go over there unwanted.

Although they seemed to understand the importance of using evidence in their arguments, writers in this group appeared to have some difficulty connecting this evidence and their conclusions in a consistently logical way.

Finally, the use of qualifiers was examined as one of the rhetorical features of these writers' texts. In general, these writers did not limit or qualify their claims; only 2 (8%) of the 24 essays produced by writers in this group used qualifiers in a consistent fashion. These writers tended to produce straightforward, essentially unqualified claims, as Kendra did in her third essay: "Terrorism is the use of unpredicted violence to cause fear in others for a purpose." Instead, writers tended to use *emphatic* language in stating their claims, as Phil did in Paper 4: "The way the United States intervened in this conflict was in no way justifiable. It represents every aspect of terrorism."

Although these writers did use first person fairly frequently, the use of first person hedges was quite rare. Although students did use some first person tags, it appeared that they used them for the purpose of clarifying and reinforcing their arguments. Kendra's use of first person in her third paper in statements such as "By this, I mean…" and "I believe this definition wraps up the meaning of terrorism" was representative of the way these writers tended to steer away from using first person to reduce the scope of their claims.

Rhetorical features: Group two.

As for Group One, four issues related to students' rhetorical strategies were investigated for Group Two writers, including writers' use of pathos, ethos, logos, and qualifiers. Writers in group two made implicit or explicit pathetic appeals in 35 of 65 cases (53.8%). Pathetic appeals used by members of this group ranged from the simple use of first person plural to describe the American public as "us" or "we" to more extensive descriptive passages and literary devices (e.g., metaphors and analogies).

However, the use of these appeals varied widely across the group. Only one student, used this strategy in each of her essays, and one student did not appear to use pathetic appeals in *any* of her essays. Four students used pathetic appeals, but also made comments that would likely alienate an American audience, in at least one of their essays. For example, in his first paper, Van used some dialogue from a news broadcast to illustrate his point about the anti-Arab sentiment prevalent in the U.S. immediately after the World Trade Center attacks, a narrative strategy that would probably be effective in gaining the sympathy of his audience. However, in the same essay, the writer made a number of statements that would be just as likely to estrange his audience; in affirming his belief in Chomsky's point of view, Van stated that Chomsky's purpose "is not to say things that would please angry people, but to state why it is wrong and their own faults that the people are angry," apparently blaming the American public for being angry about the 9/11 attacks.

Group Two writers also appeared somewhat inconsistent in their attempts to build their credibility. Only 12 (18%) of the essays written by Group Two participants were rated as using no implicit or explicit ethical appeals to build their credibility. In most cases, writers established their trustworthiness by alluding to their level of knowledge about their

subject, or by making an argument based on values. At the same time, 9 of the 11 writers in the group failed to use ethical appeals—or used them problematically—in at least one of their essays. At times, the attempt to sound credible manifested itself in an overly-critical tone, as was the case in Myron's first essay, in which he argued that one of Chomsky's contentions was, "in my opinion, one of the most ridiculous statements ever made." Additionally, these writers tended to overemphasize their own prowess as writers to build their credibility, as Aaron did in his first essay: "Chomsky's arguments are neither rational nor connecting logically, and I will prove this flawlessly in the following paragraphs."

As was the case for Group One participants, writers in Group Two were the most consistent in their use of *logos*, in that all writers in the group attempted to use facts and reasons to build their cases in each of their arguments. In terms of the logical value of their arguments, Group Two writers appeared more successful than Group One writers; 43 (66%) of the 65 essays they wrote for English 111Z appeared to use viable logic to connect claims and reasons. The writers in this group often used the rhetoric of hypo-deductive logic in making their cases, using language that implied a syllogistic approach, as in Melanie's fourth essay: "The Wahabi agree with all of the terms for terrorism that I have given, and thus are terrorists."

At the same time, 22 (34%) of the essays written by students in this group had major logical problems, and 17 (26%) of the essays that used generally viable logic also incorporated some logical fallacies. As was the case with Group One, this pattern was particularly evident in the first two assignments in the sequence; by referring to Ahmad and Chomsky's texts to support their reaction to or evaluation of these texts, Group Two writers tended to generate arguments that used circular reasoning in 17 (77%) of 22 cases.

In the essays with generally workable logic, the fallacies were fairly minor, consisting of some hasty generalizations, as in Leah's third paper, in which she argues that "throughout history everyone wants the opportunity to state his/her beliefs" and "sometimes the root of a word has all of the answers." However, in other cases, despite the writer's perception that s/he made a logical case, the argument was substantially damaged by the writer's failure to be *reasonable*. In Shawna's fourth essay, for example, she used three criteria in establishing her definition of terrorism, and goes on to contend that abortion clinic bombers are not terrorists, despite the fact that she is forced to concede two of her criteria-matches. Her emphasis on a syllogistic approach allowed her to conclude somewhat mechanically that because the bombers did not disrupt the daily lives of the public (one of her criteria), they were therefore *not* terrorists, despite the fact that this criterion is probably much less important than the two she conceded earlier in the essay. Similarly, in Aaron's fourth essay, he argued that God is a terrorist, and in his third essay, he used his definition of terrorism to define U.S. soldiers as terrorists: "This brings one to the conclusion that if you want to say suicide bombers are terrorists the people in tanks must also be."

The use of qualifiers by Group Two participants was also inconsistent. Though students in Group Two used qualifiers more frequently than students in Group One, overall, only 17 (26%) of the 65 essays written by Group Two participants consistently included terms or phrases that limited the scope of their claims. Interestingly, the lack of qualifiers was most evident in Paper 4; none of the writers in this group used qualifiers consistently in their fourth papers. Instead, these writers tended to argue that the "X" in question met "every part" of the definitions they proposed. Writers in Group Two, like their counterparts in Group One, tended to use emphatic declarative statements to intensify the strength of their

claims, as Myron did in his first paper: "Another point that Chomsky makes that I feel is blatantly incorrect is that America is the reason the Taliban came into power in Afghanistan." Interestingly, these writers used emphatic language and few qualifiers, even in essays which conceded one or more objections. Though Melanie conceded that her definition of terrorism in her third paper "may or may not be found in conjunction" with other definitions, she tends to intensify her claim in several places in her argument: "This is an obvious use of violence by the Wahabi…This violence can also only be used as a threat."

Group One: Self-reflections

Participants were asked to respond to five questions during their self-recorded reflections on Paper 4, their definition/criteria-match argument. The first question, "From your perspective, what was the point of the assignment?" drew reactions suggesting that at least three of the four participants in Group One were not focused on the ill-structured nature of the conflict proposed by the assignment. As Phil commented, "The point of the paper is to…teach us how to articulate, to write clearly. To learn how to write an argument-based paper." However, Jesse's response was slightly different, echoing the actual words of the assignment sheet in a way that was more attuned to the stasis of the argument implied in task:

> My perspective on the point of the assignment was that we had to come up with a working definition of terrorism, while at the same time providing a specific example from history, an event that could or could not be considered terrorism.

Still, in each case, participants did not suggest that there was room for disagreement with the position they had adopted; they appeared to believe that their argument left little room for further exploration of the issue.

In response to questions two and three, "What do you believe is your paper's thesis? What did you intend to discuss in this paper?" and "Looking at the major sections of the paper, what did you intend to accomplish?" each of the participants in Group One had little trouble identifying their theses or describing the content of their papers. The participants were also open about what they considered to be the weaknesses of their essays, though they identified different weaknesses. Jesse focused on his need for more evidence: "I used a few quotes in here from various sources that I found in the library. My sources were sort of thin. I only used four." Kendra and Dawn both claimed that their essays had some problems with organization and sentence level issues. As Dawn reflected, "I didn't really rework the paper number 3 that incorporated into paper number 4. So, I…you can see bits and pieces of what I intended to accomplish throughout the paper, but it doesn't actually make sense like as a whole." Phil, however, was outspoken in his belief that his essay was a good paper—only his teacher didn't see the quality of what he had written: "I stated a thesis, and back it up with facts, explained it somewhat. I don't know—I thought I did a good job, but oh well!"

In response to the fourth question, "Are there any passages that might seem complicated or potentially confusing passages to a reader? What did you mean to say?" these writers seemed hard put to identify confusing arguments or lines of reasoning, but instead focused on grammatical and stylistic issues. Phil did not identify any passages in his paper that a reader might find confusing.

In describing the persuasive strategies they used, Kendra, Jesse, and Phil noted that they relied mainly on examples to build their cases. As Phil noted, "I used a lot of facts." Dawn, however, focused on her use of pathetic appeals in her essay: "The only really persuasive strategy I tried to use was kinda trying to get at people's emotions."

These participants' overall assessment of their papers was positive, perhaps more so than the grades they received on these papers. Dawn observed that "I thought I did a decent job." Phil stated his view bluntly: "Um….I think I did actually a pretty good job. I conveyed the message that I wanted to, I felt, pretty clearly, even though I got a D on it, which is crap." Jesse's perspective was stated more diplomatically, but expressed the same point of view:

> I tried to convey my message to the reader—I tried really hard. But obviously, [Ms. Stone] didn't think I did that well of a job. Like I said, I could have done a little bit better in the way I was giving the event in question, and backing up why I thought it was a terrorist event. I probably should have spent more time on that. But overall, I think that I deserved better than a C-.

Group Two: Self-Reflections

Like Group One participants, Group Two members were asked to respond to five questions during their self-recorded reflections on Paper 4, their definition/criteria-match argument. Of the 11 participants in Group One, 9 returned these recordings to the researcher. The first question asked participants to explain, from their perspectives, "what was the point of the assignment?" Two themes emerged in Group Two participants' responses to this question. The first theme involved the perception that the assignment was about using deductive reasoning to "prove" a preconceived claim. For example, Jeff claimed that

> I thought the point of the assignment was to take some issue, and write a more persuasive essay to make the definition of terrorism, to prove that it can be an event of terrorism, that you could take one thing and write a persuasive essay using facts

> and the criteria from the previous paper, paper number three, and actually make it sound good, and sound like, it's really an event of terrorism.

Of the nine students who turned in their reflections, five responded to the first question using assumptions similar to Jeff's. These students seemed to assume that the process of selecting and supporting their claim was essentially idiosyncratic.

The second theme that emerged from Group Two participants' responses to the first question pertained to the belief that the assignment involved a more inductive process, and indicated that some of these respondents were more attuned to the ill-structured nature of the assignment. Instead of suggesting that the purpose of the assignment was to "prove" a claim decided upon in advance, Van observed that Paper 4 required him to "use my own definition of terrorism that I had written about in a previous paper, and to compare how my definition was applicable to this event." Mike noted that

> what we had to do is develop our own definition of terrorism, which was really, really hard, because there's like no real main definition of terrorism. I mean, a lot of people tried to define that word before, but there's like no really set standard definition for it. I mean, even the one in the dictionary, that's not even it, because it doesn't really define terrorism.

This theme emerged from four participants' responses to the first question.

The second and third questions to which participants responded asked "What do you believe is your paper's thesis? What did you intend to discuss in this paper?" and "Looking at the major sections of the paper, what did you intend to accomplish?" Participants' responses to these questions indicated a number of interesting beliefs about how they met the goals of the assignment. Though responses to the first question suggested that some

participants were aware of some of the uncertainties involved in formulating a viable definition, their responses to the second and third questions suggested that these students made sure that they found ways to avoid focusing on these uncertainties by choosing events that clearly conformed to the definitions they established in Paper 3. Like six of the other students in this group, Mike indicated that he selected a topic that would allow him to avoid dealing with the ill-structured nature of the conflict: "I mean, I just kind of did it this way so I didn't have to do much condition of rebuttal, because that's why I chose the Reign of Terror." However, two other students indicated that they had individual underlying motives for choosing a particular event—that they wanted to express disagreement with an idea held by an authority, or by the general public. Tony claimed that he

> chose the event of the destruction of the Al-Shifa pharmaceutical plant in Sudan in August of 98, simply because we read a book earlier this year that talked about that; Noam Chomsky thought that was a terrorist [event]. I didn't really agree with him then, so I just wanted to disagree with him some more.

Similarly, Aaron claimed that he wanted to stir up some controversy by arguing that God is a terrorist: "Basically, my thesis was to take a topic people don't look at all as terrorism, and then try to make them see that it is terrorism."

In response to the fourth question, "Are there any passages that might seem complicated or potentially confusing passages to a reader? What did you mean to say?," five participants indicated that they didn't believe that any parts of their essay would be confusing to a reader. Jeff volunteered, "I think I make sense! I mean, otherwise, I wouldn't write the paper!" Another student acknowledged that his instructor had commented on the clarity of his argument, but defended his rhetorical choices; pointing to one of his instructor's

comments, Van argued that "I completely disagree with that…I just think that the way I stated it made sense to me." Only three participants acknowledged that some passages in their essay were confusing to their instructor, or to their peer editors, and went on to explain their intended meanings. The others appeared to believe that as long as *they* understood their own meaning, another person would have no trouble understanding their perspective.

The fifth question asked participants to identify the kinds of persuasive strategies they were using in their fourth paper. Five students claimed that they decided to incorporate emotional appeals, use particular organizational strategies, or, as Van said, "state the facts exactly, and then go on to give my interpretation to convey the points" to their readers. Interestingly, these writers appeared to believe that giving their readers plenty of information would convince them to accept their argument; as Mike observed, "I thought that if I had lots of facts and evidence to back me up, then it would definitely persuade anybody to see it from my point of view."

However, four students suggested that they *did not* use persuasive strategies in their essay. Their responses seemed to suggest that they didn't view "giving facts" as a persuasive approach. As Melanie observed, "I don't know if, in my paper, there are too many persuasive strategies. However, I just sort of proved, or used certain examples to show how Dagestani terrorists—or that Dagestani people are terrorists. I don't feel like it was very persuasive."

Similar to Group One participants, in giving their overall assessment of their fourth essay, all Group Two participants seemed very positive about their performances. In addition to expressing their positive opinion of their work, two students discussed the amount of time and effort that went into the construction of their essay, and three students discussed

things they could have done to improve their performance, specifically involving grammar and paper conventions. However, even when their view of their essay was in conflict with their instructor's, participants in group two defended their performances. As Jeff exclaimed, "I think [Ms. Stone] has some issues that she needs to get over…I thought I did really well on the paper."

Case Studies

To provide richer insights into the similarities and differences in writing behaviors among students in each group, cases from each group were explored in greater detail. The following discussion describes the results of in-depth analyses of data collected for two students, one who tended to use predominantly pre-reflective thinking on the RJI, and one who used predominantly quasi-reflective thinking. These particular students were selected because their RJI scores were among the lowest or the highest for their groups, and because both students exhibited high levels of fluency in their essays, as indicated by the fact that all of their essays exceeded the minimum page length requirements for the assignment by one or more pages. For each participant, the analysis included an examination of the qualitative interview transcript, all 6 papers and drafts, and the self-reflection transcript.

Case # 1-Kendra: Pre-reflective Thinking

Qualitative interview.

In her qualitative interview, Kendra indicated that she had done a great deal of writing in her senior year of high school, when she took a course through offered at her high school by a college in her hometown: "We had a paper due every two weeks, and if it wasn't a paper, we had journals and had to write stuff down and research stuff." According to Kendra, the kinds of writing she was asked to do in high school ranged from literary

analyses, in which she was asked to "take quotes from a book, and then write about the quotes" to "descriptive papers, argumentative papers, persuasive papers, stuff like that."

Overall, Kendra appeared to be a highly motivated student with a relatively strong level of awareness about her own writing and rhetorical practices. When discussing her strategy for writing and revising Paper 1, Kendra observed that she spent more time revising her essay than drafting it. She also volunteered that she had visited Ms. Stone during her office hours to receive additional help.

Despite her wide range of experiences with writing, and her high level of motivation, Kendra stressed that she was not confident about her writing abilities. She claimed that "I have, like, no writing abilities," though she conceded that "if there's a paper where I can do something, like put myself into it, I'll just be like "ok—you know, this is easy!" She appeared to ascribe her lack of confidence in writing to her experiences with teachers. Specifically, Kendra appeared perplexed by the her perception that different teachers had different standards and expectations for her writing:

> I guess you can say that I keep focusing on what the teachers really want me to say… like my teacher last year—I told her how I think I should write how the teachers want me to say, and she said I shouldn't think that way. But in a way, it's impossible not to… It varies very differently what they want you to say, and how they want it.

The consternation Kendra expressed over the differences in her teachers' expectations seemed to have carried over into English 111Z. In discussing her experience with her first paper, Kendra observed that Ms. Stone "said I needed to do a lot of work, whereas [the peer editor] said I really didn't need to do much, but she said I needed to do a lot of stuff."

Kendra's goals for the course reflected her desire to learn more about constructing arguments, but also reflected her desire to become a better writer, in general. In particular, Kendra wanted to become more independent of her instructors, and expected the course to help her accomplish this goal:

> Like the way she's talking, by the time I get to my last paper, I should be able to know what I want to put in my paper, without having to listen to her telling us what to put in our papers--I should already know what to put in there. And how to go about rearranging or whatever, you know what I'm saying.
>
> *Paper 1*.

Kendra's first essay offered a summary of and reaction to Chomsky's views in *9/11*. The draft of the essay indicated that the writer had a solid understanding of Chomsky's argument; Kendra used a number of quotes and paraphrases from the text to describe Chomsky's essay, and the summary itself appeared fair and undistorted. The "response" section of the draft of the essay appeared to offer an exploration of some of Chomsky's main ideas, but contained no thesis, and few examples or specifics from Chomsky's text. Despite this fact, the reasoning in the draft was fundamentally circular, arguing that Chomsky's view is right because the writer agrees with it: "The main reason why the desire for revenge should not to be taken in the action of finding bin Laden, if he is in fact the terrorist, is that I agree with Chomsky's opinion that sometimes it is better to let things go." Overall, the draft offered a one-sided reading of the text, in that the writer did not acknowledge or explore other ways of perceiving Chomsky's argument, and did not differentiate her point of view from Chomsky's own. The only evidence the writer offers for her views is an analogy drawn from a childhood incident, in which her little sister, "who used to terrorize" her, pulled all the

heads off her Barbie dolls. Though this evidence is problematic, given the context, the tone established by the use of first person and the concrete nature of the narrative helps the writer generate a level of audience appeal. The summary section was organized chronologically, using temporal markers such as "then" and "next" to summarize Chomsky's main points. However, the response section of the draft has essentially no organizing markers, or qualifiers.

The writer wrote a number of questions on her draft for her peer reviewers, such as "Need something more, but what?" and "Is this clear enough?" The final draft revealed that Kendra made a number of revisions to the essay, including the insertion of a thesis statement that recapped two of Chomsky's claims, and indicated that the writer believed these claims "to be true." The writer also added another major paragraph to her response section, expressing her agreement with Chomsky's point that the 9/11 attacks were not direct consequences of U.S. foreign policies. Within this paragraph, the writer generated a creative and effective series of propositions, arguing that American citizens and their government are "not one and the same," since the U.S. has a representative, and not a direct, form of democracy. Additionally, the writer inserted topic sentences into her body paragraphs, so that the essay has more organization at the macro level. Although the final copy still has essentially no explicit organizing markers, the writer has added some code glosses such as "meaning that" and "I use this example to show," so that the essay has some organizational shape at the micro level.

However, many of the qualities that characterized the draft also characterized the final copy. Kendra's view in the final copy was still very much embedded within Chomsky's own, and she used the same circular reasoning used in the draft. The writer developed her

example of her little sister's "terrorist" activities, and also added another example from personal evidence to back her claim that the American public did not deserve the attacks: "My grandfather is an avid reader of the newspaper and CNN is his favorite television station, considering this, I was shocked to realize that he knew nothing on the extent of U.S. involvement in terrorism." Though the writer uses concrete examples that would likely appeal to an audience, she does not consider Chomsky's text from any other points of view, which is interesting, given that she also notes that "reading 9-11 came as a great shock for me to learn the many things that the U.S. has done to other countries."

Additionally, the writer tended to present an unqualified series of claims: "Chomsky is absolutely correct because it is my opinion that Americans are innocent." Only three sentences in the final copy used some form of qualified language (e.g., "revenge could lead to the destruction of more innocent victims"). Instead, Kendra tended to use emphatic language (e.g., "Chomsky is absolutely correct"). The conclusion of the essay firmly denounced U.S. actions, and the writer asserted that if the right changes take place, "we no longer have to be known to many or a few as 'the leading terrorist state.' "

Paper 2.

Kendra's draft of Paper 2 seemed very underdeveloped, but again included some notes that suggest that the writer knew in advance that revisions would be required (e.g., she ends her first paragraph with a note reminding herself to "relate the differences b/w the pre and post 9/11"). The writer's thesis in the draft was that Ahmad's

> book is not appropriate for a pre-9/11 audience because I don't believe that the audience will be able to understand the issues of terrorism discussed in the book nor can they relate to the facts and names reflected in the book. I also believe that this

> book is not appropriate for a Post 9/11 audience because the audience may be sensitive to the facts and opinions that Ahmad presents and may resent him for criticizing America when he doesn't seem apart [sic] of it.

In her first body paragraph, the writer supported her claim that the pre-9/11 audience would be able to grasp Ahmad's argument by referring to the example of her roommate, who is reading a book about a young woman adjusting to college life. Kendra claimed that "I don't believe that my roommate would have shown any interest in the book if she were a thirty-year-old woman, way past her college years," just as pre-9/11 audience would not relate to Ahmad's discussion of terrorism. The rest of the draft contained paragraphs that had been cut and pasted from the final version of Paper 1, as well as some additional notes from the writer: "Here comes my conclusion…"

In the final copy of her second essay, Kendra amended her thesis to claim that Ahmad's text *is* appropriate for pre-9/11 audiences, because it contained warnings that "a pre-9/11 audience would bring to action." However, she maintained that the essay was not appropriate for post 9/11 audience, because they may "resent Eqbal Ahmad for not being American and because the audience may sensitive to issues presented in the essay." The writer removed the example of her college roommate, and inserted a sustained two-paragraph analogy between Ahmad's essay and the Bible, arguing that "Just like the Bible, Ahmad gives recommendations for America." The writer goes on to reiterate a list of "useful recommendations" Ahmad makes in his text, using quotes and paraphrases from his essay. Next, the writer develops her view that post 9/11 readers would reject Ahmad's argument because "as ignorant as it seems, many felt resentment towards any person that was of [Middle Eastern] descent" after the events of 9/11. Citing the example of Arab students at

her high school who changed their clothes to seem more "American" after the attacks, the writer argued that "I believe that many from a post-9/11 audience would find this book to be outrageous and most likely believe that America shouldn't even have allowed this book to be published because of the simple fact that the author of the essay is Pakistanis [sic]." In her discussion of the post-9/11 reaction to Ahmad, the writer made no references to Ahmad's text at all, centering her discussion on a number of examples from personal evidence, including her family's distressed response to the death of a cousin, and her mother's description of her coworkers' reactions to the 9/11 attacks.

Although the writer seemed to suggest that a conflict exists, in terms of how some people might view Ahmad's argument, she assumed that the claims Ahmad presented were essentially incontrovertible—as is clear in her comparison of Ahmad's essay with the Bible. The reasons she gave for individuals' disagreement with Ahmad related to the audience's predisposition to disbelieve, or their biases. As in Paper 1, the use of qualifiers in Paper 2 was very scarce, and the writer invested heavily in appeals to emotions and values.

Paper 3.

Participants' third papers were written in class, so Kendra's third paper had no rough draft, and was substantially shorter than her previous two essays. In Paper 3, Kendra defended a definition of terrorism pulled from the *American Heritage Dictionary*. In her introduction, she stated that "I believe this definition wraps up the meaning of terrorism except I believe that the purpose that one may seek doesn't necessary have to be a politically motivated one. Terrorism's done for many reasons." However, in the body of her essay, she did not explore any differences between her revised definition and the definition she cited directly from the dictionary. The writer went on to cite evidence gathered from five different

websites to back each criterion of the definition. Each paragraph proceeds in a tightly constructed proposition-data-proposition pattern, with the writer making few generalizations. Overall, the essay proceeds in a very straightforward manner; the writer followed the format of a definition argument consistently.

Interestingly, this in-class essay has a much "tighter" organizational pattern than either of her previous essays, perhaps because the organizational pattern and the timed context were similar to the formats and contexts she encountered in high school. Each of the body paragraphs opened with a topic sentence, and was capped by a restatement of the topic sentence: "Attacking the public is another characteristic of terrorism"…"Attacking a public area that is heavily populated is a good characteristic of terrorism."

However, the writer did not seem to be addressing an actual conflict—or at least, she did not seem to *perceive* that a conflict existed, given the fact that, in her view, the dictionary definition "pretty much wraps up the meaning of terrorism." Kendra also included some interesting statements about the "knowability" of the motives of terrorists, specifically the 9/11 terrorists: "There are purposes for everything that a person or terrorist does … Soon the purpose for the September 11th attacks will be known as well." The writer's position in this essay was highly one-sided; she does not even explore her own objection to the dictionary definition. Similarly, the writer seemed to have an uncritical stance towards her source material, even when it seemed to overstate the case somewhat: "many statistics are stated that says [sic] that 90% of Americans will eventually display a symptom of Post Traumatic Stress Disorder (Effects of September 11th Attacks)." However, inferences about these patterns must be drawn with caution, as the writer was under considerable pressure to complete the essay in the allotted time.

Paper 4.

In her fourth paper, Kendra returned to the definition she defended in Paper 3, and used it to define the "Washington sniper" attacks as terrorist events. The draft of the essay was a typed version of Paper 3.

In the first half of the final copy, the writer used the material she wrote for Paper 3 to explain each criterion, and then argued in the second half of the essay that the sniper shootings fulfilled these criteria. As in Paper 3, the writer used source material to back most of her major and minor claims. However, the writer seemed to have an uncritical attitude towards the evidence she used. In using the example of the 9/11 attacks to support one of her criteria, the writer claimed that the terrorists' actions were responsible for the deaths of "6,000 men, women, and children," a number that did not reflect the actual death toll. Additionally, in her fourth paragraph, the writer cited the "Yemen Gateway" website, and argued that "the attack on the US Embassy [in Kenya] was done in expression of London's rage against the United States interference with [British] organization of managing mercenary armies in Africa."

In this essay, Kendra continued to argue that a terrorist's purpose "doesn't necessary have to be a politically motivated one." However, as in her third paper, she did not give any examples of non-politically motivated terrorism when establishing this point; this fact, and the fact that the sniper's own purpose was unknown, led to some difficulties in assembling this criteria-match. Kendra was able to work around this problem by using quotations from different news magazines to suggest that because the sniper left notes asking for money, he was not a "crazed killer," but an individual with a plan, or purpose. Interestingly, despite the uncertainties involved in pinning down the sniper's purpose, Kendra used emphatic language

to declare that he met this aspect of her definition: "Whatever the reason the sniper definitely had a purpose…one can relate that he indeed had a purpose[,] establishing these attacks to be an act of terrorism." Overall, this essay also used a one-sided approach, in that the writer did not examine any weaknesses in her own definition (which, again, was derived from the dictionary), and was emphatic in her insistence that "the shootings displayed every aspect of the definition," when that argument was clearly difficult for her to make.

Kendra acknowledged some objections to her claim in her sixth paragraph, observing that even though her "definition of terrorism is vaguer than other definitions, I believe mine to be more correct." However, she did not develop her discussion of this objection, or her response to it. She also used some qualifiers in her discussion of her weakest criteria-match, but used intensifiers and emphatic language equally frequently. The writer used some clear pathetic and ethical appeals in her conclusion, in which she gave a list of the sniper's victims, and claimed that these individuals would be "kept in our prayers." However, these appeals had only a tangential relationship to her actual argument. As with her third essay, the use of organizing markers was consistent in Paper 4; every paragraph had a topic sentence that clearly related to the thesis, and each paragraph used a variety of markers.

Paper 5.

In her fifth essay, a causal analysis, Kendra focused on the effects of the 9/11 attacks on the U.S. Her thesis argued that "The attacks on the World Trade Center is [sic] a controversial issue in that it has many effects." The writer did not seem to address an actual controversy in this essay, which covered health issues, hate crimes, damage to New York, decline in air travel, and loss of jobs; the only potentially debatable point in her argument pertained to her claim that the attacks led to "the decline of the economy." The writer did not

treat any objections to her claim, though the potential for alternative views was fairly minimal, given her topic. Overall, the writer appeared to have sidestepped controversy in choosing this causal chain, so that the essay dealt less with an ill-structured than a well-structured problem.

Kendra focused on a different effect in each of her paragraphs, and used evidence from personal experience and from 12 different sources to back almost all her major and minor claims; the writer used few generalizations in her discussion. At the same time, the writer makes a number of uncritical assumptions about her evidence, which problematized both the logic and credibility of her argument. For example, in arguing that New Yorkers were attempting to encourage tourism after the attacks, Kendra noted that "I am an avid watcher of *People's Court*, which takes place in downtown New York," and went on to state that, from what she saw on the show, "New York is still a great place to be." The writer also seemed to misinterpret a quote she used to support her point that the economy was damaged by the attacks; she interpreted the quote, "it's really hard to separate the economic impact of 9/11 from the general economic downturn that was already underway" as meaning that 9/11 *caused* an economic downturn, the point that she was addressing in that paragraph.

The rhetorical and textual features of the fifth essay were similar to papers written earlier in the sequence. Once again, Kendra used pathetic and ethical appeals frequently throughout the essay. As she noted in her introduction, "In Greensboro NC, nearly 600 miles away from the attacks, I cried at the loss of so many lives." However, the organization of this essay was not as tightly constructed as in her third and fourth papers, but was more similar to the organization of the first and second essays, in that the use of organizing markers was noticeably scarce, and her body paragraphs tended to be at least one page long.

The use of qualifiers was also minimal; again, Kendra tended to use emphatic language to intensify her claim: "one can easily assume the reason for the crimes to be directly attributed to the collapse of the World Trade Center."

Paper 6.

In her sixth paper, Kendra proposed that the U.S. adopt a policy of isolationism to prevent future terrorist attacks. The draft she submitted with the essay appears to be a copy of her fifth paper. Thus, there are few similarities between the rough draft and the final version.

Though she did not develop any objections to her claim in the body of her sixth essay, the writer acknowledged her conditions of rebuttal in her introduction: "Though the expansions of American interest, power, and technological advances makes isolationism impossible for the United States, I have come up with a proposal that will prevent further occurrence of terrorism in America." This time, the writer clearly chose an ill-structured problem, and seemed to understand that her own solution was problematic, if not "impossible," which was why this essay was rated as having some quasi-reflective characteristics.

However, Kendra seemed to have trouble supporting her claim. The development of this essay appeared less thorough than in her earlier products; the writer included no specifics about her solution, or how to implement it, though the assignment clearly called for this type of discussion. Additionally, the use of evidence was much weaker. Though Kendra included evidence from nine sources, two were published in the 1970s, and one source used in support of her argument appeared to *contradict* her position. Additionally, the writer made a number of unsupported propositions, such as "Currently, the US trades only with those that

it supports, but if it supported everybody and condemned no one, think of how much more peaceful the world would be." Once again, Kendra included some evidence from personal experience, this time a reference to her grandfather, whom she observed "recently informed me" that oil represents the main reason for U.S. involvement in the Middle East. Overall, the logic value of the essay was substantially hampered by the weakness of the evidence, and the number of hasty generalizations the writer made.

The rhetorical and textual features of this essay also detracted from its effectiveness. Despite the fact that Kendra seemed aware that her solution had major problems, she fails to qualify many of her claims, instead using emphatic language: "I feel confident that my proposal…can be easily achieved." The organization of this essay also appeared weaker than in her previous essays. Though Kendra did use topic sentences, these organizers did not always predict the content of her paragraphs, and the use of organizers within her paragraphs was also inconsistent. Interestingly, the use of pathos and ethos did not occupy an important place in the sixth essay. Instead, the writer tended to make some statements that would likely damage her ties with an American audience: "If the United States hadn't been caught up in their selfish reasons for interacting with the Middle Eastern countries there would still be good ties between Osma bin Laden and America."

Self reflection.

In her self-recorded reflection on Paper 4, Kendra's view of the purpose of the assignment did not appear to reflect a strong understanding of the ill-structured nature of the task: "The point of this assignment…was exactly what Ms. Stone said! We were supposed to define what terrorism is, using a certain example." In identifying her thesis, Kendra suggested that it was simple to define the "X" as an example of "Y": " My thesis

was…'terrorism is simply an unknown attack against the public effecting innocents to have a reaction of fear for a purpose. Therefore the recent events of the sniper shootings is a terrorist attack because it fits the definition of terrorism.' "

However, Kendra's reflection indicated that she realized the importance of assembling evidence in her argument: "With each paragraph, I wanted to just, like, use as much, like, examples and stuff as I could, and make sure that I like described why I put those examples in there, and make sure everything flowed together." As this comment indicates, her perspective seemed to reflect the belief that "more is more," which is particularly interesting, given some of the uncritical uses of evidence that occurred in her fourth essay.

In discussing passages that might be confusing to a reader, Kendra had some difficulty identifying parts of the text that could appear difficult for a reader to negotiate. She reflected that

> the only thing that would probably be confusing to a reader is the first part, the essay that I got an A- on it, but I figured that since I got an A- on it, it doesn't really need to be done over again, that I could just go ahead and copy and paste it, and still get an A-. And an A- plus an A was an A, you know?

In discussing what she could have done to improve this section, she observed that

> the only thing that's probably confusing was that I have fragments and stuff, and I have really bad sentence structure. And that's what I need to work on, that's what Ms. [Stone] said. She gave me a book…But I didn't read it.

Pointing out the persuasive strategies in her essay, Kendra noted that she relied on her use of examples to make her case, but also took into account her audience's ability to relate to the topic. Interestingly, her view of her audience's beliefs seemed heavily predicated on

her view of her own feelings and values: "And I know that everybody during the sniper shootings was really scared of it, because I know I was scared… I was, like…'Please don't come down here!' And so I know that everybody was, like, really really scared!"

In giving her overall assessment of the essay, Kendra defended her performance, stating that, even though she could have worked more on her sentence structure and organization, " I believe that I conveyed my message to the reader. I think that overall this was a pretty good paper, and I think that I used a real good example." Given her belief that her paper was so successful, Kendra seemed to have difficulty explaining why she received a B on the essay: "And I got a B. I don't know why I got a B." However, she eventually decided that "I think I got a B because of my grammar."

Summary of case #1: Pre-reflective thinking.

While she did not feel confident about her writing abilities, Kendra appeared to be a highly motivated student who had substantial experience with writing, including some experience with persuasive writing, as was the case for the other participants who were rated as using pre-reflective thinking, with the exception of Phil, who had never studied persuasive writing. In general, Kendra's essays appeared to reflect a stable set of reasoning patterns. Although her last essay was rated as having some quasi-reflective characteristics, each of her papers was rated as predominantly pre-reflective.

As did the other participants who were rated as using predominantly pre-reflective thinking, Kendra tended to create one-sided positions, offering evidence for only one view within her essays. She did use evidence to back most of her major claims, and she used a variety of types of evidence. However, her use of evidence appeared unconsidered, in that she often failed to consider the legitimacy or relevance of the evidence she used. As a result,

the logical value of her essays sometimes suffered. Kendra was somewhat more consistent in her use of audience appeals; most of her essays made some explicit or implicit appeal to the audience's interests, values, or sympathies. At the same time, Kendra tended to avoid discussing potential objections to her views, and had some difficulty discerning what types of rhetorical strategies would help her build her credibility and connect with the audience.

Her self-reflection on her fourth essay seemed to corroborate the conclusion that Kendra approached this assignment with some pre-reflective assumptions about the nature of the task. The instructor's comments on this essay did take issue with her use of evidence, to some extent. However, these comments did not appear to contradict the pre-reflective assumptions that Kendra appeared to bring to the writing task, given that they focused on grammatical and stylistic issues.

Case # 2-Tony: Quasi-reflective thinking.

Qualitative interview.

Tony's qualitative interview revealed that, like Kendra, he had had lots of writing experience in high school: "We did a lot of writing in English. Maybe twenty papers a year—that's a lot. So, I'm experienced. But it was very difficult to come up with stuff to write about." Like Kendra, he too had written different types of papers, though most involved some type of literary analysis. He recalled that most of his high school essays were "responses to books. Some of them were, like, argumentative papers—that's not too hard."

Like Kendra, Tony estimated that he spent a substantial amount of time (in his view) writing his first paper: "Well, I spent about two hours writing that paper. In high school, I'd go and spend about 20-30 minutes, and I'd be done. So I spent a good deal of time. And I think that on future papers, I'll spend more time." He also claimed that he spent two and a

half hours revising the essay before turning in the final copy, because "it wasn't straight writing from your head. You had to incorporate stuff from a book we had read."

When discussing his beliefs about his writing abilities, Tony indicated that "I don't like writing that much." In discussing his dislike of writing, Tony attributed it to the fact that the topics he was expected to write on have become increasingly difficult through the years:

> I guess when I was in elementary school, it was easy to write, because the topics were easy—"what's your favorite color?"—something like that. Or "What's your favorite time of day?" But you get through high school, and they start asking questions about books and authors and how they write, and what they write, and why do they write it, and I just can't.

However, he felt somewhat more confident about his ability to generate persuasive essays, rating his confidence level with persuasive writing as " Probably a seven [out of ten]," and commenting that "I can prove my opinion like on the topics such evolution, and believing someone created Earth—I can back it up with facts and prove my opinion." Additionally, he observed that he preferred writing research papers, "where you'd be able to find information and incorporate that into my paper."

In terms of his goals for the class, Tony indicated that, like Kendra, he expected to pick up basic writing skills, as well as specific skills related to persuasive writing. He observed that "hopefully I can improve my ability to write. And since we're doing argumentative papers and persuasive papers, hopefully I can learn to improve my opinion better than I have before."

Paper 1.

Tony's draft of his first paper appeared to be mostly summary of Chomsky's argument. However, the writer has made some attempts to indicate his disagreement with Chomsky's claims through statements that had questionable logical and ethical value: "The killing of innocent people seems to be the only way to get the point across to these extreme radicals. Don't mess with the United States." The draft is characterized by a lack of focus. Interestingly, the writer appeared to agree with Chomsky's views when he summarized them, but appeared to disagree when he commented on them.

In the final copy of his essay, Tony signaled his response more carefully by the insertion of organizing markers, often a first person reference, as in the 3rd paragraph "In response to this, I say the United States always has a specific purpose for what they do." Overall, Tony made a clear attempt to disagree with Chomsky, but his own views were constructed uncritically, and he seemed to defer to the authority of the majority view in a way that appeared highly dogmatic: "The United States used force to intimidate and threaten another country. This is the United States' definition of terrorism, but it appeared to be good for democracy." Similarly, Tony tended to dispense with qualifiers in this essay, instead turning to emphatic statements to characterize his beliefs about Chomsky's argument: "This is so stupid."

Though he sharply disagreed with Chomsky's argument, Tony often seemed to find it difficult to disagree with Chomsky's version of the facts. His statement that "this book is one man's opinions backed up with hard facts" seemed to reflect the belief that Chomsky's argument is founded upon some incontrovertible truths—and these "hard facts" are difficult to dispute. However, he did make several statements that may point to an emerging ability to

challenge Chomsky's *interpretation* of events, as in his claim that "Chomsky doesn't write about what Nicaragua did to the United States. It is odd to me that the United States would just go out and pick on a small country for no reason at all." Overall, Tony tended to rely on reasoning to support his criticisms of Chomsky's claims.

At the same time, Tony did not seem to bring an understanding of the ill-structured nature of the rhetorical situation to this assignment; he did not seem to understand that Chomsky may have had legitimate reasons for his argument, or that there may be different ways to interpret his text. He seemed to assume that his audience would identify with his reading of Chomsky's argument, and used no overt pathetic appeals. He also failed to establish his credibility in the text, making a number of statements that most audiences would likely find appalling: "While I say the killing of innocent civilians is bad, it gets the attention of the perpetrator, just like the killing of innocent civilians in New York got the attention of the U.S. government."

Paper 2.

Tony's draft of Paper 2 was little different from his final copy, beyond some sentence-level revisions. Therefore, the same comments apply to the draft and to the final version of the essay.

In his second essay, Tony attempted to evaluate Ahmad's text from the point of view of pre and post 9/11 audiences. Interestingly, this essay seemed to be characterized by both pre and quasi-reflective qualities. While the writer appeared to offer some criticisms of Ahmad's argument, this criticism is inconsistent; it was very difficult to tell when he was and when he wasn't assuming Ahmad's views were true. At times it seemed that he *did* believe that Ahmad's claims are true, but that Americans are too ignorant/biased to acknowledge

them: “Ahmad’s essay does a great job of explaining terrorism and defining what it is, but none of that really mattered because Americans believed terrorism was something that didn’t happen at home.” However, the internal struggle that occurred in terms of the way the position developed suggests that the writer may have been wrestling with an emerging sense of the ill-structured nature of the task. For example, after suggesting that Ahmad’s essay “does a great job,” Tony criticized Ahmad’s version of bin Laden’s involvement with the U.S.: “That sounds like a bad soap opera. It is because of America that bin Laden and his people are alive today. He should be praising America.” In attempting to view Ahmad’s argument from different perspectives, the writer seemed to imply that there *was* no legitimate way of perceiving Ahmad’s text, which is why the essay was rated as embodying some quasi-reflective characteristics.

At the same time, this essay also appeared to rely on a number of pre-reflective qualities, as well. In particular, the writer uses evidence sporadically, and much of the evidence he uses appears to rely on his own reasoning, which tends to be somewhat shaky. Tony did use a number of citations from Ahmad’s text in summarizing his argument throughout his paper, but seems to engage in a number of logical fallacies, including a number of generalizations and non sequiteurs. Although he did use some "macro" organizing elements in the major sections of the essay, the body paragraphs appeared to have an erratic organization, making it more difficult to judge the writer’s intentions accurately. Additionally, Tony seemed to have little control over his tone, and does not seem to foresee how an American audience would react to statement such as “Americans would only get made if their taxes were raised” or “This Eqbal Ahmad guy is just some foreigner who wants to blame terrorism in his own region on America.” Despite the fact that he seemed to hold

two competing views of Ahmad's text, Tony's argument contained essentially no qualifiers. Interestingly, one of the few changes made to the draft included an intensification of a claim made in a topic sentence. In the draft, the topic sentence read "This essay does not appeal to a post 9/11 audience." However, in the final copy, the writer changed the topic sentence to: "Could a post 9/11 audience find this essay appealing? No, this essay does not appeal to a post 9/11 audience."

Paper 3.

(Because Paper 3 was written in class, there was no rough draft for this assignment.)

In his introduction to Paper 3, Tony indicated that the definition he chose to argue is universally valid, in that it "covers just about every aspect including who terrorism attacks are against, by who or whom, and a purpose for them." Tony relied primarily on reasoning to back his claims, which often used a syllogistic structure:

> People who commit terrorism are not sponsored by a country. If this group was sponsored by a country it would be considered an attack, an act of war. Acts of war cannot be seen as terrorism.

However, he also used some direct quotes and paraphrases from two sources, primarily to establish parts of his definition of terrorism, arguing that "my definition is closely associated to this definition."

To some degree, Tony's third essay appeared to indicate a return to predominantly pre-reflective thinking, in that the writer seems to assume that the rhetorical situation is completely resolved by his definition. Additionally, though he claims that his definition "was formulated by many dictionary and other countries' definitions," he did not give any evidence that this was actually the case. Though his argument appeared to use a logical

approach, it did not always appear to be *reasonable*. His position seemed dogmatic, in that it rested on the assumption that violence sponsored by a country *cannot* be terrorism: "The U.S. military could be seen as a terrorist group for its accidental bombings of civilians, but they are not because they are sponsored by the U.S." Though he does acknowledge another view of the case, he dismisses it:

> The definition of terrorism could be expanded to include country-sponsored groups, but then just about every act of war would be considered terrorism. If everything was considered terrorism, the word would not have a specific meaning.

The writer did not use any overt pathetic appeals, but did appear to emphasize the logic of his argument to build his credibility with the audience. His use of organizing markers appeared stronger than in Paper 2; he tended to use illocutive markers (e.g., "For example") and transitional elements more heavily in this essay. At the same time, he avoided the use of qualifiers in constructing his claims—but also used fewer emphatic statements.

Paper 4.

The draft of Tony's fourth paper was very similar to Paper 3; in fact, the first six paragraphs appeared to be a typed version of Tony's third essay. The seventh paragraph began the criteria-match segment of the essay, in which Tony argued that 1997 U.S. bombing of a Sudanese pharmaceutical plant was not terrorism. Interestingly, this writer adopted a position of contrast in relation to Chomsky, whose text was a staple of the class's reading. On the other hand, the writer seems to be echoing the "majority view," since he acknowledged that the bombing "isn't widely accepted as terrorism," which is, in a sense, missing the point of the assignment.

The final copy of the essay was very similar to the draft. Overall, Tony's fourth paper marked a fairly profound shift in his use of rhetoric, in that the writer appeared to base his position on some evaluative criteria. In his introduction, Tony argued that "Terrorism is hard to define because there are so many different interpretations of terrorism," which indicates a generally quasi-reflective view of the situation. In arguing his major claim, Tony used the definition of terrorism he established in his previous essay, a definition that, as it turns out, appears to have been drawn from a website whose main purpose was to review trends in the petroleum market. Indicating his awareness of the context of the argument, as well as his criterion for selecting his definition, Tony claims that "While there is not one exact definition of terrorism, this definition is reasonable because it covers the entire basis; who does it, why they do it, and whom they do it against." Similarly, in this essay, Tony seemed to have a strong awareness of at least some of the objections to his definition and criteria-match, in that he devotes a paragraph to discussing Chomsky's views on the subject, which are opposed to his own.

However, this essay was rated as having a balance of quasi-reflective *and* pre-reflective characteristics, because the writer's treatment of the rhetorical situation was closed, given that he ultimately argues that a universal definition of terrorism is possible, and his definition appeared to be almost exclusively built from an uncritical identification with the definition offered by a website whose credibility on the issue is unclear. Additionally, the writer appeared to be using some fundamentally problematic logic in supporting his position. Tony's argument hung by a slender thread—upon the proposition that "groups sponsored by a country are not committing acts of terrorism." In claiming that he was using the "U.S. definition" of terrorism, Tony did not seem to perceive his claim that that the U.S. was not

engaged in terrorism relied on circular reasoning (e.g., The U.S. cannot be defined as terroristic because their definition of terrorism says so). Though he made an extended reference to an opposing viewpoint, he did not qualify his claims within the essay. Still, Tony appeared to use evidence much more consistently to back his major claims in this essay, and his control over his tone is substantially more consistent than in his first two papers, as was his use of organizing markers. Though he did not use explicit audience appeals, he was able to establish his credibility through an informed persona.

Paper 5.

(No rough drafts were available for participants' fifth papers).

In his fifth paper, Tony appeared to continue his use of quasi-reflective thinking, in that he examined several different causes of the bombing of the federal building in Oklahoma City and treats each as a potentially viable explanation of events, without dismissing them in favor of an a priori position. Though the main issue under discussion in this essay pertained to Timothy McVeigh's motives for bombing the building, Tony discussed several other theories of the case, suggesting that he had difficulty deciding which was the best: "Some people believe Iraq was behind it. The Iraq cause is difficult to discard because many people believe in it enough to file a lawsuit against Iraq." Overall, Tony's position on the issue seemed balanced, as he presented evidence for different views without asserting that one view is the most viable. Overall, the essay seems to highlight the tension between the desire to explore different causes, and the need to fulfill the assignment by arguing that "X caused Y." For example, his first body paragraph concluded, "It is difficult to understand what happened on April 15, 1995," but the next paragraph opened, "This is what happened in Oklahoma City that day."

Tony referred to five different sources to support the major claims in his argument, and in each case, the material appeared to come from credible—if not terribly profound—sources, including NPR's "Fresh Air" program and the CNN website. The organization of the essay was not entirely clear, as the second half of the paper used a narrative format to describe McVeigh's life, and various explanations of the event surface in both the beginning and end of the essay. However, Tony used temporal text connectives to help the reader follow McVeigh's history, and used topic sentences for each of his paragraphs. He also used more qualifiers in this essay, though only when discussing alternative views to his own: "Another cause of the event could possibly be that Iraq was somehow behind the attacks." As in Paper 4, his tone was much more consistently audience-friendly, and he developed an informed persona.

Paper 6.

The draft of Tony's sixth paper was virtually the same as the final copy, except that the conclusion of the draft was turned into two paragraphs in the final copy.

In the final copy of his sixth essay, Tony proposed that "The United States government should increase the power of the Central Intelligence Agency because it will reduce the number of terrorist attacks carried out on the United States and Possibly throughout the world." In contrast to the position adopted in Paper 5, Tony's position in this essay was essentially one-sided, presenting evidence for only one view. He did include a paragraph listing some objections to his proposal at the end of the essay, but did not explore these objections/alternatives in a sustained way. This was particularly surprising, given the fact that many of the class readings dealt with the CIA's involvement in *sparking* terrorism worldwide. Overall, it appeared that Tony did acknowledge some of his audience's potential

objections, but does not respond to them, nor does he concede them, exactly. It seemed that he ignored them to move onto his own points.

Tony cited 11 sources to back his major claims in this essay, and to develop an informed persona. Though some of these sources appeared to be substantial analyses, others appeared to be opinion pieces and editorials; one was written anonymously, and another was published in 1976. Interestingly, the writer seems to misinterpret a quote from one of his sources to support his view:

> The author states, "Our need to gather better intelligence about threats posed to the United States and the international community by transitional terrorist groups, must be weighed against the constraints imposed by current U.S. law and practice, the U.S. constitution, and our constitutional democracy" (Unleashing). This means that better intelligence is needed to be gained by ignoring the laws set forth in the Constitution.

As in previous essays, Tony rarely qualified his claims, instead using emphatic statements that suggest his view that his proposal will bring ultimate closure to the situation: "If this proposal is not carried out there will undoubtedly be more numerous and more devastating terrorist attacks."

In this essay, Tony used some pathetic appeals by drawing on his audience's paranoia about terrorism: "The United States has a faceless enemy in Al-Qaeda." However, the way he chose to develop and organize his essay appeared to use a fairly sophisticated appreciation of his reader's needs, in that he focused more on the specifics of his solution's implementation, rather than the problem of terrorism—with which his audience would undoubtedly be familiar. Overall, the essay appeared to have a strong use of organizing markers at both the macro and micro levels.

Unlike Paper 5, this essay was rated as having predominantly pre-reflective characteristics. Tony's overall approach appeared to use some pre-reflective thinking, in that he tended to treat the conflict as closed, and seemed to assume that his proposal provided a perfect solution to the problem of terrorism. Additionally, he tended to treat different types of sources as equally valid, distorted the meaning of a source (perhaps unintentionally) to correspond with his own claim, and did not appear to view alternative perspectives as viable, developing an essentially one-sided claim, and dismissing a number of important objections.

Self-reflection.

Tony's response to the first question indicated that he had a potentially more sophisticated understanding of the assignment than Kendra, insofar as it implied that he saw the second half of the assignment as involving an inductive process: "I felt that the assignment was to come up with a definition of terrorism, explain it using three or four reasons, and then think of a controversial event to decide whether that event was terrorism or not, by using the definition." However, his discussion of the process used in generating a definition of terrorism also appeared to indicate a more idiosyncratic approach, and in discussing his prewriting strategies later on in his self-recorded reflection, Tony implied that he had used a deductive and highly idiosyncratic process in selecting his "X":

> At first, I thought this was going to be a hard paper to do, but after you sit down and come up with your own definition, and pick a decent event that you can fit your definition to, it ended up being a pretty easy essay to write.

In discussing his intentions in crafting an argument that opposed Chomsky's view of the 1997 bombing of the Sudanese plant, Tony observed that his motivations were personal:

> I chose the event of the destruction of the Al-Shifa pharmaceutical plant in Sudan in August of 98, simply because we read a book earlier this year that talked about that, Noam Chomsky thought that was a terrorism [event]I didn't really agree with him then, so I just wanted to disagree with him some more… I wanted to come up with a definition of terrorism that wasn't really a normal definition.

Additionally, Tony suggested that his approach was motivated by an a priori position:

> The main thing I wanted to show was that violence committed by the military is not terrorism. Some people seem to think so, like Noam Chomsky, or some other people I know. They want to say it was terrorism if we kill civilians in another country. We're not going there on purpose to go and kill people. Even though it's wrong to kill anybody, I wanted to make it clear that it wasn't terrorism that was going on, committed [by] the US.

At the same time, Tony's reflection supported the assessment of his position in Paper 4 as built upon some implicit criteria. He recalled that "Some people just said it was violence; anything would be terrorism then. So I had to make it more specific."

In discussing the parts of his essay that a reader might find confusing or complicated, Tony indicated that his approach would not have confused anyone:

> I don't think there are any complicated or potentially confusing passages in my essay. Overall, written in pretty simple language, since I don't really know an extensive list of vocabulary, so it wouldn't be too hard. I'm sure a third grader could read this and understand it pretty well—maybe not get all the points, but understand what it was saying. I didn't try to confuse anybody.

Reflecting on his use of strategies to persuade his audience, Tony first responded, "I don't think I used too many persuasive strategies in my paper—definitely not in the body paragraphs, just explaining my definition." However, he went on to recall that he used some rhetorical strategies "maybe more in my conclusion paragraph, when I used conditions of rebuttal, I tried to say the opposite of what I said, but then I would disprove it, and I think that kind of proved my point for the most part."

In discussing his overall impression of his essay, as well as the degree to which he felt he had created a compelling essay, Tony appeared assured of his success. He observed that

> I think I did a pretty good job on this paper. I mean, I went and talked to the teacher two or three times about my paper. It was kind of ragged at the beginning, but with some help, I think I pulled it into a good paper. I got an A on it, so obviously I did pretty good. A lot of people would love to disagree with me and prove me wrong, and hey, it could probably be easy, but I backed up my reasons with lots of research, so it should all be good.

Summary of case #2: *Quasi-reflective thinking.*

Like Kendra, Tony appeared to have had substantial experiences with writing, including some experience with persuasive writing, as was the case for the other participants in the study. Like Kendra, he too had some doubts about his writing abilities, but indicated that he felt fairly comfortable that these skills would enable him to do the kind of work expected of him in English 111Z. However, Tony's essays received a wider range of ratings, which was also the case for the other participants who were rated as using predominantly quasi-reflective thinking. Although three of his essays were rated as predominantly pre-

reflective, two were rated as predominantly quasi-reflective, and one was rated as having a balance of pre and quasi-reflective characteristics.

Overall, Tony's essays suggested a greater willingness to differentiate his views from those of an authority, and a stronger awareness of the existence of ill-structured problems. He did not appear to use evidence more consistently than Kendra (who used it consistently herself), but did seem to have fewer problems in selecting credible and appropriate evidence. In three of his essays, he presented evidence for more than one view, and in each of his essays, he acknowledged an alternative view. There was not a clear pattern in the rhetorical features of his essays, in that some essays appeared to have a stronger logical appeal than others—and the same was true for his use of *pathos* and *ethos*. At times, Tony seemed to have some problems with managing his tone and overall organization. Like Kendra, Tony tended to use qualifiers infrequently, and often relied on emphatic statements to convey his claims.

Tony's self-reflection on Paper 4 seemed to substantiate the conclusion that he was using some quasi-reflective reasoning in creating this essay, in that he recalled assembling his position based on idiosyncratic thinking—but also based on some evaluative criteria. Interestingly, he appeared to be assured of his essay's persuasiveness, but agreed that someone else could easily see it another way. The instructor's comments on this essay, as on Kendra's essay, focused primarily on mechanical/grammatical issues, and tended to validate his approach.

Discussion of Findings for Question One: In what ways do college freshmen's written arguments reflect the assumptions about knowledge and justification described by their reflective judgment ratings?

Group One-Pre-reflective Reasoners

Four of the participants in this study were rated as using predominantly pre-reflective thinking, while 11 participants were rated as using predominantly quasi-reflective thinking. Overall, there appeared to be some differences in the patterns that emerged in their written arguments. Twenty-one of the 24 essays written by students with predominantly pre-reflective thinking were assigned predominantly pre-reflective ratings; the other three papers appeared to have a balance of pre- and quasi-reflective characteristics.

These essays were characterized by one-sided positions, or positions that offered evidence for only one view. These writers also appeared to have some problems with evidence-usage. Though each of their essays included some evidence for some of their major claims, these writers tended to have problems using evidence to support essential claims, difficulties in selecting credible evidence, and difficulties in using evidence critically. These writers generally failed to differentiate their views from the views of authorities, including the source material used in their essays. These writers tended to either sidestep controversial issues in their essays, or assume that there was only one "correct" way of solving a rhetorical problem.

Each of these writers did acknowledge objections to their claims in some way in at least two of the essays they wrote. However, half of the essays produced by pre-reflective writers made no mention of alternative views, and only three identified reasons why a

skeptical audience might disagree. These writers tended to assume that only those who were "closed-minded" or uninformed about the issues at hand would disagree with their claims.

Additionally, these essays tended to feature logical inconsistencies, a lack of qualifiers, and some inconsistencies in the use of *pathos* and *ethos.* In each case, writers in this group used facts and reasons to build their cases. However, half of the essays they produced were substantially compromised by logical fallacies. Each of these students used pathetic or ethical appeals in at least two essays. At the same time, these writers tended to use appeals that could estrange their audiences, and had trouble controlling their tone and building credibility in a consistent way. These participants rarely used qualifiers to limit their arguments, and instead tended to use emphatic language to intensify their claims.

Participants' self-recorded reflections on Paper 4 tended to support the conclusion that these students sustained generally pre-reflective assumptions about the assignment and their performance. Although these students were able to paraphrase the terms of the assignment, their beliefs about its purpose seemed to indicate a lack of awareness of the ill-structured nature of the task; they did not seem to indicate that there was room for disagreement with their positions. These participants were open about the weaknesses in their essay, but argued that readers should have no trouble following their arguments, and were very positive about how successfully they conveyed their arguments to their audiences.

Group Two-Quasi-reflective Reasoners

For writers who used predominantly quasi-reflective thinking, the patterns in their writing were less consistent. Of the 65 essays written by participants in this group, 56% were assigned predominantly pre-reflective ratings, 25% were judged to have used a balance

of pre and quasi-reflective characteristics, and 20% were rated as predominantly quasi-reflective. All eleven writers in this group wrote at least one essay that was rated as predominantly pre-reflective. However, nine of these participants wrote essays that appeared to have a balance of pre- and quasi-reflective characteristics, and nine wrote essays that appeared to have predominantly quasi-reflective characteristics.

The essays that were rated as predominantly pre-reflective shared many of the same characteristics as the essays written by participants with predominantly pre-reflective thinking; again, the majority of the essays written by students in this group were rated as having predominantly pre-reflective characteristics. Yet quasi-reflective participants also appeared more willing adopt balanced positions that offered evidence for more than one view, and more writers in this group were able to differentiate their views from the views of an authority. Additionally, each writer in this group acknowledged the ill-structured nature of a rhetorical dilemma in at least one of the essays s/he wrote during the semester, indicating a stronger awareness of the uncertainty involved in bringing closure to a complex problem.

These writers were more consistent in using evidence to support their major claims, though like their counterparts in Group One, they had trouble using evidence critically. These participants also appeared more consistent in selecting evidence that was credible, although nine of the participants in this group used inappropriate or unreliable evidence in at least one of the essays they wrote.

All participants in Group Two acknowledged the objections of a doubting audience in at least two of the essays that they wrote. These writers were not consistent in handling these objections, and, like their counterparts in Group One, tended to assume that only uninformed

or biased members of the audience would disagree. However, 10 of the 11 writers either rebutted these objections, or explicitly conceded objections in at least one of their essays.

Like participants in Group One, participants with predominantly quasi-reflective thinking tended to build their arguments on facts and reasons, rather than by using pathetic or ethical appeals. Although many of their essays did suffer from logical fallacies, the majority were not substantially hampered by problems with logic. Still, students in this group, like their counterparts in Group One, appeared to have trouble appealing to their audiences and sustaining credible personas throughout their essays. This problem was intensified by the failure to use qualifiers to limit their claims.

Group Two participants' self-recorded reflections on Paper 4 tended to confirm inferences about the assumptions about knowledge and justification that they used in their essays. Some of the participants who used quasi-reflective thinking indicated that the purpose of the assignment was to "prove" their preconceived definition of terrorism, and others suggested that the assignment involved responding to an ill-structured dilemma through a more inductive process. In each case, the participants appeared to view their approach to their assignment as highly individualized. Although some participants in this group, like their counterparts who were rated as using predominantly pre-reflective thinking, were unable to identify passages in their essays that a reader might find confusing, some participants in Group Two did identify several such passages. At the same time, there was considerable overlap in the way that each group of students reacted to their instructor's assessment of their work; in each case, these participants felt that they conveyed their messages well, and had some difficulty identifying aspects of their argument that would have merited a lower grade.

Summary of Findings for Question One: In what ways do college freshmen's written arguments reflect the assumptions about knowledge and justification described by their reflective judgment ratings?

Overall, it appeared that there were some differences in the ways that participants who were rated as predominantly pre-reflective thinkers, and those who were rated as predominantly quasi-reflective thinkers assembled their arguments. While a majority of the essays written by participants in Group Two shared similar characteristics with essays written by participants in Group One, Group Two participants seemed more willing to take on balanced positions, differentiate their views from the views of an authority, and acknowledge the ill-structured nature of some problems. Additionally, these participants seemed to have less difficulty in selecting credible evidence, and were more consistent in acknowledging the existence of objections to their views.

The most salient difference between the essays written by the two groups of students was that the participants who were rated as using predominantly quasi-reflective thinking appeared to have access to a wider range of strategies for assembling their arguments, particularly with respect to the way they adopted positions. The essays that they wrote seemed to manifest a more diverse repertoire of assumptions about knowledge and justification. While only three of the essays produced by writers in Group One were rated as having a balance of pre and quasi-reflective characteristics, each of the writers in Group Two wrote at least two essays that were either rated as using this balance, or as having predominantly quasi-reflective characteristics.

Conclusions about the association between reflective judgment level and patterns in participants' written arguments must be drawn with caution. First, there was considerable

overlap in the reflective judgment scores assigned to participants in the sample, and there was limited variability in participants' overall score distributions. This is not surprising, considering that the strongest correlates for reflective judgment development are age and education (King and Kitchener, 1994), and all the students in the sample were 18 or 19 years of age, and were all college freshmen. However, the overlap in scores for participants in this study may help explain some of the overlap in the patterns that emerged in their writing.

Additionally, a potentially problematic issue was the fact that three of the four students who were rated as using predominantly pre-reflective thinking had also been described as "challenged" writers on their initial diagnostic assessment, and these writers tended to describe themselves as less confident about their writing. On the other hand, three of the students who were initially categorized as "challenged" were rated as using predominantly quasi-reflective thinking on the RJI, and each of these participants went on to write essays with quasi-reflective characteristics.

Question Two: What kinds of reflective judgment are encouraged in the persuasive writing classroom context through textbooks, assignments, and the instructor's feedback?

Though this study was mainly concerned with investigating the relationship between students' reflective judgment levels and their persuasive writing behaviors, it was important to pay some attention to the major features of the writing context, in order to draw sound conclusions about this association. Thus, the second question that guided this project focused on the ways in which the classroom context appeared to foster particular kinds of reflective judgment usage in participants' essays. This question concentrated on the roles

that the course curriculum, assignments, and instructor played in encouraging reflective thinking in participants' written arguments.

The following discussion relates findings about the course in which these students were enrolled; the assignments students were required to complete; the instructor's beliefs about pedagogy, assessment, and students' level of preparation; and the instructor's feedback on participants' Paper 4. Participants' perceptions of these contextual elements, communicated during their qualitative interviews, are provided when available. There were no appreciable differences across reflective judgment groupings in terms of how participants perceived these contextual factors. However, the instructor's feedback to participants on their fourth paper was also examined across reflective judgment groupings, and because there were some differences in the way that the instructor responded to participants' work, findings concerning feedback are reported separately for each group.

Curriculum

Prior to the Fall 2002 semester, the curriculum of English 111, Composition and Rhetoric, centered around persuasive writing for civic audiences. In anticipation of curricular changes which will go into effect in the 2003-2004 school year, the fall 2002 focus changed somewhat to reflect an emphasis on both civic *and* academic audiences. The number of students in the course was also lowered from 23 to 18 as part of the university's efforts to reduce student-teacher ratios, and the title of the course was changed to English 111Z. According to the university's course catalogue, this course involves an

> introduction to elements and strategies of argumentative writing for civic and academic audiences. Strategies for generating, organizing, and revising texts.

> Includes instruction in library research methods, use of evidence, and essay exams. Attention to grammar and conventions of standard written English. (Undergraduate Course Catalogue, 2002, np)

In accordance with this description, the participating instructor's curriculum maintained a focus on persuasive writing, but included assignments tailored to appeal to both civic and academic audiences. Lynn Troyka's *Handbook for Student Writers* (1999) was a required text for all English 111Z courses. Ms. Stone ordered this handbook for her students, but did not assign any readings from it; instead, it was treated as a supplementary reference. The course's main text, Lunsford et al.'s *Everything's an Argument* (2001), provided the organizing structure for the class, dividing the semester into discrete segments devoted to the production of various categories of persuasive writing.

This textbook follows the "theory of types" discussed in much of the literature on teaching argument at the college level, most notably by Fahnestock and Secor (1983), and provides information on the Toulmin framework for conceptualizing and analyzing arguments and lines of reasoning, as well as the content and structure of definition, evaluation, causal, and proposal arguments. The text opens with a generally reflective perspective on the purpose of writing arguments, advising students to "take no claim at face value, examine all evidence thoroughly, and study the implications of your own and others' beliefs" (p. 19). The authors distinguish between persuasion and argument, and note that "arguing isn't always about winning or even about changing others' views," though "in practice, this distinction between argument and persuasion can be hard to sustain" (p.6). Overall, the textbook takes the position that nearly any text that takes a point of view can be

an argument, and that "developing an inquiring turn of mind" can help students participate in the world of debate around them (p. 19).

Part 1 is three chapters long, and is entitled "Introducing Argument." In the first two chapters, the authors outline various ways of categorizing arguments, including stasis theory, and describe lines of argument, including arguments "from the heart," "based on values," "based on character," and arguments "based on facts and reasons" (p. 26-29). The third chapter focuses on the importance of considering audiences and demonstrating credibility. Part 2 develops the discussion of the four major lines of reasoning in four separate chapters. The seventh chapter, "Arguments Based on Facts and Reasons," emphasizes the essential role that the statement-proof or claim-data structure plays in argument, a point also stressed in Chapter 8, which presents the Toulmin framework for describing and structuring arguments, and in Chapter 19, which specifically focused on fallacies. Participants also read Chapter 18, "What Counts as Evidence," which discusses primary and secondary information sources (including online sources), how to obtain them, and how to use evidence effectively in an argument.

Participants were also required to read four additional chapters from Part Four, "Writing Arguments." These chapters focus on strategies for writing evaluation, definition, causal, and proposal arguments. Each of these chapters opens with a series of vignettes that illustrate the particular type of argument under discussion. Next, the authors discuss common contexts for these arguments, and offer suggestions for constructing and supporting each type of claim. Each of these chapters include two full-length sample arguments produced by professional writers.

Qualitative interviews with participants indicated that their perceptions of the textbook and the general emphasis of the course were varied, though no pattern appeared with respect to reflective judgment groupings. Only three students indicated that they had never studied persuasive writing in the past, but several other students noted that there were differences between their high school experiences with writing arguments, and the content of English 111Z. For example, Shawna noted that "we're talking about the Toulmin scheme…I'd never heard of that before," and Kendra recalled that "when we did argument papers in the 11th grade, it wasn't this detailed. It was basically state your claim, or whatever."

However, in their qualitative interviews, most participants indicated that they felt comfortable with the course content. Some participants observed that the concepts covered in the course had already been covered thoroughly in their high school courses. Van stated that "I looked at the Toulmin scheme…probably sometime around 9th grade." Likewise, Carrie volunteered that "when I found out what this class was going to be about, and I found that our textbook was going to be *The Art of Argument*, or something like that, I was kind of like—'Gosh, I've already done this.' "

Overall, most participants indicated that the course material was a natural extension of their prior knowledge. Dawn noted that " There's quite a bit of new stuff, but it builds on top of what I've already learned." Echoing this sentiment, Leah claimed that "basically, it's common sense for a girl that likes to dispute!" Phil, one of the students who claimed that he had never had formal exposure to persuasive writing, noted that the essays in English 111Z were, nonetheless, similar to papers he'd written in high school: "I mean, it's all argumentative in a paper, because when you have a thesis, you're trying to persuade someone

to think something. So, I guess it's the same thing, just different kinds of reading." Though many had not had the intensive argumentation instruction that Carrie and Van experienced, Myron's claim that "I haven't really encountered anything that I hadn't known before" was typical of most participants' view of the course at the end of the first month of classes.

Some students even suggested that the course was easier and more enjoyable than their high school English classes, most of which focused on literary analysis. Tony observed that "I guess more my problem is writing about other [novels]. But, like, definition papers I can do, and opinion papers I can do." When asked about his perception of the course, Mike claimed that "Well, it's…a pretty easy-going class, because it's mostly say what you feel and stuff." Comparing his senior English class with English 111Z, Chris noted that "I would say—it was the exact same class, but more rigorous, geared toward higher writing." Reflecting on the difference between English 111Z and his high school English courses, Jesse claimed that "I don't really like writing too much about symbolism and all that stuff. I like the opinion stuff that's been in the prompts that we've had."

As a number of scholars have observed (Hillocks, 1995; Knudson, 1992; McCann, 1989), students can have difficulty writing arguments when they lack sufficient background information to develop their ideas and sustain a position. To remedy this potential problem, the instructor chose to organize the course around a central theme, and included two background texts to provide a critical perspective on this topic. The topic of terrorism was chosen because it represented a timely issue with which students would already have some familiarity and interest, due to the events of 9/11/01. The instructor selected Noam Chomsky's *9-11* (2001) and Eqbal Ahmad's *Terrorism: Theirs and Ours* (2001) to supplement the primary text. Both of these texts present a generally critical view of U.S.

foreign policies, and make the argument that many U.S. actions fulfill the authors' criteria for terrorism. Although *Terrorism: Theirs and Ours* also includes a 15-page essay by Ahmad, both of these texts feature transcribed interviews with the authors.

Once again, students' responses to the organizing theme and supplementary texts were varied. Leah observed that Ms. Stone

> kind of took me aback when she said that the whole semester was on terrorism. It doesn't bother me so much, but if I don't understand a certain thing, I'm afraid that that'll end up in all of my writing, or all of the tests, or stuff like that. That's what I'm kinda worried about—that if I don't do well with it, then it's going to be all semester, instead of just—"ok, let's move on to something else."

As Leah's response indicates, students who were concerned about Ms. Stone's choice to organize the course around a single issue or theme were less concerned about the choice of topics than the fact that they would be required to use the same topic in all their papers. As Phil noted, "I'm going to get real tired of terrorism real quick." However, the specific theme of the course appeared to be another non-issue for most participants, as most did not mention it during their interviews, or suggested that they believed it was a positive aspect of the course. As Jeff observed, "it's actually subject matter that I feel comfortable with, just because I've had so much exposure to it." Similarly, Van indicated that the material was not new to him:

> We just finished reading a book, *9/11*. That wasn't too new to me, because I'd been keeping up with the news and everything, so that wasn't too new. Some of the points were obviously were reiterating stuff I'd heard in the past. So far it's been pretty much review, but trying to bring up new ways of looking at it.

Though she too had learned about terrorism outside class, Melanie communicated her belief that "It's good to…read the book, Chomsky's *9/11*, and to learn more about a topic. I think it gives you a whole new perspective on things outside the class."

Despite the fact that the course had an organizing theme, an examination of the syllabus shows that the major emphasis of the class was on students' writing, specifically on producing the categories of claims described in the textbook. Of the 46 class meetings held during the semester, 19 were spent in writing workshops, peer review sessions, or practicing particular skills during sessions such as "Strengthening your definitions" and "Arguing to specific audiences." Other sessions involved activities related to the rhetorical content found in *Everything's an Argument* (e.g. "Intro to evaluation argument") or activities related to the writing process, but not necessarily the actual practice of writing, such as "What is peer review?" and "Idea sharing day." A substantial amount of time was spent on procedures for using evidence; seven sessions were devoted to topics such as "Incorporating others' texts into your own prose" and a trip to the library. Two days were devoted to student conferences.

In general, participants had little to say about the fact that the course stressed persuasive writing instead of the literature-oriented approach they experienced in high school English. Some of the participants expressed their surprise that the course did not focus on the kinds of literary readings they had been exposed to in their high school classes. However, no students expressed any surprise with Ms. Stone's emphasis on the writing process; it appeared that students were familiar with activities like peer review from their high school courses. Jesse claimed that "we had peer-editing and peer review in our high school. It's pretty similar." As Mike observed, the course was in some ways like his

sophomore year of high school, given that "Tenth grade was basically an all-writing class, because it was preparing you for the tenth-grade writing test." Tony, one of the few students to discuss his perception of class activities, indicated that he enjoyed the way the class operated:

> I like the class, because you go in there and it's not boring or anything…We won't take notes everyday; we'll talk about a book we've read or a paper we have to write, or we'll talk about ideas we have to write about the paper, or we'll do a peer review on a paper.

Overall, the course's focus on writing represented a change for some students, but the class activities appeared to be familiar for most, and were viewed positively by the students who mentioned them during their interviews.

One of the characteristics that distinguishes English 111Z from many other courses taught in the English department is that it is often scheduled in the computer lab, and many English 111Z teachers create websites using school-sponsored webspace to disseminate assignments and other course-related information. Ms. Stone's sections used the computer lab on an alternating basis; that is, her classes typically met for three weeks in a row in the computer lab, and then moved back to a traditional classroom for three weeks.

This experience was almost certainly new for most, if not all, students in her classes. However, the participants in the study had little to say about this arrangement. Only three participants mentioned the computer classroom or the use of the class website at all during their interviews, and both indicated that they were positive features of the course. Carrie noted that "I've never been in an English class that used computers, and I think that's a definite asset." Van indicated that he knew "what to expect" because "she's already got all

the papers out on the website." Aaron, the only other student who mentioned the class's use of technology, noted that

> instead of writing stuff down on the over head, like you used to get in high school, or writing stuff on the board, they've got all the technology here, and you got the projection, and [Ms. Stone is] at her computer, and she's just typing away. And everybody else is taking notes on their computers, and we'll just save them and email them to ourselves—and that's a really nice ability.

Thus, students appeared to view the use of technology within the course either as a non-issue, or as a helpful learning aid.

Assignments

During their interviews, participants seemed generally positive about the kinds of assignments they were asked to do in English 111Z. However, when asked about the kinds of assignments she typically assigned students, the instructor noted that students

> seem to prefer the kinds of assignments that I'm not giving! They'd love to write some personal narratives. And they would love to write some sort of pro-con thing, and are a lot of times uncomfortable with taking a stand. They either love or hate research papers, or fear them.

The assignments Ms. Stone selected for inclusion in the course were geared towards encouraging students to support a "critical claim" with evidence. All the assignments were either directly or indirectly text-based, requiring students to either react to a text or to use outside sources to back their own claims. Each assignment asked students to respond to a controversy, an essentially ill-structured dilemma. In each case, the instructor's assignments tacitly required students to bring closure to a controversy, a requirement most evident in the

last paper, which obliged students to find a solution to a particular terrorism-related issue. However, each assignment asked students to consider an issue from various perspectives, and defend a judgment that represented the most plausible response to the dilemma, from their own perspective. Assignments 2-5 also included sample student essays (one of which was excerpted from another textbook), whose positive and negative characteristics students discussed in class.[12]

The first two assignments did not require outside sources, beyond the primary texts used in class. Paper 1 was the most open-ended in terms of structure, as students were simply asked to offer their response to Chomsky's claims in *9-11*; as a text that that critiqued the way in which the Bush administration has handled the war on terrorism, many of its claims would be considered controversial by an American audience. The second essay was more rigidly structured, asking students to generate criteria to evaluate the appropriateness of Ahmad's *Terrorism: Theirs and Ours* for pre and post-9/11 audiences.

The instructor encouraged the use of outside sources in the rest of the assignments in the sequence. The third and fourth essays, following the classic definition format, had relatively lockstep structures, asking students to respond to the need for a more comprehensive or accurate definition of terrorism, and discuss whether a "borderline" event constituted an act of terrorism from the writer's own perspective. The fifth essay had a more flexible structure, requiring students to consider the possible causes of a terrorist event. The sixth assignment followed the traditional proposal arrangement, including a discussion of a problem that needs solving, the writer's solution, and his/her justification for the solution. Assignment sheets for each paper are included in Appendix 7.6.

Although a few students expressed some anxiety about their ability to fulfill the assignments to Ms. Stone's satisfaction, most participants' reactions to the assignments themselves were generally relaxed. Two students clearly perceived the assignments as challenging. Melanie said that "If I did it on a scale of one to ten, I probably feel pretty challenged right now—I'd say an eight, " and Kendra noted that "I didn't know it was going to be this hard."

However, the other participants indicated that they felt fairly comfortable with the assignments. As Jesse observed, "It's really the same as high school. It's not too much different." Reflecting on the different kinds of assignments he was asked to complete for class, Jeff claimed that "I'm actually enjoying this better, because the papers and books are shorter, and they're deal with a subject that I'm more used to, that I have more experience with." When asked how much of a struggle writing the first paper was for him, Chris responded, "None. I knew how to write the paper before it was even assigned or even suggested." Leah anticipated that assembling the papers required for English 11Z would not be a challenge: "It's basic." Similarly, Myron indicated that, at the end of the first month of classes, "the class makes me feel like a really good writer, because we're going over stuff that… you'd seem like you'd know right when you're born." Thus, participants generally appeared to perceive that the range of skills they brought to the class were sufficient to meet the demands of the course assignments; there was no difference across initial performance categories or reflective judgment groupings in terms of participants' perceptions of the difficulty of the assignments.

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[12] Because two of these essays were written by former students of Ms. Stone, it was not possible to obtain permission to include excerpts from these writing samples in this study.

Instructor

An interview with Ms. Stone was conducted during the first week of the semester, and was designed to elicit information about her views on the purpose of English 111Z, her role in the classroom, the ways in which she responds to student writing, and her beliefs about her students' level of preparation for the course. The instructor's views of the purpose of the class reflected the official course description, as well as her own belief that the course provided an important means of preparing students for writing in the university:

> I think it says on the policy section that it's to introduce students to civic and academic audiences, or writing. But I think, more, it's to introduce students to writing in the university and not necessarily in this 'writing in the disciplines' type thing, but just to get them up to the university standards of writing.

When questioned about the kinds of skills the course was designed to impart to students, the instructor listed the major emphases of her course, including an

> emphasis on being able to focus their ideas, organization.…If we don't formally teach them grammar and mechanics, it, I think, emphasizes the importance of at least clarity. It helps them with development—that's a big problem that a lot of them have. Emphasizing research, introducing them to the library, and how to do research in big university systems.

From Ms. Stone's point of view, instead of stressing grammar or style, the course was intended to enhance students' ability to develop and present their ideas clearly, and to engage in the kinds of research expected of them elsewhere in the university.

The instructor's description of her own philosophy of pedagogy reflected an awareness of research and developments in instructional practice. When asked about her role

in the classroom she replied, "Well, I like to say to them in a joking way—I know that you feel I'm like a taskmaster, but I'm really more like a guide or a coach." This "coaching" approach stemmed from Ms. Stone's sense that teaching writing is an interactive and constructed process:

> I don't want to say that you can't teach writing, because you can—but I do think that really what I'm there to do is to help them focus on what their strengths and weaknesses are, and sort of be there as they practice those things to give them feedback, as sort of a touchstone, or really an advisor, when it comes to writing, rather than someone who imparts, you know, wisdom that they "absorb."

Instead of viewing her role as a "dispenser" of knowledge, Ms. Stone saw herself as a facilitator of learning.

With regard to her assessment practices, Ms. Stone viewed herself as fair, but demanding. The types of feedback she gave students also reflected an awareness of best practice, in that she valued a balance of positive and critical feedback:

> Well, I try to praise what there is to praise…Some people believe that if it's a C paper, then there's nothing to encourage, which I don't think is true… So, I try to say something positive, and then I try to focus on no more than three main problems…those three main problems usually are *not* grammar. And I will try to star one or two main issues that they should be working on.

Although Ms. Stone noted that "I have gotten in trouble before for being overly encouraging," she felt that praising "what there is to praise" and focusing on a few main problems at a time was the best approach to improving students' writing. Overall, her beliefs about the purpose of the course, her own role in the classroom, and assessing student writing

seemed to embody a number of current assumptions about the constructed nature of learning, and the need to enact the role of facilitator within the composition classroom.

Because her attitude towards her students' abilities might be an important factor in the way she taught the course, Ms. Stone was also asked to describe her impressions of her students' level of preparation for the course. She indicated that, from her perspective, her students typically represent "a real variety" of skill levels. Ms. Stone acknowledged that she didn't know the reason for this range, but offered two competing explanations. First, she suggested that this variety may stem from the differences in her students' high school learning experiences: "I don't know what it depends on, whether it's the different high schools that they go to are so varied… some people are very prepared. Some aren't." However, she also indicated that the challenges may be a result of the demanding nature of the task: "It's a challenging course, cognitively, the assignments and that sort of thing. And some of the kids aren't—I don't want to say brighter than others—but that's true." From Ms. Stone's perspective, students' difficulties with the assignments appeared to be a result of either lack of experience, or a relative lack of intelligence, when faced with complex assignments. She claimed that "some kids *are* brighter than others, and some kids have just had high school experiences where they did a lot of writing, and know what questions to ask." Faced with explaining why students tend to struggle with some of the course assignments, Ms. Stone assumed that the reasons for their difficulty pertained either to prior experiences, or stable, intrinsic cognitive abilities.

During their qualitative interviews, most participants did not discuss their impressions of the instructor, focusing instead on their general impressions of the class. However, students who did discuss Ms. Stone indicated that they viewed their instructor positively.

Most of them seemed to concur with her perception of herself as a facilitator, and not a "taskmaster." Jeff observed that Ms. Stone appeared to feel it was necessary to seem authoritative during the first few weeks of class, but noted that this quality had been replaced with a more understanding attitude:

> When I first got in, [Ms. Stone] was leaning over her desk saying, "If you miss the seventh day of class, I will fail you, regardless, etc." And it was like the classic professor --"I will lay down the law." But as the class went on, she's gotten a lot better, and she's gotten more understanding. I guess that first day was just to weed out some of the kids, to get them to go "oh no, I can't handle it."

Myron volunteered that, from his perspective, Ms. Stone "doesn't seem like the boring, monotonous guy that's going to tell you that…you've gotta to have your topic sentence, and you've gotta have your transitions, and just making everybody's paper look exactly the same." Aaron contrasted his experience with Ms. Stone with his expectations of what a college instructor would be like, based on the information given to him by his high school teachers:

> She is trying to help everybody, even though back in high school they were telling us "None of your teachers are going to care about you in college! They don't care if you fail or pass!" They wouldn't become professors if that wasn't their whole objective.

Kendra and Aaron revealed that they had already been to see Ms. Stone about their papers, and that she had spent time helping them assemble their drafts; overall, the participants perceived that Ms. Stone was a helpful instructor, and appeared to view her approach favorably.

Instructor's comments: Group one.

The instructor's comments on Paper 4 were examined as a means of investigating the degree to which the patterns in the participants' essays were being challenged and/or reinforced. Table 4.6 illustrates the focus of marginal comments made by Ms. Stone on the fourth paper written by Group One participants.

Table 4.6

Instructor's Comments on Group One Participants' Fourth Paper

Comment Topics	Dawn	Kendra	Phil	Jesse	Total
Agreement	1	17	0	4	22
Clarity	2	2	1	1	6
Development	2	2	4	2	11
Evidence	1	3	2	15	21
Ill-structured nature of problem	3	0	1	2	6
Logic	1	0	4	3	8
Mechanical/Grammatical Corrections	2	17	13	8	40
Organization	0	0	0	0	0
Paper conventions	0	1	0	1	2
Style	0	2	2	0	4
Total	12	44	27	36	120
Grade	C+	B	D	C-	120

The range in the number of marginal comments the instructor made on Group One participants' essays was considerable, from 12 on Dawn's essay to 44 on Kendra's. Mechanical/ grammatical corrections represented the category of comments made most frequently for these essays, followed by comments expressing a generalized agreement (usually a check-mark or "Yes.") The next most commonly-addressed issue in these students' essays involved evidence-usage, a topic Ms. Stone addressed in comments such as "You don't really have evidence for this point" and "Develop this paragraph with more specifics." In each case, Ms. Stone also commented on the way these students developed

their arguments in statements such as “Be more specific” and “A nice ending.” Questions about logic (e.g., “What does the impact of the blast have to do with the intention?”) and comments involving the writer’s treatment of the dilemma, or the ill-structured nature of the conflict (e.g., “How do you know that?”) were also posed in three of the four cases. However, these patterns varied substantially across individual cases; for example, Ms. Stone commented 15 times on the way Jesse used evidence in his fourth paper, but commented only once on Dawn’s use of evidence.

Ms. Stone also wrote more extensive notes at the end of each essay, summarizing her impressions of the paper, and offering suggestions for the next assignment. These summarized comments generally reflected the themes developed in the comments made throughout each essay. In Kendra’s case, the endnote focused on the need to clean up her “sentence level problems” and citations, while in Phil and Dawn’s cases, Ms. Stone’s final comments expressed the need for a more logical relationship between different parts of the argument. In Phil’s paper, Ms. Stone noted that

> what's problematic is that your intro lays out a definition that you don't fully establish--in fact the criteria you do establish don't quite relate to your initial definition. Further, your criteria-match paragraphs don't put enough emphasis on how the event fulfills the criteria--they're more summary.

Similarly, in Dawn’s case, Ms. Stone alluded to the circular reasoning that occurred when she attempted to define an abortion clinic bombing as a terrorist event, after using the example of this bombing to establish her criteria: “this paper would be stronger if you did more to distinguish your ‘event in question’ from the examples establishing your criteria.”

Ms. Stone also emphasized the need for better research in both Jesse and Dawn's essays, encouraging Dawn "to avoid sites that claim to be news sources but appear to be more propaganda" and advising Jesse that "The bottom line here is that you don't have the evidence to make your claim. You just don't have enough evidence about the event."

Instructor's Comments: Group two.

As with Group One, the instructor's comments on Group Two participants' Paper 4 were also examined in order to provide information about how patterns in the participants' essays were being challenged and/or reinforced. Table 4.6 illustrates the kinds of comments Ms. Stone made on each participant's fourth essay.

Table 4.6

Instructor's Comments on Group Two Participants' Fourth Paper

Comment Topics	Jeff	Leah	Van	Myron	Tony	Chris	Shawna	Melanie	Carrie	Aaron	Mike	Total
Agreement	7	7	0	1	31	4	2	11	N/A	22	6	91
Clarity	1	1	0	1	1	2	7	2	N/A	0	1	16
Development	0	3	0	3	1	1	1	0	N/A	0	5	14
Evidence	1	1	2	3	0	2	4	4	N/A	0	3	20
Ill-structured nature of problem	2	0	2	3	0	0	0	0	N/A	1	0	8
Logic	2	0	0	0	0	1	1	0	N/A	1	1	6
Mechanical/Grammatical Corrections	2	16	1	3	7	6	2	2	N/A	16	2	57
Organization	4	0	3	2	0	6	2	0	N/A	1	1	19
Paper conventions	0	0	0	0	0	0	2	0	N/A	0	1	3
Style	0	5	0	0	0	0	1	0	N/A	2	2	10
Total	19	33	8	16	40	22	22	19	0	43	22	244
Grade	B	B+	C	C-/D+	A	B	C	A-	A	B+	C+	244

The range in the number of marginal comments made by the instructor on Group Two participants' fourth essay was similar to the range in the number of comments made on essays written by Group One members. However, the pattern of instructor commentary was different for Group Two participants, in that the instructor commented less frequently on grammatical issues, and expressed agreement more frequently with the ideas of students in Group Two, compared to Group One. As for Group One, evidence usage was the next most frequently commented-upon issue; however, Ms. Stone commented on this issue *less* for Group Two, in absolute terms, even though there were more than twice as many students in Group Two. Ms. Stone commented on the writer's logic or treatment of ill-structured problems in seven of ten cases; however, the actual number of comments on these issues for the entire group was the same as for Group One. Interestingly, the instructor commented on participants' organization in seven of ten cases, for Group Two participants, but made essentially no organizational comments on the essays written by Group One writers.

As was the case for Group One participants, the endnotes written to Group Two participants tended to reiterate comments made throughout the essays. In four cases (Leah, Tony, Aaron, and Melanie), the instructor made no substantive criticisms or comments about the content of the essay, except to congratulate the writers, or to encourage them to work on their grammar and mechanics. However, on the other essays, the instructor made some pointed comments about the logical value of the arguments presented, and/or their use of evidence. In response to Jeff's essay, the instructor queried the writer about the stasis of his argument, and his lack of a critical claim: "what's the value of classifying [a] murder-suicide as terrorism?… You could strengthen the paper by discussing the consequence of your definition and criteria match more." Similarly, in response to Van's argument, the instructor

observed, "you're not always using evidence to support your claims, nor have you established why the claim is critical." Reacting to Myron's development of his definition argument, Ms. Stone pointed out that

> The definition you've taken from the dictionary has a lot of criteria, not just the 2 you take up (only one of which you develop individually). Further, the criteria need to be developed with specifics. The Chomsky and Ahmad [texts] aren't doing much for you here.

While the instructor's marginal comments within the body of the essays written by Group Two participants seemed to reflect different patterns than the comments made on the papers written by Group One members, many of the instructor's final remarks to students in both groups seemed to share similar characteristics.

Discussion of Findings for Question Two: What kinds of reflective judgment are encouraged in the persuasive writing classroom context through textbooks, assignments, and the instructor's feedback?

Curriculum

In some respects, the curriculum of English 111Z seemed well-suited to encouraging reflective thinking, particularly since most of the participants had already had some exposure to persuasive writing. The approach to writing arguments described in the course's main text, *Everything's an Argument*, appeared to emphasize the fact that writers should choose the best evidence and consider multiple perspectives in constructing their arguments. Assigned readings from this text emphasized the importance of using logic to connect claims and reasons, selecting credible evidence, and carefully assessing the stasis, or reasons for the existence, of their arguments. Further, the fact that the readings and assignments were

organized around a central theme could have helped participants optimize their ability to write informed arguments, given that a lack of background knowledge would be less likely to interfere with their ability to generate content. These characteristics would appear to encourage higher-order reflective judgment usage.

However, these characteristics did not seem to have a consistently supportive effect. For example, participants tended to dismiss important recommendations made by the text. In the majority of cases, participants in both groups adopted one-sided positions that did not account for alternative views, or the context of the argument. When generating the types of arguments described in the textbook, participants tended to ignore the recommendations made by the authors. For example, in Chapter 9, "Arguments of Definition," the authors observe, "In case you are wondering, important arguments of definition usually *can't* be solved by consulting the dictionary" (p. 111), a point reiterated in Ms. Stone's assignment sheet for Paper 3. Nevertheless, many participants in both groups *did* use the dictionary definition of terrorism when assembling their essays. Similarly, students were encouraged to use the Toulmin schema in Chapter 8 as an invention device in their first and second essays. However, none of the participants used the language of the Toulmin framework, or appeared to be applying these concepts in any sustained way, but instead focused on how Ahmad's argument might make audiences angry, or their perception that pre-9/11 audiences would have been too uninformed to understand Ahmad's points.

The role of the supplementary texts used in the class reflected a similar pattern. Ms. Stone chose the supplementary texts to broaden students' perspectives on the issues under discussion in their essays. Because Chomsky and Ahmad's views run counter to the popular view of the U.S. and its role in world terrorism, it would be reasonable to assume that their

positions would have been unfamiliar to many participants, and would challenge them to think through the reasons for their own viewpoints. Yet these authors tended to be treated as incontrovertible authorities by participants; in responding to their arguments, participants tended to assume that their views were "true," and used them to support their own one-sided arguments throughout the course of the semester.

Assignments

The assignments used in English 111Z appeared to demand a high level of reflective thinking. Each of the assignments emphasized the need to respond to conflicts by generating a "critical claim" supported by evidence, while recognizing conditions of rebuttal. In particular, the second essay, which required students to evaluate Ahmad's essay from the point of view of two different audiences, and the sixth essay, which asked students to select a viable solution to the problem of terrorism, appeared to be well-suited for encouraging the use of more sophisticated assumptions about knowledge and justification.

However, in many cases, participants' responses to these assignments did not seem to reflect their potential for eliciting reflective thinking, as described their RJI ratings, despite their perception that the assignments were not difficult. To some degree, this phenomenon appears to have been a function of the assignments themselves. For quasi-reflective participants, the timed writing context of Paper Three may have limited their ability to think about the rhetorical problem from different angles. Additionally, the responses to Paper 2 and Paper 6 appeared to elicit less reflective thinking than some of the other essays in the sequence, at least for participants who were rated as using predominantly quasi-reflective thinking. Students in both groups appeared to find it difficult to construct reflective responses to Chomsky and Ahmad's texts, perhaps because they were not required to use

outside evidence. For quasi-reflective reasoners, the fact that the sixth essay required students to identify a single solution for a complex problem may have depressed their ability to consider alternative ways of thinking about the issue. Interestingly, all of the students who were rated as using predominantly pre-reflective thinking wrote essays that had some quasi-reflective characteristics for their sixth essays, which suggests that these students may have become more willing to incorporate these characteristics as they became more experienced in writing arguments. However, students who were rated as using predominantly quasi-reflective thinking tended to write essays with *fewer* quasi-reflective characteristics for their sixth essay, which tends to problematize the conclusion that more experience with writing arguments lead to the incorporation of more sophisticated beliefs about knowledge and justification—at least for quasi-reflective participants.

For both groups, less reflective thinking appeared to occur in the first and second essays, which required students to respond to Chomsky and Ahmad's texts, and use those texts to support their assessments. Participants who disagreed with these authors had some difficulty in finding ways to support their arguments, and participants who agreed with these authors tended to simply reiterate their claims. With few exceptions, these students tended to assume that these authors' view was "correct" or "true," which appeared to make the process of responding to and evaluating their claims more difficult. Participants who attempted to use personal evidence to back their responses seemed to have some difficulties in choosing appropriate evidence; those who relied on textual evidence tended to generate arguments that used circular reasoning.

Essays that encouraged students to bring in outside sources to back their claims appeared to result in more reflective thinking. However, participants in both groups tended

to assume that they needed to generate one-sided arguments to "prove" their claims, and often chose topics that did not address true controversies, perhaps to minimize the need to respond to their conditions of rebuttal, as Mike suggested in his self-reflection on Paper 4. For participants in Group One, the sixth assignment seemed to encourage the use of more quasi-reflective thinking, possibly because the assignment called for writers to think through the difficulties involved in generating a real solution for a real problem. For participants in Group Two, the fifth assignment, a causal essay, seemed to encourage more quasi-reflective thinking. Reasons for this phenomenon may include the fact that the fifth assignment was somewhat more flexible in its structure, and encouraged students to consider multiple causes of a problem. The focus of the assignment may have facilitated a balanced approach, as well as a greater willingness to view the conflict as complex, and potentially unresolvable.

Instructor feedback

Ms. Stone's philosophy of pedagogy and assessment indicated that she preferred enacting a coaching or facilitating role, rather than relying on a direct instructional role. As participants' reflections and qualitative interviews suggested, in many cases, the feedback she gave to participants occurred in informal meetings held during her office hours, so written feedback was not available for analysis. In general, it appeared that her response style mirrored her beliefs about best assessment practices, in that she tended to focus on specific issues in responding to student papers, rather than comment extensively on all problematic features.

For these reasons, gauging the effects of instructor feedback on participants' use of reflective judgment in their essays was difficult. The range of grades assigned to participants' fourth essays was similar for both groups. The highest grades were assigned to

essays that had predominantly quasi-reflective characteristics, or a balance of pre and quasi-reflective characteristics, and the lowest grades were received by essays that had primarily pre-reflective qualities. However, there was considerable overlap in the grades assigned to essays written by both groups of participants, suggesting that the instructor was using additional criteria in grading this assignment.

In the body of participants' fourth essays, Ms. Stone commented on logical issues, and issues related to the ill-structured nature of the dilemma for participants in both groups, although these comments were made more frequently for participants who were rated as using predominantly pre-reflective thinking. The instructor also commented more frequently on Group One participants' use of evidence in Paper 4. This fact suggests that Ms. Stone may have found these pre-reflective reasoners' selection and incorporation of evidence more problematic than the use of evidence by quasi-reflective reasoners in this sample. Additionally, the fact that Ms. Stone expressed agreement with Group Two participants' ideas more frequently than with Group One participants' ideas may indicate that she found these writers' views and rhetorical strategies more acceptable.

One of the interesting features of the instructor's commentary on these essays was the fact that there were essentially no comments directed at the need for greater balance, or attention to conditions of rebuttal, despite the fact that only two participants (both of whom were in Group Two) gave evidence for alternative views on this assignment. Again, the instructor's decision to focus on other issues in commenting on participants' essays suggested that she considered other criteria more important when grading this assignment. Interestingly, on the next assignment, seven participants included evidence for more than one

view—without having been prompted to do so by their instructor's comments on their previous paper.

The relationship between participants' use of reflective judgment in their essays and their instructor's feedback on their essays appeared complex. For example, in Mike's third paper, he appeared to use quasi-reflective thinking in assembling his position, which focused on two different views of the definition of terrorism. However, Mike earned a D+ on his third essay, because the instructor perceived that he did not develop the criteria listed in his thesis. As he noted in his self-reflection on Paper 4, "My paper number three was really bad. It was crappy." In his fourth essay, Mike returned to a much more pre-reflective stance, choosing a non-controversial event to define as an act of terrorism, because

> in saying all these obvious points, I made it real hard for anybody to argue, you know, that the Reign of Terror was not an event of terrorism….I just knew I could establish grounds as to how it met my criteria.

In reflecting on his performance and his instructor's feedback on Paper 4, Mike observed that "I was pretty pleased with paper number four, because I think I accomplished what the teacher wanted." This example points to the possibility that participants may have misinterpreted the instructor's feedback, in some cases, and that they may have assumed that more pre-reflective positions would be better received by their instructor—and the fact that Mike's fourth paper received a B+ suggests that his perception may have been valid.

The instructor's philosophy of assessment makes drawing conclusions about the association between her feedback and students' use of reflective judgment in their essays more difficult. On many essays, the instructor's commentary seemed rather sparse. However, this may have been a function of the instructor's decision to "pick her battles," and

focus on one or two specific problems, to avoid overwhelming her students. As in the case of Kendra's fourth essay, the decision to focus on the writer's sentence-level issues may have precluded commenting on other issues related to the pre-reflective characteristics of her essay. Further, as students' self-reflections indicated, even though the instructor commented on content issues in her end-notes, many participants in this study tended to experience difficulty interpreting her suggestions, and often concluded that "grammar held me back."

It is important to note that despite the many problematic features in many of their essays, none of these writers was failing the course, again indicating that the instructor was using additional criteria in assessing their performances. By focusing on one instructor and her students, this study was limited in its ability to determine the relationship between reflective judgment usage and instructor feedback. However, it is highly possible that another instructor may have focused on criteria other than those that guided Ms. Stone's assessments—and that these students might not have been judged as successful in another course that emphasized persuasive writing.

Summary of Findings for Question Two: What kinds of reflective judgment are encouraged in the persuasive writing classroom context through textbooks, assignments, and the instructor's feedback?

On the whole, it appeared that the course assignments demanded reflective thinking, but that the writing context was not consistently effective in encouraging students to use more sophisticated assumptions about knowledge and justification. Despite participants' generally positive perceptions of the curriculum and their ability to fulfill the assignments, the majority of the essays they produced did not harness the complexity of the epistemologies they brought to the class, as described by the RJI. Further, the instructor's assignments and

feedback appeared to be inconsistent in supporting participants' use of more complex reasoning.

Still, conclusions about the relationship between contextual issues and participants' use of reflective judgment in their essays must be made with caution. This study focused on the patterns that emerged from participants' essays—and not on the context in which these essays were produced. Although I did visit the class, these visits were not made regularly, or for the purpose of observing and systematically recording class proceedings. Thus, the impact of daily class activities on students' writing would be difficult to gauge. Additionally, the choice of texts and the design of the syllabus lay entirely with the instructor. Because the study had a naturalistic approach, the instructor was not given a rubric to assess participants' essays, which made determining the patterns in her feedback and their effects on student writing more complicated.

Question Three: Building on the answers to the preceding questions, how can we (re)design curriculum and instructional practices to meet the critical literacy and cognitive developmental needs of freshmen writers?

Although the relationship between the writing context and the patterns that emerged in participants' essays was unclear, it is highly possible that some features of the writing context encouraged less reflective thinking—and that these features could be made to support students' use of the developmental abilities they brought into the class. Each of the participants in the sample was rated as using some quasi-reflective thinking in their responses to the RJI. However, none of these students consistently made use of quasi-reflective assumptions in their writing. At the same time, each of these participants wrote at least one

essay that had some quasi-reflective characteristics, suggesting that they were capable of using more sophisticated assumptions about knowledge and justification in their writing.

Curricular Focus

Although the course syllabus revealed a commitment to focusing on the writing process, this course also emphasized what Hairston (1982) termed "current-traditional rhetoric," in that it was organized around the production of several different genres of argumentative discourse. As Hairston observed, the current-traditional paradigm focuses on what students write, more than *how* they write. In this case, the writing context was heavily informed by a classical approach to argument through its emphasis on the "theory of types" described by Fahnestock and Secor (1983, 1985, 1990). This approach does not preclude the recognition of multiple valid positions or the consideration of evidence that contradicts the writer's major claim—and indeed the classical view of argument as embodied in Sir Phillip Sidney's *Apology for Poetry* (1595), for example, devotes a substantial proportion of the argument to *refutatio*, or a consideration of alternative views. However, the typology used in *Everything's an Argument* has a more or less explicit emphasis on "proving" that X *is* a Y, or that X *caused* Y, etc. This approach sometimes fails to account for the uncertainties involved in knowing and in justifying a point of view, and this failure may be especially important for students who are already constrained by limited time and knowledge of their subjects. At the same time, this approach is widely used in our culture, and failure to expose students to these forms could be detrimental. Thus, devising developmentally appropriate ways to help college freshmen participate in Western forms of argumentative discourse, while avoiding some of their pitfalls, may represent the most important goal of a study of this type. By shifting the curricular focus from specific types of arguments to strategies important to

creating sound arguments, generally, instructors may find it easier to support students' use of their full array of epistemic beliefs.

Instructional Practices

The participants in this study may have been encouraged to make fuller use of their emergent epistemologies, had they had different contextual supports. Ms. Stone already had in place a number of important process-oriented activities in her classroom. However, additional activities related to the production of *arguments*, specifically, may have proved especially beneficial. Further, a greater sensitivity to the developmental needs of these participants may have helped them access the more sophisticated assumptions about knowing and justifying that they brought into the classroom.

First, each of the assignments in English 111Z emphasized the importance of establishing and supporting a "critical claim" with evidence. However, participants may have felt less pressure to stake out one-sided claims and use questionable evidence in support of their views, if the assignments had emphasized a different procedure for developing their positions. Lowering the stakes associated with adopting a single position may have encouraged these students to take a more deliberative approach. Given that each of the writers in the sample was rated as having the ability, to a greater or lesser degree, to view multiple positions as valid, these participants may have benefited from the opportunity to use consider the reasons and evidence associated with different perspectives. These writers tended to "foreclose" on a particular positions before evaluating the evidence. One way to avoid this foreclosure could involve assignments that allow students to develop more speculative and exploratory positions. Although the "research paper" has fallen out of favor with many writing instructors, assignments that allow students to explore various points of

view on an issue, without having to support a particular stance, could help students avoid falling back on pre-reflective thinking to adopt and defend a position. If used as part of a sequence of assignments, this approach might have helped participants become more familiar with various arguments for and against the positions they might adopt in later essays, and could have encouraged them to adopt more balanced stances.

Further, participants in the sample had difficulty differentiating their perspectives from the views of authorities, an issue that was particularly noticeable in the first two assignments. By introducing Chomsky and Ahmad within the classroom setting, it appeared that Ms. Stone inadvertently solidified these writers' status as authorities for participants, which made it very difficult for them to assess their views critically. Although the main text used in the class did encourage students to consider the persuasive strategies used in everything they read, these participants may have benefited from more practice with reading as "believers" (Elbow, 1973) and as "doubters," a strategy that has been emphasized in some popular persuasive writing texts (Ramage & Bean, 1999).

Participants in both groups also had some difficulty recognizing that the assignments they were given required them to negotiate an ill-structured problem in writing. Once again, this problem was more noticeable among predominantly pre-reflective thinkers in the sample, though all writers in both groups had trouble with this issue in at least one of their essays. In some cases, these writers behaved as if no controversy existed; in other cases, these writers simply avoided controversy altogether by picking a "safe" claim that could be supported through critical thinking alone. The fact that each participant received some Stage Four ratings suggested that each had some understanding of the fact that knowledge is

fundamentally uncertain, and that people may have legitimate reasons for believing different things. However, this belief rarely manifested itself in their writing.

In some ways, this characteristic may be among the most difficult to address of any raised in this study. Encouraging students to use critical thinking is clearly an important goal. However, not all problems may be solved by critical thinking—and this reality lies at the heart of the kinds of ill-structured dilemmas that students encounter in persuasive writing. Using the Toulmin schema to analyze their own arguments may have helped some participants identify their own warrants, or underlying assumptions, as well as the assumptions of readers who might disagree. However, this framework for understanding argument can be cumbersome for some students. Another approach might rely on the use of "round robin" peer review activities to identify other ways of viewing a writer's claim; writers who find that there *are* no real objections to their claims may find that they are not addressing true controversies.

Another problem that was especially important for students that were rated as predominantly pre-reflective thinkers pertained to their use of evidence. The official course description for English 111Z indicated that it provided an introduction to the "use of evidence." However, the standards for the use of evidence within the academic community were not adhered to by these participants, in many cases. Just as they tended to identify with Ahmad and Chomsky, they had great difficulty in making critical assessments of the materials they incorporated to support their own claims. Participants tended to assume that if they used some evidence in their argument—and especially if they used a lot of it—that they had adequately substantiated their claims. While Ms. Stone spent class time discussing the quality of different types of sources, and students read a chapter on using evidence in their

arguments, these participants may have profited from more systematic ways of testing and selecting evidence. Their developmental levels, as measured by the RJI, suggested that they had not internalized their own criteria for evaluating the information they used to substantiate their claims. Thus, the introduction of specific methods of determining the quality and sufficiency of evidence may have been beneficial. For example, the STAR method described by Fulkerson (1996) may have helped participants make judgments about the sufficiency, typicality, accuracy, and relevance of the information they used in their arguments. This method encourages students to consider

> S-*Sufficiency of grounds*: Is there *enough* evidence to warrant the claim drawn?
>
> T-*Typicality*: Are the data representative of the group of data being argued about?
>
> A-*Accuracy:* Is the information used as data true?
>
> R-*Relevance*: Is the claim asserted relevant to the information about the sample? (p. 44-45)

At the same time, instructors may need to provide careful support for each step of this method, as questions about the "truth" of the data reintroduces a number of epistemic issues that students who have not internalized their own criteria for assessing truth claims may have difficulty negotiating.

These writers had some trouble in linking their claims and evidence logically, and often failed to use evidence to support major propositions, problems that were particularly evident among pre-reflective thinkers in the sample, but also emerged for quasi-reflective thinkers. Because students using pre-reflective assumptions may have had a concrete understanding of evidence, it may have been difficult for them to make inferences about when additional (or different) evidence was needed to support a conclusion. Participants

using quasi-reflective assumptions may have found it difficult to "distinguish between considering evidence for a belief, evaluating the belief in light of that evidence, and basing a belief on that evaluation. Rather, they [chose] evidence that fit their prior beliefs" (King & Kitchener, 1994, p. 59). Given these developmental characteristics, these participants may have profited from practice with interpreting evidence, and using it to support a conclusion. Each of the assignments in the sequence was predicated on participants' ability to engage in these activities independently, and few participants appeared to bring this ability to the classroom. However, additional modeling within the classroom context may have helped some participants view the process of finding, interpreting, and incorporating evidence as a act that is, ideally, inductive, rather than deductive.

Additionally, participants in the sample had difficulty responding to audiences. This problem was particularly common among participants who were rated as having predominantly pre-reflective assumptions, though participants with quasi-reflective scores also had difficulty with this issue in their essays. One method of encouraging students to think from an opponent's point of view involves the use of Rogerian argument, which forces the writer to consider the reader's objections to his own claim, before presenting the claim to the reader.

At a more fundamental level, these participants may have benefited from a systematic consideration of their audiences' beliefs, values, experiences, and knowledge levels. Each of the essays assigned to participants was directed at an "American" audience. In two cases, this audience was described as having read the same materials as the participants. In Paper 5, the audience was specified as "people who are concerned or who should be concerned about a given event, but are either confused, misinformed, or uninformed about the cause of the

event." However, in the rest of the assignments, writers were given no additional information about their assigned audiences. Each of the participants had access to some degree of Stage 4 reasoning, which suggests that, if given additional contextual support, these writers could make some inferences about reasons why an audience might disagree, other than the reasons that writers in this sample actually gave—which pertained to the reader's biases or lack or information. With assistance, these participants may have been enabled to see that different interpretations of evidence could lead readers to different conclusions.

Related to the consideration of their audiences, extended opportunities to test the effectiveness of their ethical and pathetic appeals may have been helpful to writers in both groups. Participants in both groups made use of these appeals, but were not consistent in generating effective strategies for building their credibility and connecting with their audiences. Although discussed at length in their textbook, these strategies were not emphasized in their course assignments—which may be one reason why participants did not focus on these issues. Encouraging writers to engage in explicit ethical and pathetic appeals may not have been appropriate, as these writers were already struggling with the logical demands of their arguments. However, using process-oriented activities already in place (e.g., peer review) to help participants refine the strategies they chose may have helped some participants control their tones, and avoid estranging their audiences.

One of the most pervasive features of the essays written by both groups of participants was the paucity of qualifiers. These participants appeared to perceive that arguments that were unwavering, and even emphatic, would be more successful. For participants using pre-reflective thinking, the reluctance to use qualifiers may be linked to the assumption that knowledge is absolutely certain, or only temporarily uncertain. (King and

Kitchener, 1994, p. 56). For participants using quasi-reflective thinking, this reluctance is more difficult to explain, given these individuals' awareness that their "conclusions are tenuous and…that others' conclusions are as well" (King and Kitchener, 1994, p. 60). The disinclination to use qualifiers may signal these participants' return to pre-reflective thinking to bring closure to the assigned task. The concept of limiting claims by using qualifiers was introduced to participants in Chapter 8 of *Everything's an Argument*, which covered the Toulmin schema, and participants were encouraged to use this schema as an invention device. However, participants in both groups may have benefited from assignments that were more consistent and explicit in requiring the use of qualifiers, from access to models and example "banks," and from additional practice in determining how qualifiers reduce the burden of proof.

Summary of Findings for Question Three: Building on the answers to the preceding questions, how can we (re)design curriculum and instructional practices to meet the critical literacy and cognitive developmental needs of freshmen writers?

A movement away from the genre-based curriculum emphasized in this course might have helped both pre and quasi-reflective thinkers in this study write more successful arguments. The process-oriented activities already in place may not have fully engaged and supported the developing abilities participants brought to the class. Overall, these participants may have profited from a stronger focus on developing emergent skills related to the creation of balanced positions, a more critical and inductive use of evidence, careful consideration of multiple reasons for objections, strategies for building and sustaining the relationship with their audience, and the consistent use of qualifiers to limit the scope of their claims. Teaching these skills within a meaningful context is important; it is doubtful

whether these skills taught in isolation would have had a positive effect on any group of writers. However, the focus of the course may have required some alterations, in that the production of various genres of argument may not have been the most useful means of supporting these participants' development of skills and assumptions related to persuasive writing.

CHAPTER V: CONCLUSIONS

Summary

Most available research indicates that the written arguments of college freshmen are characterized by a number of problems, including difficulties in managing evidence, creating logical and balanced positions, and handling opposing views. Reasons for these difficulties are unclear. However, some studies have indicated that cognitive developmental issues experienced in late adolescence may have some bearing on undergraduates' ability to generate sound arguments. The Reflective Judgment Model describes how our assumptions about knowledge and justification develop, and was selected for use in this study due to its potential to provide the most complete explanation of how individuals apply emerging epistemic beliefs in persuasive discourse.

This study investigated the reflective judgment development and persuasive writing behaviors of 15 participants enrolled in a freshman composition course at a large public university. The purpose of the project was to examine the relationship between these participants' reflective judgment stages and the patterns in their written arguments, with respect to position-taking, evidence usage, treatment of opposition, and use of rhetorical strategies. The study was guided by three major questions. The first question asked how participants' use of reflective judgment in their essays compared to the reflective judgment levels they demonstrated in the Reflective Judgment Interview (RJI), a psychometric interview designed to measure individuals' development in this domain. The second question focused on the way that the writing context, including the curriculum, assignments, and instructor feedback, contributed to the use of reflective judgment in participants' written arguments. The third question represented an extension of the first two, and addressed how

curricular and instructional practices might be revised to meet the critical literacy *and* cognitive developmental needs of freshmen writers.

To answer these questions, this study adopted a mixed-method design. To assess participants' reflective judgment development, the RJI was conducted with each participant. Because most studies of the relationship between cognitive developmental issues and writing behaviors are limited because they rely on single samples of student writing produced in experimental settings, the choice was made to examine multiple writing samples produced within a supportive naturalistic context. Each of these essays was rated holistically, using criteria that corresponded to each of the major reflective judgment stages, pre-reflective, quasi-reflective, and reflective. In this study, none of the participants used reflective thinking on the RJI, and none appeared to use reflective thinking in their essays. Patterns in participants' essays were examined across reflective judgment groupings to determine differences and similarities in the essays of students who were rated as using predominantly pre-reflective thinking and those written by participants who were rated as using predominantly quasi-reflective thinking. To supplement these analyses, qualitative interviews were conducted with participants, and these students were also asked to use a hand-held tape recorder to reflect on their fourth paper. Additionally, the instructor was interviewed and the textbooks, paper assignments, and feedback for the fourth paper were examined.

Major Findings

As Shaughnessy (1977) has observed, different preparations for college work and lack of familiarity with academic conventions can interfere with students' abilities to meet expectations in college composition. In this study, participants' qualitative interviews

revealed that their preparation for college composition had many similar elements, and that they were familiar with common academic writing conventions. All participants revealed that they had taken advanced English courses in high school, and most had studied persuasive writing in the past. While a few students felt challenged by their college composition course, none were placed in a remedial writing course, and most felt that their skills were sufficient to carry them through. However, an examination of their written arguments produced for the course indicated that each of these writers experienced some difficulties in assembling essays that met the kinds of requirements that Coirer et al. (1999) described as necessary for strong written arguments. Although these students did not appear to have difficulty generating content for their essays, they did appear to have some difficulty in developing well-considered positions, evaluating and selecting appropriate content, using sound reasoning and evidence to support their claims, and taking into account the potential objections of a doubting audience. Further, these participants seemed reluctant to qualify their claims, which tended to increase their burden of proof.

Examining participant' essays across reflective judgment groupings revealed that there were some differences between the patterns that emerged for participants who used different levels of reflective judgment, as measured by the RJI. Compared to participants who were rated as using predominantly pre-reflective thinking, participants who were rated as using predominantly quasi-reflective thinking tended to have more variety in their approaches, in that they appeared more inclined to take on balanced positions, differentiate their views from the views of authorities, and recognize the complexity of ill-structured rhetorical dilemmas. These participants created essays with fewer logical problems,

appeared more willing to acknowledge potential objections to their claims, and offered evidence that would be more acceptable and credible to readers.

However, the majority of the essays written by both groups of participants used one-sided positions, and did not examine or respond to objections in a sustained way. In most cases, participants used evidence that was not examined critically, and offered unqualified claims. Participants in both groups appeared reluctant to concede contested points, and in the majority of their essays failed to address the fundamental conflict underlying the rhetorical problem. These characteristics have been identified in other studies of students' persuasive writing (Crammond, 1998; Hays, 1988; Hillocks, 1995). However, the findings of this study are particularly interesting, in that these participants were students in a course that stressed persuasive writing, and engaged students in all steps of the writing process. Because the design of the course had the potential to support optimal writing performance, the fact that participants' arguments were characterized by a number of problems, and that some of these problems appeared to surface differently across reflective judgment groupings, suggests that these college freshman may have had fundamental difficulties with some aspects of written argumentation.

An investigation of the writing context focused on the text, assignments, and the instructor's feedback on the fourth essay. Overall, the contribution of the writing context to participants' use of reflective judgment was unclear. Though the supplementary texts were intended to provoke critical and reflective thinking, the participants appeared to have some difficulty bringing a critical perspective to these texts, and tended to treat the authors as incontrovertible authorities, which appeared to depress their ability to generate thoughtful or reflective responses, even when it was clear that they disagreed with the authors' views.

Similarly, the assignments that required students to generate and support a single critical claim may have subverted participants' exploration of different points of view and different kinds of evidence. Although the instructor did call attention to participants' use of evidence, her feedback focused on criteria that were not necessarily related to participants' use of reflective thinking in their essays, a fact that may have reinforced some of the patterns that kept recurring in their essays.

Given these findings, participants in this study might have benefited from different contextual supports. The course's focus on the writing process may not have been enough to help these students access their full repertoire of epistemic beliefs. By encouraging students to avoid assembling their essays at the last minute, and by inviting classmates to comment on their work, the course's focus on the writing process may have helped participants remedy some problems in their essays. However, the fact that the writing process did not eliminate many of the problematic features of their arguments suggested that participants needed more practice with comparing and synthesizing different views, locating and critiquing evidence, anticipating objections, and selecting the most appropriate rhetorical strategies. Moving away from a curriculum organized around the production of arguments that use different categories of claims to an approach that focuses on developmentally appropriate strategies for enhancing the skills needed to produce sound arguments might have helped these participants tap into the more sophisticated assumptions about knowledge and justification that they brought to the writing context.

As Langer and Applebee (1987) observed, to enable a complex interaction between thinking and writing, "effective writing instruction provides carefully structured support or *scaffolding* as students undertake new and more difficult tasks" (p. 129). Using instructional

scaffolding to support students' emergent epistemologies could have enabled participants to take more risks and adopt more complex positions. The concept of effective instructional scaffolding in the English Language Arts has been defined in various ways (Bereiter & Scardamalia , 1981; Langer, 1984). However, Langer and Applebee's model of instructional scaffolding provides the clearest connections to instruction in persuasive writing at the college level.

As Langer and Applebee (1987) have suggested, allowing students to take greater ownership of their work—as opposed to having their choice of assignments and perspectives implicitly or explicitly imposed upon them—can be an important aspect of this scaffolding (p. 141). Similarly, a collaborative rather than an evaluative stance on the part of the instructor may have helped these students view knowledge as constructed, rather than received from an authority (Langer & Applebee, p. 144). Although the production of written texts within a classroom environment is rarely an entirely student-driven process, allowing students to "have something of their own to say in their writing" gives students a stronger sense of purposefulness (Langer & Applebee, p. 141). Further, as King and Kitchener (1994) stress,

> classes in which students are expected to receive information passively rather than to participate actively will probably not be effective in encouraging students to think reflectively…and assignments that emphasize only others' definitions of the issues or others' conclusions will not help students learn to define and conclude for themselves. (p. 238)

Participants in this study were allowed to pick their own topics for four of the six papers they wrote, and they tended to write more reflective arguments for these assignments. However,

the fact that the two supplementary texts used in the class argued similar views may have constrained participants' abilities to "own" different perspectives, in that they may have perceived that they had to confront beliefs implicitly sanctioned by their instructor.

Further, the developmental appropriateness of the task should be a major consideration in the college composition classroom. Developmentally-sensitive assignments focus on the zone of proximal development, offering a balance of challenges and supports (Vygotsky, 1962). Instructors need to create assignments that build on skills that students already have; "When the stretch is too far, the dialogue falls apart" (Applebee & Langer, 1987, p. 142). Assembling arguments that involve a thoughtful consideration of the merits and deficiencies of multiple views, while developing a critical claim with the most reliable evidence may demand skills associated with reflective thinking. None of the participants in this study seemed to bring these skills into the classroom, perhaps because they had not acquired the necessary assumptions about knowledge and justification. Creating developmentally-sensitive assignments and instruction requires that instructors understand that students may hold different beliefs about knowledge and knowing, and tailor their assignments and feedback accordingly. As Kitchener and King (1994) emphasize, it is important to respect the epistemic beliefs students hold, even when they are not consistent with reflective thinking, because "they are reflections of the sincerely held assumptions about knowledge that students use to solve controversial problems and are steps in a developmental progression" (p. 231). While exposure to essays that model reflective reasoning may have been useful, these participants may have benefited from assignments that allowed them to explore the assumptions associated with their current developmental frameworks, before asking them to adopt new ones.

Closely related to the developmental appropriateness of the task is the degree of support offered by the instructional context (Langer & Applebee, p. 142). Participants in this study needed more guidance in connecting the demands of the class with their present beliefs about knowledge and justification. Just as using the stages of the writing process can demystify the production of written texts for students, learning specific strategies involved in the creation of sound arguments may lower the level of cognitive dissonance associated with this task. While participants in this study did not spontaneously produce a number of features associated with effective persuasive writing, they may have had more success in creating sound arguments, had the instructional context targeted their developmental needs more purposefully. As King and Kitchener (1994) explain, providing a balance of challenges and supports to students is an important element of encouraging reflective thinking in the classroom; further, they argue that instructors must "recognize that challenges and supports can be grounded emotionally as well as cognitive" and provide appropriate encouragement (p. 246).

Langer and Applebee also emphasize that internalization is an important part of instructional scaffolding: "As new learnings mature, they become internalized as part of the student's own repertoire" (p. 144). Research on reflective judgment indicates that major transitions in reflective thinking occur slowly over long periods of time (King and Kitchener, 1994). Thus, it would be unreasonable to assume that direct instruction in the strategies involved in persuasive writing would have a direct effect on the cognitive deep structures that shape epistemic beliefs. However, the participants in this study needed help in unpacking the demands of their assignments. As revealed in their self-reflections, the participants in this study had trouble voicing the purpose of their assignments, and struggled to explain why they

received the grades they did. Therefore, the goal of effective instruction in argumentation for college freshman may involve the internalization of expectations and strategies for meeting these expectations.

Conclusions

The results of this study provide substantiation for Davidson et al.'s (1990) prediction that reflective judgment may play an important role in how some students construct solutions to the dilemmas they face when writing arguments. Given these findings, assuming that all freshmen come to the first day of classes equipped with the necessary repertoire of cognitive skills for dealing with ill-structured problems in writing may problematize their ability to produce the kinds of arguments we want them to write. Examining epistemic dispositions may help uncover the reasons why some students make the rhetorical choices they do—and may help instructors find ways to support their students' exploration of more sophisticated beliefs about knowledge.

As Kirby (1991) remarked, encouraging careful and reflective thinking can be difficult to do in the language arts classroom, especially when there are other goals at stake: "Classrooms can be lively places. They can also be deadly" (p. 22). Though the instructor in this study was particularly strategic in choosing an organizing theme that would stimulate student thinking, her vision of the course's purpose was closely associated with the department's official course description, which emphasized conventions of writing, rather than cognitive issues, and her feedback seemed to corroborate this focus. Though they appeared to like their instructor and were generally positive about the course, many participants in this study seemed resigned to the fact that this was yet another course about

"how to write a good paper." However, mastering academic discourse may involve more than learning how to reproduce some of its conventions.

Given the possibility that, as Barton (1993) has suggested, student and expert writers bring fundamentally different epistemological stances to their tasks, helping students become expert thinkers, as well as masters of academic writing conventions, represents an important dimension of the composition classroom. The instructor in this study voiced a widely-held belief that students' difficulties with written arguments pertained to their lack of preparation for college writing, or to their lack of intelligence. The possibility that some writing behaviors may be related to the developmental nature of students' beliefs about knowing and justifying provides an important alternative explanation for instructors searching for ways to clarify for students what they expect from them.

Given that some differences in participants' essays emerged across reflective judgment groupings, it is possible that there is developmental component to students' written argumentation. This finding may have some additional implications for curriculum and instruction at the K-12 level. While it would be unwise to dispense with instruction in written argumentation, the developmental appropriateness of using high-stakes assessments that require young students to write persuasively should be a consideration of policy-makers and test developers. Like post-secondary instructors, K-12 educators may need to devise more developmentally sensitive and supportive strategies for helping students meet their expectations.

Because the way students negotiate ill-structured issues in writing may have some connections to their development of reflective judgment, giving students information about their thinking, and how it may influence their writing is important. Participants in this study

believed that their reflective judgment scores accurately represented the way they resolved ill-structured problems. If instructors could provide this kind of information during student conferences, students may be empowered to reflect on the ways that their beliefs and assigned tasks intersect, and develop their own strategies for meeting instructional goals.

Overall, this study suggests that the Reflective Judgment Model may provide one way of explaining some of the patterns that emerge in college freshmen's persuasive writing. This possibility points to a number of conclusions about the importance of considering cognition's role in writing. As a number of researchers (Bereiter & Scardamalia, 1987; Flower & Hayes, 1979; Hays, 1988) have observed, some problems in students' writing may stem from *more* than a simple lack of familiarity with academic discourse conventions. How writers' cognitive schemas interface with their writing contexts represents an area of research that deserves more attention.

To date, no other studies have investigated the relationship between students' development of reflective judgment and their writing behaviors. Therefore, this project represents an extension of research on this developmental model, and has some positive implications for the use of this model to explain how students make some rhetorical decisions. Given this fact, this study may raise some new questions involving issues of domain dependence versus domain independence, in that some aspects of writing development may have a dependent relationship with the development of epistemic beliefs. While more research needs to be done to investigate the degree to which the development of specific epistemic assumptions is a necessary condition for developing the ability to write persuasively, the results of this study suggest that there is a foundation for such investigations.

Limitations

This study investigated the patterns in arguments written by participant who were rated as using predominantly pre-reflective and predominantly quasi-reflective thinking in their Reflective Judgment Interviews. Given this focus, the study had a number of limitations. First, a thorough investigation of the role that the instructional context played in how participants incorporated their epistemic assumptions in their writing was beyond the scope of this investigation. Though some important features of this context were examined, observational methods were not used, and the instructor's feedback on all essays was not explored. For the research questions posed in this study, the advantages of the naturalistic context of the study seemed to outweigh the advantages of using an experimental setting, in that the writing produced by participants in this study may be more comparable to the writing produced by students in other classroom contexts.

The qualitative nature of this study precluded the use of a large sample. Although the RJI is generally used with large samples, the fact that six pieces of writing and two additional transcripts were examined for each participant would have made the use of a larger sample overwhelming. Moreover, the fact that the study included 15 participants made statistical inferences about the generalizability of results more difficult.

A related limitation involved the lack of variability in the participants' RJI scores. Because the sampling method focused on first-time enrollees of English 111Z, and—more importantly—because there were no nontraditional learners enrolled in Ms. Stone's courses, all the students who signed up for the study were 18 or 19 years old. The RJI ratings that participants received reflected the median scores for college students in their age group (King & Kitchener, 1994). However, the lack of age differences among participants decreased the

likelihood that there would be a wide range of RJI ratings represented in the sample. Therefore, conclusions about the role that reflective judgment development played in these participants' construction of their written arguments must be stated cautiously.

Another limitation pertained to the course's focus on western concepts of argumentation. The course in which participants were enrolled relied on a typology of argumentation that was heavily influenced by the classical western tradition. Because argumentation is a culturally-bound construct, participants' reflective judgment development may have played a different role, had they been required to produce essays that corresponded with a different cultural construct.

Finally, the role played by the potential emotionality of the course's organizing theme was not a focus of this study. On the whole, participants did not seem to have strong emotional reactions to their assignments and readings, though it is possible that there could have been some differences in the participants' written arguments, had the instructor chosen a different theme. The potentially complex relationship between cognition and emotion represented territory that was not explored by the methods used in this project.

Recommendations for Research

The qualitative focus of this study was useful in capturing some of the phenomenological and contextual issues that may have contributed to the way participants incorporated their assumptions about knowledge and justification in their written arguments. The examination of multiple pieces of writing from each participant was also useful in drawing more dependable conclusions about the way participants applied their epistemic assumptions in a naturalistic context. However, the relationship between reflective judgment development and students' negotiation of ill-structured problems in writing continues to offer

important opportunities for research. In many ways, this study represented an exploratory venture, and teasing out the relationship among developmental stage, contextual supports, and writing behaviors continues to represent a challenge.

Given this challenge, future studies should examine more extensively the elements of the writing context, particularly the role of the instructor's feedback. Such studies might investigate whether instructional feedback acknowledges the writer's developmental level and provides appropriate challenges and supports. Additionally, it may be important for future studies to investigate the writing of participants with a wider range of reflective judgment ratings, which may necessitate the use of a larger sample that includes individuals from different age groups. Alternatively, using longitudinal approaches like those used by Sternglass (1993) or, more recently, Herrington and Curtis (2000) could lead to more definitive conclusions about the impact reflective judgment development has on the way individuals respond to ill-structured problems in writing. Further, more intensive studies of the similarities and differences in the written arguments of students with the *same* reflective judgment ratings may be useful in sorting out the way that developmental level and contextual influences intersect and interact.

Overall, the relationship between cognition and writing is an issue that should receive greater attention from the research community. As Carter (1990) argued, building a pluralistic theory of how students acquire expertise in writing involves examining social and cognitive factors related to knowledge and knowing. Learning more about how writers perceive and process the world around them may give us more insight into how we can help them become empowered to make themselves heard within the university and the wider community.

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APPENDICES

Appendix 7.1

Freshman Writing Program
Writing Standards

NEEDS REWORKING (D)	NEEDS REFINING (C/B)	EXCELLENT (A)
	Focus	
Writing lacks a definite and unifying persuasive purpose; its argumentative claim is vague or inconsequential and/or it strays from its claim. It is unlikely to persuade its designated audience.	Writing is unified by a definite persuasive purpose: its claim is clear and consequential for the audience and its sticks to the focus stated by the claim. It seems likely to achieve its persuasive purpose.	In addition to being unified, writing is founded in a claim that is both an insightful response to the rhetorical problem and valuable for the audience. The writing clearly achieves its persuasive purpose.
	Development	
Writing provides weak support for the claim: its evidence or supporting arguments are insufficient-sketchy and unconvincing and/or are inappropriate for the audience and purpose.	Writing provides adequate support for the claim: it incorporates enough evidence to be convincing and arguments that are appropriate to the audience and purpose. Sources are chosen and used fairly and responsibly in support of the claim	Beyond sufficiency and appropriateness, writing uses evidence or supporting arguments in an especially persuasive way--lively, informative, and engaging. Sources are well chosen and used with insight in support of the claim.
	Organization	
Writing lacks coherence: the relationships among the ideas are unclear, a result of an organizational structure that is not appropriate to the persuasive purpose and/or of inadequate transitional material.	Writing is coherent: the relationships among the ideas are generally clear; the organizational structure may be followed with little difficulty and ins appropriate to the persuasive purpose; suitable transitional material aids the reader in following the logic of the argument.	Writing achieves a smooth and logical flow of thought that seems natural. Its organizational structure is easily navigated and incorporates transitions that effectively guide the reader through the argument.
	Style	
Style and tone weaken the argument by being unclear and/or inappropriate to the audience or purpose: sentence structure is too simple or overly complex or monotonous and doesn't place emphasis on important ideas; word choice is cliched, dull, inconsistent, or unsuitable to audience or purpose.	Style and tone support the persuasive purpose: sentences are clear and incorporate proper emphasis; they are written at a level appropriate to the audience; word choice is suitable to the audience and purpose and avoids wordiness and redundancy.	In addition to being clear and appropriate, style enhances the persuasive purpose: it is lively and inventive; sentence structure is varied and highly readable; choice of words is fresh and interesting, making the ideas memorable and powerful.
	Grammar and Mechanics	
The kind and number of grammatical and mechanical errors seriously impede the progress of the reader and undermine the credibility of the writer. Sources are documented inadequately.	Reader is not impeded by grammatical and mechanical errors. Writing demonstrates general mastery of Standard Written English. Sources are documented adequately, using a documentation system that is appropriate to the audience.	Writing has virtually no problems with grammar and mechanics, demonstrating a mature command of Standard Written English.

Directions for Writing Sample

Length: 2-3 pages
Due August 23

Purpose: At the beginning of a writing course, teachers usually like to get a sample essay from each student in order to gauge writing ability. This sample will not be graded, and the teacher will keep it on file for your records.

Goals:
To clearly articulate a claim about your history as a writer.
To demonstrate your best writing skills.

Prompt: In an essay which provides information on your history as a writer, answer the following question: What was the best paper you ever wrote and why?

Appendix 7.2

Reflective Judgment Interview Dilemmas*

1. Most historians claim that the pyramids were built as tombs for kings by the ancient Egyptians, using human labor, and aided by ropes, pulleys, and rollers. Others have suggested that the Egyptians could not have built such huge structures by themselves, for they had neither the mathematical knowledge, the necessary tools, nor an adequate source of power. What do you think about these statements?

2. Some people believe that news stories represent unbiased, objective reporting of news events. Others say that there is no such thing as unbiased, objective reporting, and that even in reporting the facts, the news reporters project their own interpretations into what they write.

3. Many religions of the world have creation stories. These stories suggest that a divine being created the earth and its people. Scientists claim, however, that people evolved from lower animal forms (some of which were similar to apes) into the human forms known today.

4. People often have to make decisions that affect their health, such as deciding whether to eat foods or drink beverages that contain artificial sweeteners. There have been conflicting reports about the safety of these additives. For example, some studies indicate that, even in small amounts, artificial sweeteners (Such as NutraSweet) can cause health problems, making foods containing them unsafe to eat. Other studies, however, have indicated that even in large amounts, artificial sweeteners do not cause health problems, and that foods containing them are safe to eat.

5. Some researchers contend that alcoholism is due, at least in part, to genetic factors. They often refer to a number of family and twin studies to support this contention. Other researchers, however, do not think that alcoholism is in any way inherited. They claim that alcoholism is psychologically determined. They also claim that the reason that several members of the same family often suffer from alcoholism is due to the fact that they share common family experiences, socioeconomic status, or employment.

*Excerpted from RJI training materials (2002).

Reflective Judgment Interview Questions

Probe Question
1. What do you think about these statements?
2. How did you come to hold that point of view?
3. On what do you base that point of view?
4. Can you ever know for sure that your position is correct? How or why not?
5. When two people differ about matters such as this, is it the case that one opinion is right and one is wrong? If yes, what do you man by 'right'? If no, can you say that one opinion is in some way better than the other? What do you mean by better?
6. How is it possible that people have such different point of view about this Subject?
7. How is it possible that experts in the field disagree about this subject?

(Excerpted from King & Kitchener, 1994, p. 102-103)

Qualitative Interview Guide (for Students)

Guiding Question (Alternative prompts to be used if guiding question fails to solicit rich response).
1. How would you describe your experiences with writing?
Alternative Prompts
▪ How much writing/what kind were you asked to do in high school?
▪ What kinds of writing are you being asked to do this semester in your other classes?
▪ Have you ever studied persuasive writing in the past?
2. How would you describe your beliefs about your writing abilities?
Alternative Prompts
▪ How confident are you about your ability to write?
▪ Are there certain types of writing that you prefer?
3. Describe your experiences in English 111.
Alternative Prompts
▪ Is this class what you expected of a freshman composition course? Why/why not?
▪ How much time do you spend on your assignments?
▪ How much of the information in this course is new to you?
4. What do you expect to learn in English 111 this semester?
Alternative Prompt
▪ What kinds of knowledge/skills do you hope to take away from this class?

Interview Guide (for Instructor)

Guiding Question (Alternative prompts to be used if guiding question fails to solicit rich response.)
1. What do you feel is the purpose of English 111? Alternative Prompt ▪ What kinds of skills do you believe this course is intended to impart to students?
2. Describe your philosophy of pedagogy, as it relates to writing instruction in this course. Alternative Prompt ▪ How would you describe your role as a teacher of this course? ▪ What is your role in designing assignments? Delivering feedback?
3. In your experience, how prepared have your students been for the English 111 curriculum? Alternative prompt ▪ Describe the skill range you have encountered as an English 111 instructor. ▪ Are there certain types of assignments that your students seem to prefer?

Appendix 7.3

Directions for Self-Recorded Reflections

The goal of the self-recorded reflection is to clarify your intentions and meaning in Paper 4, so that I can draw more secure conclusions about the patterns in your paper.

What to do:

I'd like you to spend at least 15 minutes reviewing your paper on tape, using a hand-held tape recorder. Use the following questions to help guide your discussion. If you have other points you'd like to raise besides those mentioned in the questions, feel free to do so.

Note: Don't feel compelled to be modest or overly self-critical. ***Say what you think***--be honest. Nothing you say here will be heard by your instructor or other participants. Your instructor and peer-editors have already commented on the paper—I'm most interested in what *you* think about it.

Before recording, test to see if the recorder's batteries are working well. If not, use the new ones I gave you. (You can keep them if you don't use them).

Guiding Questions:

1. From your perspective, what was the point of the assignment?

2. What do you believe is your paper's thesis? What did you intend to discuss in this paper?

3. Looking at the major sections of the paper, what did you intend to accomplish? (You might look at each paragraph, or you might examine the major organizing ideas).

4. Are there any passages that might seem complicated or potentially confusing passages to a reader? What did you mean to say?

5. From your perspective, what kinds of persuasive strategies did you use in this paper? Can you point out some places where you believe you are using particular persuasive strategies?

6. What is *your* overall assessment of the essay? Do you think you conveyed your message to the reader?

When you are finished recording, place the tape in the box outside your instructor's office door, and pass on the tape recorder to another participant in your class.

Appendix 7.4

Evaluative Rubric

Participant# Paper #

Issue	Characteristic	Yes	No	Comments
Position	Position reflects thoughtful integration of multiple viewpoints.			
	Writer differentiates own view from view of authorities.			
	Writer uses logic to connect evidence and conclusions.			
	Writer recognizes ill-structured nature of conflict.			
Evidence	Writer offers support for claims.			
	Writer uses credible evidence, within the context of the assignment.			
	Writer assembles/assesses evidence critically.			
Audience/ Opposition	Writer acknowledges alternative views.			
	Writer responds to alternative views.			
	Writer concedes contested point(s).			
Rhetorical Patterns	Writer uses pathetic appeals.			
	Writer uses ethical appeals.			
	Writer qualifies claims consistently.			
Reasoning Patterns.		Holistic Assessment of Stage(s)		
Prereflective				
Quasi-Reflective				
Reflective				

Stage 2 Characteristics/Beliefs	Position	Evidence	Audience/ Opposition	Rhetorical patterns
Belief in a "true reality that can known with certainty but is not known by everyone" (p. 51).	Position is one-sided; other views are not taken into consideration.	Writer may defer to authorities when stating viewpoint, as deference to authority is the basis for belief.		Heavy use of emphatics and other positive validity markers; absence of qualifiers.
Authorities are right, and are assumed to know the truth (p. 51).	The writer may perceive little reason for the argument, as there is a "right" way to believe, and "thus express little or no conflict in making decisions about controversial issues" (p. 54).	.		Potential disregard for attributors, or need to introduce quotes.
"Others who disagree with the views of these authorities are threrefore wrong. . .others' views are seen as wrong, misled, unninformed, maliciously motivated." (p. 51)	Writer may have some difficulty locating the stasis of the argument.		Writer may have some difficulty understanding why/how some audiences might disagree, and may not recognize that people do disagree. Treatment of alternative views is either absent or unfair.	Writer may have some difficulty recognizing areas of the essay through which readers may need additional guidance (e.g. organizing markers).
Because a right or wrong answer does exist somewhere, they do not recognize that problems can be ill-structured (p. 52).	Writer may adopt a dogmatic position; not only is there only one view of the case, this view is "right."	"Evidence, whether supportive or contradictory, is not seen as relevant. . .individuals may hold to their own views even in light of disconfirming evidence" (p. 52).		Writer's conscious use of appeals may be limited.
Individuals may "try to align evidence with their beliefs by distorting the evidence" (p. 54).		Writer may distort or misinterpret evidence.		

All page refs: King & Kitchener (1994)

Stage 3 Characteristics/Beliefs	Position	Evidence	Audience/ Opposition	Rhetorical patterns
Belief that in some areas authorities may not currently have the truth--however, the truth will be known with certainty at some future point (p. 55).	Writer continues to maintain relatively dogmatic position; however, there is greater recognition of the uncertainty involved in making decisions about disputes.	Continued deference to authorities; however, some authorities may be seen as "bad," or less informed.		Relative absence of qualifiers; however the writer may use fewer emphatics.
Beliefs are justified by authorities' views, or through personal opinion (in the absence of an authority's view, or in the case when an authority does not have the answer) (p. 55).	Writer may continue to affiliate own position with authority's , though this affiliation may be more sporadic.	Writer uses personal opinion to back disputed knowledge, or uses sources idiosyncratically.		Writer may include a heavier use of first person.
"Differences of opinion are assumed to result from not knowing the answers with certainty" (p. 55), or from bias (p. 56).	Writer continues to have difficulty locating the stasis of the argument.		Writer assumes that if skeptics had more information, they would not disagree. Alternatively, writer may assume that opponents are simply biased.	The writer may have an emergent use of rhetorical appeals--probably pathetic appeals.
Continued difficulty in linking evidence, inference, and conclusions (p. 56).	The writer's position may seem "arbitrary, unjustified, or unstable" (p. 57).			
Because truth will eventually be seen through concrete evidence at some future point, individuals believe that "the use of probabilistic evidence so substantiate belief is arbitrary, and interpretation of evidence is illegitimate" (p. 55-56).		Writer does not interpret evidence, nor make the assumption that his sources rely on their interpretations of evidence.	Writer may make some concessions about contested points, but not when evidence for his position is available.	

All page refs: King & Kitchener (1994)

Stage 4 Characteristics/Beliefs	Position	Evidence	Audience/ Opposition	Rhetorical patterns
Belief that one "cannot know with certainty" (p. 58).	Writer may have some difficulty staking out clear-cut position; view may seem relativistic.			Heavier use of hedges and qualifiers.
The relationship between reasons and beliefs is acknowledged; however, "they are not consistent in their use of evidence…but use personal beliefs to choose the evidence used to support preconceived beliefs" (p. 59).	When staking a position, the writer offers reasons for beliefs, but this reasoning may not be inductive or logical.		Writer understands that his opposition has *reasons* for disagreeing with his position, but may not view their reasons as founded in logic.	
Knowing is understood as idiosyncratic to the individual, because neither evidence nor evaluations of evidence are certain (p. 58).	The writer may not feel need to offer substantial reasoning for his position, or justify claims beyond asserting that they are the "majority view."	Writer may not attempt to resolve conflicting evidence.	Writer may not attempt to rebut or reconcile opposing views.	
Views of authorities may be dismissed as biased; individual assumes that experts evaluate the evidence the same way they do, or that experts' opinions are no different than their own (p. 59).	Writer readily differentiates own view from authority's.	Writer may continue to use authorities indiscriminantly, but because *no* views are seen as trustworthy.		
"If knowledge is uncertain, and there are no criteria for evaluation, then someone can choose when and how to use evidence" (p. 59).		The writer may take on a more heavily critical attitude with respect to his sources--but without articulating criteria for evaluating them. Also, the writer may continue to use sources idiosyncratically.	The writer may express hesitation in critiquing the views of others.	Writer may engage in more frequent pathetic ethical appeals, in the absence of a reliable logic.

All page refs: King & Kitchener (1994)

Stage 5 Characteristics/Beliefs	Position	Evidence	Audience/ Opposition	Rhetorical patterns
Belief that while we may not know with directly or with certainty, we may know *within a context* (p. 62).	Writer is able to articulate and some context-dependent criteria for evaluating claims.			Continued use of qualifiers and hedges.
New understanding of interpretation--that the perceptions of the person making the interpretation limit what is known (p. 62).		Writer does not conflate evidence with interpretation.		The writer may begin to use ethical appeals more heavily, as the credibility of the person offering an interpretation is understood to be important.
Individuals can better differentiate and integrate knowing and justification, the opinions of authorities and the opinions of self, unconsidered claims and considered evaluation (p. 63).	Writer can differentiate *and* integrate own views and an authority's.	Links between claims and evidence are clearer;	Other views may be using different evidence, and different rules of justification.	
However, individual does not yet have *overarching* principles for weighing evidence across knowledge systems; beliefs are justified according to the rules of inquiry for the specific context (p. 63).		The writer may continue to have difficulty evaluating claims from two competing systems of thought.		Writer may tend to present a more balanced view, and may use more reflective transitions (e.g. however, on the other hand, etc.)
The writer may hesitate to take a firm position--because he understands different perspectives as using different evidence and assumptions, and may see these perspectives as equally legitimate (p. 63).	"Individuals frequently appear to be giving a balanced picture of an issue or problem rather than offering a justification for their own beliefs" (p. 63).		Writer tends to avoid labelling solutions or views as "right" or "wrong," but views them "potentially legitimate interpretations of issues" (p. 64).	

All page refs: King & Kitchener (1994)

Stage 6 Characteristics/Beliefs	Position	Evidence	Audience/ Opposition	Rhetorical patterns
Knowledge is uncertain and must be understood inrelationship to context and evidence.	The writer's claims are built inductively upon a systematic consideration of the evidence.			Writer may use a balance of hedges, qualifiers and emphatics.
However, some judgments and beliefs may nevertheless be evaluated by using overarching criteria.	Writer has the ability to articulate a position while acknowledging the inherent uncertainty of decision-making.		Writer does not reject others' views as wrong, but views his own as "better," and can offer criteria for this judgment.	
Individuals "evaluate the expertise, opinions, and conclusions of experts" (p. 68).		Writer uses evidence only after considering its context and the credibility of its source;		The writer may offer a balanced use of appeals.
Individuals draw conclusions across perspectives by comparing and relating views (p. 67).	The views of others have informed, but not overwhelmed the writer's own position; he has his own criteria for staking out positions.	Writer uses a variety of sources.	The writer deals thoughtfully with opposing views, but offers compelling reasons for abiding by his own position.	The writer may return to first person in offering a synthesis of the beliefs of authorities and self.
Knowing and justifying can be coordinated; solutions to ill-structured problems "must be constructed rather than simply found" (p. 69).	Writer's position-taking is more complex and thoughtful, and involves a synthesis of perspectives.			

All page refs: King & Kitchener (1994)

Appendix 7.5

INFORMED CONSENT FORM

Persuasive Developments: Reflective Judgment and College Students' Written Argumentation

Principal Investigator: Amy Overbay

You are invited to participate in a research study. The purpose of this study is to expand our knowledge about the relationship between college students' reflective reasoning and persuasive writing practices.

INFORMATION

You will be asked to assist the researcher with three important aspects of the study:

- Nominating eligible student-participants enrolled in your English 111 course(s).
- Participating in a qualitative interview. This interview will help the researcher find out more about your beliefs about your role as a writing instructor in English 111Z, and will take approximately thirty minutes.
- Providing access to copies of your writing assignments and consenting participants' major papers and preliminary drafts.

AMOUNT OF TIME REQUIRED

This study will be carried out over the course of the Fall 2002 semester. Prior to the beginning of the semester, the researcher will meet with you to review procedures for nominating students and discuss your questions about the study. This meeting should be brief, lasting no more than thirty minutes. You will be asked to allow the researcher to make a brief announcement in each of your English 111 sections, and to pass around a sign-up contact sheet in these classes. Additionally, you will be asked to help the researcher make decisions about students' eligibility for the study, based on their performance on a diagnostic assignment to be completed as part of their coursework in English 111. This process should take no more than one hour. The qualitative interview, to be conducted early in the semester, should last no more than thirty minutes. During the semester, each set of participants' papers should be provided to the researcher after it is graded, so that she can make copies. (The originals will be returned to students promptly.) Your participation in the study should require no more than 5 hours of your time, over the course of the semester.

RISKS

This study poses minimal risks to participants. Participation in this study is in <u>no way</u> tied to any professional evaluation of your teaching. Although your writing assignments and comments on students' final drafts will be considered as one part of the writing context, your identity and that of your students will remain <u>entirely</u> confidential. The focus of this study is on students' reasoning and writing skills—not on evaluating instructors' teaching. Any information revealed to the researcher during interview procedures or informal discussions will be kept strictly confidential. Additionally, contact information, such as your telephone

number or email address, will not be released to any other parties. Tapes, transcripts, and other documents related to the study will be returned to participants by September, 2003.

BENEFITS
This study is intended to generate knowledge about the connection between reflective reasoning and persuasive writing. Your participation in this study represents a contribution to a virtually untapped area of cognitive research. Participation in this study also offers some personal benefits, in that it encourages participants to consider their role in shaping students' writing, and reflect on their pedagogical beliefs.

CONFIDENTIALITY
The information in the study records will be kept strictly confidential. Data will be stored securely and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No reference will be made in oral or written reports which could link you to the study.

COMPENSATION
Upon agreeing to participate in this study, you will be paid $100. If you withdraw from the study prior to its completion, you will be asked to help the researcher make arrangements to continue collecting data from student-participants in your class(es).

CONTACT
If you have questions at any time about the study or the procedures, you may contact the researcher, Amy Overbay, at acstephe@unity.ncsu.edu or 779-3243. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148)

PARTICIPATION
Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

CONSENT
I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Subject's signature_____ **Date** _____

Investigator's signature_____ **Date** _____

INFORMED CONSENT FORM

Persuasive Developments: Reflective Judgment and College Students' Written Argumentation

Principal Investigator: Amy Overbay

You are invited to participate in a research study. The purpose of this study is to expand our knowledge about the relationship between college students' reasoning and writing.

INFORMATION

1. You will be asked to participate in three data collection procedures:
   - The Reflective Judgment Interview. This interview involves four general knowledge questions. Your responses will help the researcher understand and describe the way that you think about difficult-to-resolve problems. The transcripts from this interview will be sent to a professional rater, who will identify the dominant reasoning patterns used within your responses. At the end of the semester, you will be asked (via email) whether you believe this rating is indeed accurate. This interview will take approximately one hour or less, and your response to the follow-up email should take no longer than a few minutes.
   - A "writing history" interview. This interview will help the researcher find out more about your beliefs about yourself as a writer, and your experiences with writing, including your experiences in English 111. This interview will take approximately thirty minutes.
   - A self-recorded reflection on 1 piece of writing from English 111. You will be asked to reflect on one piece of writing from the set of papers you produce in English 111. This reflection will include your beliefs about the quality of this piece, your understanding of the assignment, and your intentions as the writer. You will be asked to spend 15-30 minutes on this reflection.

Additionally, your instructor will give the researcher access to copies of your English 111 papers (including drafts). You will **not** be asked to do any additional writing for this study.

AMOUNT OF TIME REQUIRED

This study will be carried out over the course of the Fall, 2002 semester. You will be asked to give about 2 hours of your time over the course of this semester (Reflective Judgment Interview and follow-up email = 1 hour; writing history interview=30 minutes; self-recorded reflection=15-30 minutes).

RISKS

This study poses minimal risks to participants. Participation in this study is in no way tied to your course grade in English 111. Any information revealed to the researcher during interview procedures or reflections (such as your feelings about English 111) will be kept strictly confidential. Similarly, reviewers of your Reflective Judgment Interview transcripts will have no knowledge of your identity. Additionally, contact information, such as your

telephone number or email address, will not be released to any other parties. Tapes, transcripts, and other documents related to the study will be returned to you by September, 2003.

BENEFITS
This study is intended to generate new knowledge about the connection between cognition and writing. Your participation in this study represents a contribution to a virtually untapped domain of cognitive research. In addition, you will have the opportunity to learn more about your own thinking processes, and reflect on the ways in which you may apply these processes in your persuasive writing practices.

CONFIDENTIALITY
The information in the study records will be kept strictly confidential. Data will be stored securely and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No reference will be made in oral or written reports which could link you to the study.

COMPENSATION
For participating in this study you will receive $20, as well as a Reflective Judgment Interview rating, an empirically derived description of your preferred reasoning patterns. If you withdraw from the study prior to its completion, you will receive the money, but will not receive a Reflective Judgment rating.

CONTACT
If you have questions at any time about the study or the procedures, you may contact the researcher, Amy Overbay, at acstephe@unity.ncsu.edu or 779-3243. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148)

PARTICIPATION
Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

CONSENT
I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Subject's signature_____ **Date** _____

Investigator's signature_____ **Date** _____

Appendix 7.6

Paper # 1: Summary and Response: *9-11* by Noam Chomsky
Length: 2-3 pages
Draft 1/Peer Review: September 4
Final Copy: September 9

Audience: Your peers and others who know *9-11* by Chomsky

9-11 by Noam Chomsky is a series of interviews that took place shortly after the events of September 11th, 2001. The purpose of these interviews, conducted largely by an international group of journalists, is to educate and inform. However, Chomsky comes to the table with a particular set of beliefs and assumptions. You may find some of his assessments to be contrary to your own feelings on the subject of September 11th and the issues surrounding those events. In this paper, you will summarize Chomsky's views on *9-11* and respond to a few *2 or 3) of his claims that you find particularly noteworthy.

Purpose: To demonstrate your ability to summarize a text. To demonstrate your ability to put forth critical claims. Successful completion of this assignment will prepare students to summarize and synthesize texts in the future and to put forth critical argumentative claims and support them with evidence.

Goals: To succinctly and efficiently summarize the claims in *9-11*.
To articulate clear claims.
To support your claims with personal and text-based evidence.

Preliminary work:
Read *9-11* by Noam Chomsky

It may be helpful to find our more about Chomsky. You can read about him at:
http://ww.noam-chomsky.com/bio.htm

Approximately ½ of this paper should be summary, and the other 2/3rd should be the response. The paper should have an introduction that previews the body of the paper, and a conclusion that wraps things up.

In crafting this argument, you should be mindful of the Toulmin scheme. Use it as an invention technique.

Effective arguments will include:

A clear thesis, indicating that the essay will summarize and respond;
A logical organization;
Paragraphs developed with quotes, paraphrase, and discussion-evidence that supports the thesis;
Topic sentences and transitions that echo the thesis;
Sentences with few grammatical or mechanical issues.

Paper #2: Evaluation of *Terrorism: Theirs and Ours* by Eqbal Ahmad
Length: 3-5 pages
Draft 1/Peer Review: September 23
Final Copy: September 30

Audience: American readers of *Terrorism: Theirs and Ours*

Terrorism: Theirs and Ours is a provocative essay, based on a speech. Although delivered before the events of September 11th, the claims and ideas that Ahmad puts forth take on a new meaning for a post-9-11 audience. In fact, it is nearly impossible to consider Ahmad's claims without looking through the lens of the 9-11 attacks. In this paper, you will make a claim about the effectiveness of this argument for a pre- and post-September 11th audience. Perhaps it was effective then, but is it now?

Purpose: To demonstrate your ability to assess the strength of an argument based on changing assumptions of the audience. Successful completion of this assignment will prepare students to write arguments in the future as well as equip them to evaluate an array of arguments, including research sources and their own writing.

Goals: To closely analyze argument, with respect to audience and the Toulmin Scheme.
To practice evaluation.
To articulate clear claims.
To incorporate text-based evidence.

Preliminary work:
Read *Terrorism: Theirs and Ours* by Eqbal Ahmad.

Lay out the argument according to Toulmin's scheme for the logical structure of arguments; identify claims and reasons, warrants, backing types of grounds, conditions of rebuttal, and qualifiers. The purpose of this Toulminization is to make it easier to "see" the parts of Ahmad's argument.

After your "Toulminization," consider the following questions to help determine the effectiveness of the argument. In order to devise a claim about the value of this argument in light of the changing assumptions of the audience, it is important to consider these questions for a pre- and post-9/11 audience:

1.Is the warrant likely to be acceptable to Ahmad's audience, or does it require backing? If so, does the writer provide it? From the argument alone, can you speculate on who he believes his audience to be, what the audience knows about the issues, and what they value and believe?

2. Does Ahmad consider how a "shrewd adversary" might refute his argument by attacking (a) the reason and grounds and/or (b) the warrant and backing> Does he respond, building in conditions of rebuttal—words or phrases indicating the situations under which the reason or warrant might not hold?

3.Does Ahmad's claim need to be qualified? If so, is it?

4.Are the kinds of evidence supporting the claim and the backing (if provided) sufficient, i.e., does Ahmad rely on more than his personal opinion and provide more than one example, statistic, instance, or expert testimony? If chains of reason a reused, are they clear and compelling?

Effective arguments will include:
A logical organization;
Paragraphs developed with quotes, paraphrase, and discussion-evidence that supports the thesis;
Topic sentences and transitions that echo the thesis;
Sentences with few grammatical or mechanical issues.

Paper #3: Definition Argument-Part One
In-class essay to be written on October 11

Audience: The American public

Purpose: To convince your audience that your definition of terrorism is a valid, working definition.

Goals: To clearly articulate a definition (criteria) for terrorism.
To support that definition with evidence based on your experience and research.
To practice research skills.
To practice incorporating outside texts into your own writing.
To practice the in-class essay exam.

What is terrorism?

Establish a definition for this term based on dictionary definition, negation, and examples. Alternatively, you might use the criteria established in another work. You may begin by consulting a dictionary, but expand your definition. Is the dictionary definition in any way misleading or inadequate? Too narrow or too broad?

Do not start your paper with a general statement about Webster. To say something typical like. "According to Webster, the definition of terrorism is…" is cliched and shows a reluctance on your part to think critically.

In order to do a successful job with this paper, you'll need to come to class prepared with notes that will allow you to develop your argument successfully and with sufficient evidence. In fact, you may bring with you to class 3 3x5 notecards with handwritten notes from your sources. These notes should not be used as a means to write out the essay before class. These notecards will be passed in with your exam. You must bring a typed works cited page which you will also pass in with your exam.

A word of caution, we have seen that it is possible to devise an overwhelming number of criteria for any particular argument, and to best facilitate your essay writing process, it makes sense to limit yourself to three or four criteria.

Effective arguments will:
Have a clear thesis which puts forth a definition for the word terrorism;
Support the thesis with evidence based on outside research;
Use a logical organization;
Feature paragraphs developed with quotes, paraphrase, and discussion-evidence that supports the thesis;
Have topic sentences and transitions that echo the thesis;
Have sentences with few grammatical or mechanical issues.

Paper #4: Definition Argument
Peer Review: October 23
Due Date: October 28

Audience: The American public

Purpose: To convince your audience that your definition of terrorism is a valid, working definition and to convince your audience that the event in question does or does not fulfill that definition.

Goals: To clearly articulate a definition (criteria) for the word terrorism.
To support that definition with evidence based on your experience and research.
To prove that the particular activity or person does or does not fulfill the criteria that you have established.
To practice research skills.
To practice incorporating outside texts into your own writing.

Part 1:
For paper #3, the first part of the Definition argument, you established the criteria for your definition of the word terrorism. Because that was an in-class exam, you should take time to rework and revise that paper so it is a cohesive and well-developed argument.

Part 2:

You must now integrate the work you did on Paper # 3 with a new paper, the goal of which is to articulate your definition and do a criteria match to establish that an event from history (current or not) fulfills (or does not fulfill) your definition of terrorism.

The event in question should be somewhat controversial in relation to your definition. For instance, it wouldn't be very critical to argue that the events of 9-11, 2001 were terrorism, because everyone accepts that they were. However, the shooting at the El-Al ticket counter at Los Angeles International Airport in July, 2002 is an incident that some believe was terrorism, and others believe was not. Using specific examples from newspapers, journals, television, radio, history books, etc., argue that your incident does or does not fulfill the definition of terrorism.

You will need to convince your audience of two things:
1. That your definition is valid.
2. That the event or person in question fulfills this definition.

This paper should be in MLA for,.
Your works cited page should have no less than three (3) sources, not including a dictionary or thesaurus.
Consult *Everything's an Argument*, Chapter 9, if you need help understanding the nature of the definition argument.

Effective arguments will include:
A clear thesis, incorporating both elements of the definition argument;
A logical organization, mindful of the criteria-match format;
Paragraphs developed with quotes, paraphrase and discussion;
Topic sentences and transitions that echo the thesis;
Sentences with few grammatical or mechanical issues.

Paper #5: Causal Argument
Length: 5-6
Peer Review: November 13
Due Date: November 18

Audience: People who are concerned or who should be concerned about a given event, but are either confused, misinformed, or uninformed about the cause of the event.

Purpose: To articulate the causes of a particular terrorist event, the causes of which may be unknown or under debate.

Goals: To articulate a critical causal claim.
To support your causal claim with sufficient evidence from a variety of outside sources.
To demonstrate the ability to skillfully integrate a number of sources into your own writing.
To navigate a body of sources for the purpose of finding information to support a particular claim.

Process:

1. Briefly outline a terrorist event, the causes of which are unknown or disputed.
2. Explain the importance of this event. Did it affect the general population or a selected group? What are its consequences-side effects (negative and positive, if there are any)? Beyond the most obvious and immediate consequences, does this event lead to any secondary effects?
3. Support your claims with data. You may use surveys, interviews, and personal observations, in addition to library research.

Consult Chapter 11 in *Everything's an Argument* as a reference for writing this paper.

Your works cited page must have a minimum of 5 sources, 3 of which must have print analogues. You must use at least one source from a scholarly journal or book.

Effective arguments will include:
A clear thesis, which makes a causal claim;
A logical organization;
Paragraphs developed with quotes, paraphrase, and discussion-evidence that supports the thesis;
Topic sentences and transitions that echo the thesis;
Sentences with few grammatical or mechanical issues.

Paper #6: Proposal Argument
Length: 5-7 pages
Draft 1: December 2
Final Copy: December 6

Audience: The American public (can be narrowed to lawmakers).

Purpose: To persuade your audience to implement your proposal which sets forth a solution to the problem of terrorism.

Goals: To articulate a proposal claim consistent with the purpose of the assignment.
To support your proposal claim with sufficient and specific evidence from a variety of outside sources.
To develop your proposal claim with sufficient conditions of rebuttal, including alternate proposals and justification for your particular proposal.
To navigate a body of sources, both academic and civic, for the purpose of finding information to support a particular claim.

Research requirements: For this assignment, you will be relying primarily on the library for source material. For this proposal paper, you will need at least nine sources. Three of your nine sources must be "print only" (books! Or other non-Internet sources). Three of the nine (but not necessarily the three print only sources) must be scholarly (from academic journals or books).

You have already written a paper illuminating the causes of a particular terrorist event. Now write a paper in which you propose a solution which will prevent terrorism in the future.

Process:
1. You'll need to begin by summarizing a lot of what you said in your causal argument. Rather than cutting pasting your causal paper into this essay, highlight the main causes or most important cause of the terrorist event and its consequences.
2. Explain what you are proposing to alleviate this problem. How could readers implement your suggestions? How do you think this proposed action might alleviate the problem at hand Have similar proposals been implemented elsewhere? If they have been unsuccessful, how is your proposal different? This aspect of your paper will require specifics.
3. Explain why you feel your proposal offers a viable solution. What grounds can you provide to prove that your proposal will have the positive effect you claim it will? What are the costs? Will its benefits outweigh its costs? What effort will be involved in implementing the necessary changes? Often, arguing by analogy is useful in this section.
4. Structure your argument and develop it appropriately using your notes on the above questions. Some students may have to spend more time developing the specifics of a proposal. Other students may have to spend more time justifying a controversial proposal.

Incorporating your research: Your research can help you discover responses to the questions above. You might need research to help you prove that a problem exists in the first place. You might use research to help you create your proposed solutions, which might be modeled on actions other groups or people with similar problems have taken. For example, if you claim that group A's solution is effective, then you can argue that your similar solution will also be effective. Finally, you might use research to help you justify your response: use research to determine what the costs might be; use research to develop a resemblance argument—have other groups adopted similar proposals successfully? What are some problems that your audience might expect if they do follow your advice, and how might they be prepared to handle them?

Effective arguments will include:
A clear thesis, which makes a proposal claim;
A logical organization which takes alternate proposals and justification into consideration;
Paragraphs developed with quotes, paraphrase, and discussion-evidence that supports the thesis;
Topic sentences and transitions that echo the thesis;
Sentences with few grammatical or mechanical issues.

Appendix 7.7

Paper 3, 004

Terrorism

Terrorism is a term that many experts have spent a large part of their life trying to define. According to the American Heritage Dictionary, "Terrorism is the unlawful use of force or violence by a person or organized group against people or property with the intention of intimidating or coercing societies or governments, often for ideological or political reasons (Dictionary.com)." Politically, terrorism is a way for minority groups to voice their opinion and force their views onto the world scene. Also in some way or another, terrorism is a retalliation for previous actions perpetrated against the terrorist parties.

The idea of terrorism being an unlawful use of violence and the fact that it takes place as retalliation for previous acts go along with one another. One act of violence effectively results in more acts of violence. In the book, Terrorism: Theirs and Ours, Eqbal Ahmad states, "Victims of violent abuse often become violent people. It's the fact that you've experienced violence at other people's hands (Ahmad 20)" People have been upset through violent acts effecting them, so they express their feelings through violent acts of their own. Also in Ahmad's book he says, "Terrorism is an expression of anger, of feeling helpless, angry, and alone. You feel like you have to hit back. Wrong has been done to you, so you do it (Ahmad 19)."

As well as retalliation, terrorist acts are a way for groups with no voice in the world politically, to get their opinions out in the open. There is an effort to be heard, and to get their problems recognized by the world and dealt with by the people (Ahmad 18). Noam Chomsky, the writer of the book 9-11, dealing with international terrorism says, " There is certainly an issue of political authority and power (Chomsky 13)." The perpetrators of terrorism have no power politically, so they force the world to recognize them through acts of violence.

Terrorism is a way for smaller groups to feel powerful through acts of violence. Terrorism is a retalliation against previous acts, with political implications being one of the main factors.

Participant# 004 Paper # 3

Issue	Characteristic	Yes	No	Comments
Position	Position reflects thoughtful synthesis of multiple viewpoints.		X	Overall, the essay offers a one-sided argument, in that there is no attention to the reasons why people disagree over the definition of terrorism.
	Writer differentiates own view from view of authorities.		X	
	Writer uses logic to connect evidence and conclusions.	X		Though the writer uses a number of generalizations, he does not seem to adopt an unreasonable stance.
	Writer recognizes ill-structured nature of conflict.		X	The writer implies that there is true disagreement about what terrorism is: "Terrorism is a term that many experts have spent a large part of their life trying to define." At the same time, the writer's position appears to be little different than the o
Evidence	Writer offers support for major claims.		X	The writer offers three direct quotes. However, there are no other examples from the historical record or from general knowledge.
	Writer uses credible evidence, within the context of the assignment.	X		Perhaps because the writer starts from an authoritative, agreed-upon definition, there is no real sense for the need for the argument—there is nowhere for his argument to go. Thus, the writer falls back upon sources that he's already encountered in class
	Writer assembles/assesses evidence critically.		X	
Audience/ Opposition	Writer acknowledges alternative views.		X	There is no treatment of disagreement/alternative views in this argument.
	Writer responds to alternative views.		X	
	Writer concedes contested point(s).		X	
Rhetorical Patterns	Writer uses pathetic appeals.		X	
	Writer uses ethical appeals.		X	
	Writer qualifies claims.		X	

Reasoning Patterns.	Holistic Assessment of Stage(s)	
Prereflective	X	This essay seems to reflect pre-reflective reasoning, especially in its reliance on authorities' views, and in the writer's failure to identify the stasis of the argument, and his subsequent treatment of the conflict as closed.
Quasi-Reflective		
Reflective		

Paper 3, 009

Terrorism is a term that, for some, may have become more relevant recently. For others, though, it is an old word that they must see proof of everyday. However common this phenomena may be, the word itself still causes argument in order to be defined. Many books on the subject devote whole chapters to the defining process, or merely declare it as impossible. Here, though, I would like to provide my own definition, agreeing that it may or may not be found in conjunction with so many others. Terrorism is a criminal act that involves the use or threat of violence, occurs for some motive or goal, and causes fear in a particular group of people or the general public.

Terrorism involves the use or threat of violence. To provide a working example, I will discuss the Dagestani terrorists of Russia, namely the Wahabi. Dagestan is a section of Russia with a population of two million and thirty different ethnic groups. One of the these is the Wahabi, a culture who wishes to restore purity of Islam while riding their regionof all other cultures. They are known to use violence (Rmana np). In September of 1999, a Wahabi group attacked a five-story apartment building in Buinaksk, Russia. This bombing killed 61 and injured many more, who had to be removed from piles of ruble. This apartment was in a thought-to-be safe military housing complex ("Buinaksk" np). This is an obvious use of violence by the Wahabi, and shows in one aspect they are terrorists. This violence can also only be used as a threat, since the public of Dagestan is familiar with Wahabi, they will know violence is always a possibility. This violence can be considered terrorist because it also agrees with the other two points of the definition, which will later be discussed. The violence has reason but often is done blindly as Wahabi have killed innocent women and children as well as men ("Victims" np).

This violence called terrorism must also have a motive or goal. Terrorists do not kill without reason, in which case they may be classified as insane. However most often they are intelligent people fighting for some cause. In the case of the Wahabi, they have many reasons, most consisting of turmoil between people of the region. Although politics by way of the old communist regime versus the ambitious businessmen may play a role, Wahabi mostly fight for sectarian reasons. Another group in Dagestan, Fufists, are very tolerant, and adaptable. They Wahabi, though, want to achieve and Islamic State, and in order to do this they have decided to use violence (Raman np). They desire to convert the people of Dagestan to their ways, regardless of how long it takes or how many lives it eliminates. For this second reason Wahabi are terrorists, as terrorism requires a motive.

For obvious reasons it is easy to say that terrorist cause fear. This fear may be in some particular group of people or the general public. In this case, fear is caused because the people of Dagestan are aware that they may be killed by Wahabi any day. Wahabi also known in Pakistan, the Shia people. This is a particular group that the Wahabi aim at, for having different beliefs ("Victims" np). Many Shias, most often innocent, are killed only because they are Shia. Wahabi have thrown grenades at schools at Shia, put of suicide bombs in public places, and randomly shot and killed Shia people ("Victims" np). Due to this it clear how fear is produced in the society. I can imagine just the mention of "Wahabi" causes glances over the shoulder. Deaths of this specific group or the public is succint with the definition of terrorism, since it is for a reason that a particular group is killed with violence.

There may be many different definitions of terrorism, and some will not agree with the one I have provided. This is due to the fact that "terrorism" is a working term used daily by so many different people in so many different ways that no one definition can be one hundred per cent accurate. Someone will always disagree.

Terrorism, old or new, is an action that people world-wide are familiar with. It occurs everyday, in so many countries that for some the knowledge is simply overlooked. It exists, however, and most often in order to address the problem the term must first be defined. This can pose problems, cause arguments, and take time. However, most would agree terrorism uses threat of violence, if not the actual deed of violence. This violence, or threat of, causes fear, and often is acted out because of a motive. The perception of idiot men shooting the crowds is not terrorism, though often this is an action terrorists may take. Terrorism is quite complicated, as is the term itself, and should not be merely thrown out in expression as "just" some common daily occurance.

Participant# 009 Paper # 3

Issue	Characteristic	Yes	No	Comments
Position	Position reflects thoughtful synthesis of multiple viewpoints.		X	The writer offers some degree of balance in her paper, though her discussion of her argument's limitations in her last body paragraph is very vague. Additionally, the use of one particular example—while considered effective by her instructor—limited the s
	Writer differentiates own view from view of authorities.	X		
	Writer uses logic to connect evidence and conclusions.	X		
	Writer recognizes ill-structured nature of conflict.	X		To some degree, the writer does suggest that creating a definition is an inherently complicated process: "There may be many different definitions of terrorism, and some will not agree with the one I have provided. This is due to the fact that "terrorism"
Evidence	Writer offers support for major claims.	X		The writer focuses on one example, and cites information from three different websites to support her claims.
	Writer uses credible evidence, within the context of the assignment.	X		
	Evidence is used critically.		X	
Audience/ Opposition	Writer acknowledges alternative views.	X		This student also included a brief paragraph touching on conditions of rebuttal, and acknowledging the difficulty of creating a single comprehensive definition.
	Writer responds to alternative views.		X	Overall, however, the writer seems to suggest that disagreement over the word either stems from an inability to get everybody to agree on something ("Someone will always disagree") or from a lack of awareness ("It occurs everyday, in so many countries tha
	Writer concedes contested point(s).	X		"Here, though, I would like to provide my own definition, agreeing that it may or may not be found in conjunction with so many others."
Rhetorical Patterns	Writer uses appeals to pathos.		X	
	Writer uses appeals to ethos.	X		The writer builds credibility through concessions, and through a neutral tone.
	Writer qualifies claims.		X	
Reasoning Patterns.		Holistic Assessment of Stage(s)		
Prereflective		(X)		In her choice of definitions, and her choice of examples, the writer seems to be side-stepping controversy, so that she may solve the rhetorical problem via critical thinking.
Quasi-Reflective		X		This writer seems to be using some more sophisticated, quasi-reflective reasoning, especially with respect to her treatment of the audience, her anticipation of objections, and her sense of the argument's context and reason for being: "Terrorism is quite
Reflective				

Paper 3, 012

In a world of spin and manipulation words can sometimes hold several meanings. Terrorism is one of these words. Lacking a universally accepted definition it has become a word that can be span to mean good or evil. The definition I am offering is based from other writers and diplomates point of view which I gathered through research. Terrorism is, a calculated tactic developed by Individual(s) to execute a deliberate violent action. Also there is an established intent to destroy non combatant human life or disturb economic stability to accomplish goal(s). It must also be driven by the need to accomplish something above and beyond taking human lives or creating turmoil in the economy. Finally it must be perpetrated by people not under colonial, alien or foreign dommation for self-determination and national liberation, as recognized and determined by the United Nations.

The first filter in determining what is terrorism is that it must be calculated violent act carried out delibratly by individuals. This part of my definition shares partially with the definition the Department of defense offers. They define terrorism as "The calculated use of unlawful violence or threat of violence to inculate fear" (Theodore npn). I removed unlawful from my definition, because the word terrorism is as Jimmy Carter's national security advisor Zbigniew Brzezinsk put it, "Terrorism is a technique, a tactic. You can't wage war on a technique" (Wood npn). The U.S. Supreme Court can decide when and when not terrorism is unlawful or unjustifiable. If you immediately brand terrorism as unlawful people are less likely to accept the common definition because they know the I.S. is responsible for some form of terrorism and to be thought a crimanal without due process admits guilt and doesn't seem fair. Acts of terrorism are so violent in nature. Some uncontroversial examples of terrorism are, September 11th, Oklahoma City bombing, and the first attempt to destroy the World Trade Center. So to include these in my definition, terrorism needed to be a violent act.

There needs to be a clear intent to destroy non combatent human life or attempts to harm economic stability to accomplish the goal of the act. This is most debated topic as I see it. Americans for the most part are afraid to be called a terrorist or to become one in the same with Osama bin Laden. As I stated before terrorism is violent, but it is not a universal evil. As Dr. Oldenquist, a Professor of history at Ohio State University on history put it, "Attacks on the enemy's armed forces by suicide bombers are no more terrorism than attacks with tank" (Oldquist, npn). This brings one to the conclusion that if you want to say suicide bombers are terrorist the people in tanks must also be. When seeking out to destroy those who use terrorism for evil it is important to remember that destroying terrorism by use of terrorism only allows evil terrorism to continue to survive.

Third, defined by the need to accomplish something beyond taking lives. To be called terrorism there must be an overhead goal. For example, a robbery is just a robbery, they are only interested in harming the economy on a local level by stealing. Also serial killers, or other violent people, are only interested in the goal to make violence. If your goal is to chop out terrorism by bombing out non combatants then you are only transfering the torch to your side.

Finally, terrorism is perpetrated by people, not under colonial, alien, or foreign domnation." (M2 Pres). This was taken from a representative from Sudan that came to a UN confrence. This part separates freedom fighters from terrorism. In Afganistan the country

was being controled by Russia. Then they were freedom fighters. However after that they were no longer under foregn domination and therefore are terrorism using terrorists.

To conclude my definition of terrorism is workable because it makes clear the differnce between terrorism and other random violent acts. And it also defines a defference between freedom fights and terrorism. Last but not least it has been proven that non controversial acts of terrorism are still terrorism. Therefore my definition should be considered a valid universal defnition.

Participant#	012	Paper #		3
Issue	Characteristic	Yes	No	Comments
Position	Position reflects thoughtful synthesis of multiple viewpoints.		X	The writer claims that his view is based on a synthesis of views: "The definition I am offering is based from other writers and diplomates point of view which I gathered through research." However, the writer's position is essentially one-sided, althoug
	Writer differentiates own view from view of authorities.	X		
	Writer uses logic to connect evidence and conclusions.	X		The writer clearly perceives that he is making a logical argument, though some of his logic appears stretched. The logic he uses in his discussion of U.S. involvement of terrorism seems strained—which may be some result of his attempts to appeal to a gen
	Writer recognizes ill-structured nature of conflict.		X	The writer seems to assume that controversy exists only because some people have devious motives: "In a world of spin and manipulation words can sometimes hold several meanings." From his point of view, the writer's synthesis of multiple perspectives br
Evidence	Writer offers support for major claims.	X		
	Writer uses credible evidence, within the context of the assignment.	X		The writer uses evidence cited from several news service and newspaper websites. He seems to have taken care to make reference to credible figures (e.g. Jimmy Carter's national security advisor).
	Writer assembles/assesses evidence critically.		X	In this case, the writer does not appear critical of his sources.

Audience/ Opposition	Writer acknowledges alternative views.		X	Because the writer included a discussion of freedom fighters in his text, he effectively eliminates a number of potential objections to his argument. However, he does not explicitly enumerate or address his conditions of rebuttal.
	Writer responds to alternative views.		X	
	Writer concedes contested point(s).		X	
Rhetorical Patterns	Writer uses pathetic appeals.	X		The writer may be attempting to appeal to audiences through his use of imagery: "If your goal is to chop out terrorism by bombing out non combatants then you are only transfering the torch to your side." However, it is doubtful if this kind of imagery wo
	Writer uses ethical appeals.	X		
	Writer qualifies claims consistently.		X	In fact, the writer seems intent on generating a "universally valid" definition.

Reasoning Patterns.	Holistic Assessment of Stage(s)	
Prereflective	X	The essay reflects some pre-reflective reasoning patterns, in that the writer claims that his definition must be “universally valid,” and that ultimately this conflict is solvable.
Quasi-Reflective	X	This essay also reflects more sophisticated patterns of reflective reasoning, in that the writer seems—at least initially—to be aware of the ill-structured nature of the conflict, and claims that he has considered the issue from multiple perspectives.
Reflective		