Learning how to argue: Experiences teaching the Toulmin model to composition students

by

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CHAPTER 1. INTRODUCTION

It is the mark of an educated mind to be able to entertain a thought without accepting it.

Aristotle (384 BC - 322 BC)

Education's purpose is to replace an empty mind with an open one.

Malcolm Forbes (1919 - 1990)

Introduction: The Importance of Argument

In democratic cultures, the ability to argue effectively has always been central to public participation. But only recently has the study of argument become a specific discipline with a fixed place in our academic curricula. As Christopher Shroeder notes, “A person who can argue coherently and cogently commands a considerable amount of authority in our culture, and such a person is considered to be educated, to have power...” (95). This rising attention to argument also reflects “a broader cultural reemphasis on rationality, critical thinking, and the need for high-level writing skills in formulating and justifying judgment” (Kneupper, 1984: 113). Unfortunately, modern society can also treat argument as a simplistic contest concerned primarily with winners and losers. Nonetheless, in our increasingly diverse world, argument remains a valuable tool for breaking through divisions and hostility and moving dissimilar parties toward inquiry, understanding and negotiation (Emmel xi).

In light of this need for argumentative skills, higher education is charged with the task of teaching students how to form ideas and argue for those ideas. A central step in the educational process involves exposing students to a juxtaposition of different ideas and concepts and challenging them to choose their own beliefs and construct their own knowledge. The next step is for students to learn both how to put an argument into words
and how to critique the arguments of others. As Richard Fulkerson puts it, “It is crucial that students learn to participate effectively in argumentation as a cooperative, dialectical exchange and a search for mutually acceptable (and contingent) answers” (1996: 17). Accordingly, higher education has generally agreed that college students should be taught how to write logical arguments, typically assigning the task to the English department and college composition courses.

Iowa State University (where I work) agrees that it is important to teach students how to compose logical arguments. A major component of the second semester first-year composition course asks students to “construct arguments that integrate logical, ethical, and emotional appeals” (Instructor’s Guide 13). The final paper requirement is typically a position or argument essay. It asks teachers to help “students recognize the role of argumentation and persuasion” (14), noting that “argumentation helps develop key cognitive skills, including defining different positions, synthesizing evidence to support arguments, and assessing an audience’s underlying assumptions” (14). Clearly, Iowa State University acknowledges the value of argumentative skills for the individual and society and expects this training to occur in the composition classroom.

This thesis grew out of my experiences over six semesters teaching argument in the first-year composition setting. While my experiences thoroughly convinced me of the importance of teaching students how to write an argument, they also proved how difficult it is to get students to think critically and compose rational arguments. The argument assignment and paper, more than anything else in the semester’s curriculum, seemed difficult for the students to grasp and challenging for me to teach. My students’ papers continually disappointed and perplexed me: too many papers showed that the students had failed to think through their subjects, take a distinct stand and support their position. The argument paper’s minimum requirement was a clear claim in a thesis statement with a
reason and evidence to support the claim. Too often, the logic of the students’ arguments was weak and shallow, lacking this combination of claim plus supporting reasons.

Charles Kneupper is one of many scholars who echoes my frustrations: “Because of its complexity, argument is probably the most difficult form of discourse to teach” (Kneupper 1978: 237). Some of the difficulties include students’ developmental limits in comprehending logic, the lack of guidance provided by standard texts, and poor teacher training. Such problems in teaching argument leave composition scholars divided in their reaction to this pedagogical challenge. Some like Barbara Emmel argue “that argument does stand up both as a genre and as a process that can serve students well” (xi). She contends that placing argument at the center of a composition class shows respect for the student’s ability to conduct open-ended inquiry, negotiate differences and construct knowledge (xxi). But other composition scholars like Patricia Roberts-Miller point out the inconsistency: “While argument is often central to the practice of composition, it is not central in our theorizing with one another about the teaching of writing” (2). Christopher Schroeder says that while some composition books focus on argumentative skills, composition teachers often “lack the necessary background and training in rhetoric and logic to teach argumentation effectively” (2).

For help, some teachers have turned to the theory and standards of evaluation drawn from the discipline of logic; however, most conclude that formal logic isn’t particularly helpful for teaching argumentation since practical arguments are comprised of probabilities and therefore unsuited for the standards of formal logic. Those who teach syllogistic reasoning find that its burdensome complexity doesn’t suit rhetoric, which “deals in probabilities and relies on inductive modes or generalizations based on inductive processes” (Kneupper 1978:237). Other writing instructors attempt to teach students about argument via fallacies, which is a negative approach to argument, fraught with complications (Fulkerson 2002: 328). I am not alone in wondering, considering all these
complications, what more can be done to help students engage in better reasoning and, in turn, in better writing.

My struggle with teaching students how to write strong arguments led me to research ways I could improve my own teaching in this area. Consequently, I decided to write my thesis about my experiences in trying to help my students learn how to write a logical argument. The driving question is “what could I do to help students reason better about matters of controversy so they could write better?” In pursuit of an answer, I reviewed a variety of approaches commonly used in composition textbooks to find a method that worked well in the classroom. Ultimately, I decided to focus on the model of argumentation advanced by Stephen Toulmin (b. 1922). Toulmin is a philosopher and logician from London who still works, writes and teaches in Chicago. Though Toulmin’s ideas were not originally directed to rhetoric, his model for argumentation has been adopted in many composition books because it is clear and easy to follow, providing the writer and reader with basic guidelines for creating a map of an argument. I decided to model my teaching after his theory of argument and experiment with its application in my own classroom. I would evaluate the effectiveness of the Toulmin method both during and after the argument unit. My goal was to generate substantive data about the effectiveness of the model in my own classes, given the specific conditions of my teaching style. Once supplied with such concrete information, I could decide to use, modify, or abandon the Toulmin model for the teaching of argument.

This thesis is a report on my efforts to test the Toulmin model in the context of my own classrooms. I will begin (Introduction) with an explanation of Toulmin’s model and the reasons why I chose to use his approach to teach written argument. In Chapter Two (Methods), I will explain the methodology of my research project in which I used Toulmin’s ideas about teaching argument with two classrooms of first-year composition students (48 total). In order to evaluate whether the specific Toulmin applications used
during a five week period helped students write a better argument and understand key parts of an argument, I asked students to complete a diagnostic assignment at the beginning and at the end of the argument unit. This second chapter describes the diagnostics and other methods (ie. reflections, focus groups) I used to measure whether my interventions produced positive results. In Chapter Three (Results), I share the results of these diagnostics, along with notable findings gained from student reflections and focus group discussions. In Chapter Four (Implications), I explore what the research results suggest about the best ways to teach argument. My overall objective is to find ways to improve my own pedagogy by learning how to teach argument effectively in the college composition classroom. My specific goal is to address my research question of whether or not Toulmin’s model improved student learning and performance.

This chapter represents an introduction to my research efforts and will focus on providing an overview of Toulmin’s model of argumentation. The major sections of the chapter are as follows:

A. Basics of Toulmin’s theory of argument
B. Unresolved questions regarding Toulmin’s model
C. Value of Toulmin’s model for students and teachers

This overview will provide the basis for understanding how and why I used the methodology I chose for my research.

### A. Basics of Toulmin’s theory of argument

Logic and argument are the focus of Stephen Toulmin’s work. In his first book *The Uses of Argument* (1958) Toulmin argues that it is wrong to require argument to meet formal logic criteria. He rejects strict rationalism and advocates returning to the tradition of practical philosophy before the 17th century (Olson 283). Toulmin offers a system of rational argument that features non-complicated reasoning compared to the system of formal, logical, traditional argument that has been in place for hundreds of years. His
ideas were not originally intended for the field of rhetoric, but the discipline has appropriated them because they offer a structural model for building and analyzing rhetorical arguments. The impact of his work was to revive the field of practical argumentation, which was presumed to be nearly dead. Toulmin’s critique shows the irrelevance of theoretical argument to the assessment of real-life, practical argument and proposes a different method that more accurately describes the way people make convincing and reasonable arguments. In place of formal logic he offers a relatively non-complicated system of rules for rational argumentation that consolidates both inductive and deductive reasoning. His book’s impact was to reform the ways argument was thought about and taught at American universities (Kastely 77).

Basically, Toulmin’s rules for rational argumentation test the validity of support for a claim by examining the make-up of the claim, data and warrant within an argument. An argument, according to Toulmin, “is movement from accepted data, through a warrant, to a claim” (Brockriede and Ehninger 44). Data (or reason) is information that answers the question “What have you got to go on?” A claim is a statement or assertion you intend to prove as ‘true.’ Claims involve taking a stand, since they usually have a controversial nature. A warrant is the logical persuasive connection between the claim and the reasons supporting it. Warrants are unstated assumptions about value that make the claim seem plausible. Since an argument is valid only if the required procedure model is followed and the warrant from data to claim is accepted, the warrant is crucial in establishing validity. Toulmin uses the following diagram to show “what features a logically candid layout of argument will need to have” (123):
Toulmin goes on to add three additional elements to a more complex version of his argument model: a **qualifier** (which registers the degree of force which the writer believes his claims holds), a **reservation** or rebuttal (which anticipates certain objections and lists conditions in which the warrant doesn’t apply), and **backing/evidence** (credentials which justify the warrant when readers are not willing to accept it at face value). Because my pedagogical experiment involved first year college students with differing abilities, I chose to concentrate on a simpler model, which focuses on the claim and reason.

Toulmin’s exploration of logic’s role in discourse convinced him that universal evaluation criteria should be replaced by evaluation based upon field-dependent and subject-related considerations. Sound argumentation, according to Toulmin, is “conducted in accordance with a formally valid procedure and in conformance with the specific soundness conditions of the field or subject concerned” (van Eemeren 133). Frans van Eemeren argues that the concept of fields of argument encouraged recognition that the soundness of arguments is not universal and certain, but field-specific and contingent, and “this belief was another step in undermining the analytic ideal and resituating argument within the rhetorical tradition” (204).
In his book *The Uses of Argument*, Toulmin gives examples of how the kind of backing used to prove a point will change as the field of argument changes. For example, a warrant concerning whales being mammals is defended by relating it to a system of taxonomical classification while a warrant concerning whether a Saudi Arabian is necessarily a Muslim would be supported by statistics on how religious beliefs vary among different nationalities (89-90).

Fortunately for teachers like I, Toulmin’s visionary ideas about logical argument are relatively simple to explain to students. Brockriede and Ehninger pointed this out forty-five years ago when they wrote, “Toulmin has provided a structural model which promises to be of greater use in laying out rhetorical arguments for dissection and testing than the methods of traditional logic” (47). They describe Toulmin’s system as “a new, contemporary, dynamic, and usable logic for argument” (53). They go on to list numerous ways it is superior and more flexible than analysis offered in traditional logic. Its structure helps students examine and understand the various claims, assumptions, and reasons behind those claims. Toulmin’s argument theory can be summarized as follows: It

- recognizes argument as a form of inquiry and language as primarily a form of thinking
- understands rhetoric’s close connection to logic and insists that logic needs to be more practical and usable
- advances ideas about logic and rhetoric that fly in the face of the dominant, rationalist tradition at the time
- understands rhetoric in pragmatic terms, as dealing with probable knowledge and applies it in real world situations
- concerns itself primarily with the promotion of good reasons for supporting claims, as opposed to insisting upon the absolute truth of a claim
acknowledges the importance of the writer’s assumptions and requires readers to probe their values.

- encourages writers to do audience analysis to ascertain whether the writer and reader share common values.

Scholars also point out that Toulmin’s model of informal logic fits a post-modern worldview which rejects rationalism’s devotion to formal argument and obsession with only the “correct” answer. Toulmin disallows the idea of universal evaluation criteria and the related notion that any field is superior to another. He “attempts to develop standards for assessing the worth of ideas that are neither absolutist nor relativistic” (Foss 92). Toulmin contends that an argument’s effectiveness is contingent upon the knowledge and values of the arguer and audience. He introduces the concept of fields within argument, with some criteria qualifying as field-dependent and others as field-invariant. This distinction departs from formal logic’s belief that all aspects of argument are field invariant and that valid claims are consequently universal and timeless.

Many composition scholars appreciate how Toulmin’s model moves from the older prescriptive model to a process communication model that more accurately represents the actual ways in which rhetoricians conceive of and carry out arguments (Fulkerson 1996: 50). As in the postmodern worldview, Toulmin views inferences as fallible, considers conclusions uncertain, and believes that the warrants authorizing inferences come less from logical form than from the substantive beliefs of an audience (van Eemeren 194). The qualifiers within Toulmin’s model effectively acknowledge the complications in real life. What Toulmin calls the rebuttal can ground and contextualize an argument in the specifics of a situation. Proponents appreciate how Toulmin’s complex view of argument, which doesn’t demand absolute or unqualified positions, helps fight the intellectual reductionalism that came with rationalism.
B. Unresolved questions regarding Toulmin’s theory

Despite general approval by rhetoricians, various postmodern challenges have been raised about Toulmin’s theory of argument. Some scholars charge that Toulmin’s system tends to “affirm traditional approaches and assumptions about knowledge and power” and thereby endorses hierarchical and linear thinking (Olson 12-13). Toulmin’s descriptive diagrams have been described as reductive illustrations which fail to consider the true complexity of persuasive communication (Olson 10). Others point out that his model cannot be used to either generate or evaluate arguments. Fulkerson contends that Toulmin’s concept of fields of argument can make arguments hard to evaluate, since “one must first be able to assign an argument to a specific field and then know that field well” (1996: 21). Another challenge is whether to treat an argument macroscopically as one argument or microscopically as a series of arguments (Fulkerson 1996: 26). Schroeder argues that the most obvious rhetorical limitation of logic built around assumption is its failure to account for the emotion-laden aspects of the rhetorical situation (13). When ethos or pathos is ignored, students don’t learn how to appeal to an audience’s emotions or how stylistic choices affect an argument.

Another major concern is whether students can effectively move from a description of an argument model to actual invention of an argument. As Fulkerson notes, experience and research show Toulmin’s theory to be “more problematically complex than it first appeared” (1996: 47). Some reassurance comes from those like Kneupper who have concluded that “[b]esides providing a more understandable model of argument than syllogistic logic and a useful heuristic for developing an argumentative essay, the Toulmin model is also useful in discourse analysis and in teaching the logical outline” (Kneupper 1978: 239). All sides considered, the preponderance of professional opinion appears to confirm that Toulmin’s method of contextualized analysis is a significant improvement.
C. Value of Toulmin’s model for students and teachers

I chose to try Toulmin’s model with my classes because it offers students a useful
structure for writing and evaluating arguments. College students often struggle to think
through issues logically, but the clear definitions and illustrations of Toulmin’s model help
students focus their thinking, understand the shape and layout of an argument, and
develop good critical thinking habits. His model asks writers to determine their claim
(what they believe) and how to support their claim. Toulmin’s model also helps students
choose an assumption that links the claim and data, with careful consideration of whether
their suppositions are shared by their audience. As Kneupper points out, the claim-reason-
warrant structure makes the functional elements so explicit that “the imputed relation
between claim and evidence can be more easily grasped and more specifically criticized”
(1978: 239). Students are also less intimidated by a method that “explicitly addresses
argumentation in everyday situations in ordinary language” (van Eemeren 160). Because
the key to improving students’ understanding and practice of argument is making the
process understandable and practicable, I chose Toulmin’s model for its relatively easy-to-
follow guidelines and less-complicated theory.

Toulmin’s model also helps the composition teacher. Before undertaking this study, I
was subject to Schroeder’s indictment: “many who teach composition today lack the
necessary background and training in rhetoric and logic to teach argumentation
effectively” (95-96). I needed both instruction and reassurance that argument can be
taught without assistance from the procedures of formal logic. I found in Toulmin a more
understandable model of argument than syllogistic logic and “a useful heuristic for
developing an argumentative essay” (Kneupper 1978: 239). As Kastely put it, “The
economy of his analysis lent itself to teaching. . .Toulmin offered a simple and flexible
account of practical reasoning” (78). His model forced me to practice figuring out the claim-reason-assumption of an argument so I could help my students do the same. Its practical advantage is that it shows the layout of an argument so clearly that both students and teachers can identify effective assumptions that make for accepted arguments. It also enables students and teachers to spot logical breakdowns more easily. Toulmin’s more contemporary writing model sat well with my beliefs about rhetoric: knowledge is understood to be probable and situated, instead of traditional logic, which understands truth in terms too abstracted from real-world situations.

Another compelling feature of the Toulmin method is what Shroeder describes as the “relative ease with which this system can be presented in a composition classroom” (99). Shroeder concludes,

For composition teachers, then, Stephen Toulmin has been something of a godsend. His system of substantive reasoning, commended by many as a practical pedagogical tool, has significantly simplified and humanized the life of the composition teacher and has enabled those who utilize it to present argumentation in radically simpler and more comprehensible terms (97).

Endorsements like this left me anxious to try teaching argument Toulmin’s way. Any pedagogical tool that simplified and humanized my life as a teacher was worth trying. I was curious to discover if a change in my pedagogical methods could significantly help my students. Maybe I wouldn’t be forever frustrated with how student papers suffer from poor foundational logic.

So, despite the questions raised about aspects of Toulmin’s model, the void in argument pedagogy noted by scholars and verified by my own experience convinced me to try it with my students. The obvious next step was to test his ideas about logic and rhetoric to see whether they could inform and guide my efforts to teach students how to argue more
effectively. Finally, it came time for me to try this new approach, motivated by the desire to help students learn to think and reason better and by the hope that improved reasoning would yield improved composition papers.
CHAPTER 2. METHODS

The lack of clarity about how to best teach argument creates a need for testing argument theories with students in composition classrooms. In order to learn if the Toulmin model would work pedagogically for me I needed to test it with real students. Therefore, my research plan was to implement the Toulmin model in my classroom with two classes of first-year college students over a two semester time frame to see if this new (to me) methodology would improve my students’ argumentative skills. In this chapter I describe the three basic elements of my research agenda: my research design, my research process, and my analytical methods. Section I on Research Design covers the following topics:

A. Context for research studies
B. Nature of the participants
C. Instruments used to generate data (diagnostics, reflections, focus groups)
D. Researcher role

The instruments, which constitute the heart of my research effort, include a pre- and post-diagnostic essay intended to measure student development with argument over the course of the semester, student reflections which reveal students’ understanding about what they had learned, and focus group discussions which provide feedback on the research tools.

The second section of the chapter, on my research process, describes the steps taken to conduct the research and gather the data. The process is divided up into the following time periods:

A. Beginning of the unit
B. During the unit
C. End of the unit
D. Changes made between semesters
Within each time period, I describe the steps involved in gathering the data from the diagnostic as well as the process for getting information from student reflections and focus groups.

In Section III on analytical methods I explain my methods for analyzing the data from the three research instruments. Major subject headings are as follows:

A. Setting data limits
B. Using a rubric
C. Rating the diagnostics
D. Categorizing and tabulating the data
E. Correlating information from different sources to draw conclusions

This type of research study, which involves a mix of quantitative and qualitative data, requires careful planning and meticulous note taking. I describe the entire process, including adjustments that were made as circumstances warranted. The outcome of this is reported in the next chapter, “Results.”

I. Research Design

My goal of improving my teaching of argument necessitated two steps. First, I needed to experiment with various ways to teach the Toulmin model to students. To get ideas for exercises explaining Toulmin’s approach, I surveyed numerous textbooks and scholarly articles, looking for possibilities.\(^1\) I inserted appropriate exercises into the unit schedule, moving from most basic (identifying and writing a claim) to more complicated (using supportive evidence). See Appendix A for examples of these exercises.

Next, I needed to evaluate whether my interventions actually improved student learning and understanding. Discussions with my major professor led me to conclude

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\(^1\) For a full bibliography of critical resources consulted for this project see Works Cited, especially Barnett, Browne, Faigley, Fisher, Lundsford
that the best way to learn whether a method worked was to evaluate student performance before and after a teaching intervention (Mendelson January 2005). This decision is supported by other research which used pre-test and post-test measurements to get objective data (Choinski, Chenoweth). We also decided that evaluating student argument skills should involve two main components: testing ability to identify parts of an argument within an argument and testing ability to write an argument based upon a case study. In light of these discussions I designed a diagnostic test to be given to my students at the beginning of the unit, before I’d done any teaching, and at the end of the unit, after five weeks of explanations and exercises (see Appendix B). I focused on assessing two main skills: their ability to identify parts of an argument--claim, reason, evidence, assumption, counterarguments--within an editorial, and their ability to actually write a logical argument from a case study.

The decision to have students analyze an editorial is supported by composition scholars like Robin Muksian-Schutt who writes that “argument analysis is extremely beneficial to a budding writer” because “by studying journalistic and fictional documents . . . students began to notice the assumptions that underlie much of the public’s thinking” (342, 347). The second part of the diagnostic moved beyond the ability to understand and identify terms in an argument and asked students to actually write an argument based upon a case narrative. The argument writing task was designed to prompt the student to show what they understood as essential to a sound argument. My goal wasn’t to see if my students “got it right” but to conduct a more inductive analysis of what students actually understood and could produce.

Before I started the study, I made one adjustment to the Toulmin model, based upon my experience and advice from my major professor (Mendelson, January 19, 2005). Previous semesters had convinced me that the warrant section of the claim-reason-warrant structure can be quite difficult for students to comprehend. When I asked students to
identify the warrant within their argument in the past, very few had been successful. Scholars report similar problems. Muksian-Schutt notes that, in her experience, “The concept of warrants as generalizations or assumptions is often difficult for students to grasp” (345). Fulkerson agrees: “Students have a great deal of trouble identifying appropriate warrants to link data to claims . . . the cognitive act of inferring an appropriate warrant for a given argument isn’t intuitive” (1996: 59). Therefore, while we discussed Toulmin’s idea of warrants and counterarguments in class, my diagnostic research as well as my teaching during these experiments concentrated on helping students figure out the claim-reason-evidence components of the model.

I A. Context for research studies

The study took place at Iowa State University (ISU), a land-grant university with 25,000 students, during the fall semester of 2005 and spring semester of 2006. The class setting was English 105, the second semester of ISU’s First-Year Composition program. English 105 students have either passed out of 104, based upon their test scores, or taken 104 and earned a “C” or above. English 104 introduces students to the fundamentals of academic communication. Typical assignments include writing a profile, analyzing a piece of visual art, and writing a report and proposal. English 105 builds upon the foundation of 104 and focuses on argument and persuasion. In English 105 students are expected to analyze arguments, respond to arguments, and construct their own arguments. Typical assignments in 105 include writing a summary and a rhetorical analysis, designing a visual analysis, and writing an argument paper that is supported by research and documentation.

As a Teaching Assistant at ISU, my classes in English provided a convenient site for research on the project. My research involved two sections of English 105 distributed over the course of the 2005-2006 school year. I taught 23 students one semester and 25 the other semester (class limit is 26). Earlier in the semester I had required my students to compose the following: a short summary, a rhetorical analysis of an essay, and a poster
analysis of a visual. The documented position paper which served as the culmination of the learning in the argument unit was worth more points (25% of total grade between the paper and a group PowerPoint presentation) than any other assignment in the semester (see Appendix C for an abbreviated syllabus). The documented position paper (assignment sheet in Appendix D) challenged the students to implement all they had learned over the course of five weeks about argument and persuasion, including their ability to invoke the Toulmin method as both readers and writers of argument. While student performance on the final position-argument paper was not measured for this research project, student performances on some class exercises during the unit were used as a measure of student ability.

I B. Nature of participants

The English 105 classroom consists of students from all colleges of ISU because all students are required to take First-Year Composition prior to graduation. The forty-eight students who participated in this study represent a cross-section of average students. The participant group included 19 females and 29 males, ranging in age from 18-23. The students were asked to provide some demographic information on a form given to them the first day of the study (see Appendix E). The results told me that half of them had tested out of first semester Composition (based upon ACT-E scores of 24 or higher or a College Composition Writing Test score of 4 or higher) and the other half had already completed English 104. All the students had graduated from U.S. high schools and had been exposed to traditional writing instruction. When asked to evaluate their competency as writers, 25% rated themselves as “A” students, 60% as “B”, 15% as “C”, with none as “D” or “F.” When asked to what extent they had participated in any debate or argumentative activities within the last five years, the average score was 3.1 on a scale of 1-6 (with six as extensive
involvement). Since ISU students are required to get a “C” or above in this class, students are typically motivated to do competent work.

### I C. Instruments used to generate data

The majority of the data came from the beginning-of-the-unit and end-of-the-unit diagnostics which asked students to identify parts of an argument within an editorial and write an argument based upon a case narrative. Additional data was gathered from coursework and reflections written the last day of the unit and focus group discussions with students at the end of the second semester.

### Diagnostic identification component

The diagnostic I designed had two components. The identification task provided them with an editorial and definitions of terms. Students were asked to identify these parts of the argument within the editorial.

- **claim** – the author’s message that s/he wishes you to accept
- **reason** – a proposition that supports the claim, answering the question “why”; the “because” that justifies the claim
- **supporting evidence** – particular observations, research data, specific examples or analogies used to corroborate the claim and reason
- **assumptions** – any ideas that the author assumes that you hold which would lead you to support the argument
- **alternative positions** – any opposing ideas the author raises and perhaps dismisses

I purposely kept the diagnostic design brief because I wanted to know where the students started from, before any instruction, and because I believe that simplicity aids in clarity. My hope was that asking students to identify specific parts in the editorial would help them focus on the essential components of an editorial argument.
At the end of the unit I provided students with a different editorial of similar length and complexity and asked them to define and identify the claim, reason and supporting evidence within the argument. I attempted to make these pre- and post- tests of identification skills as similar as possible.

**Diagnostic writing component**

The “Writing Component” of the diagnostic described a case narrative and asked students to write a logical argument that includes a claim, a reason and supporting evidence. The case study asked the student to write an e-mail to a sibling, trying to convince him/her that the sibling should contribute toward sending his/her parents on a certain trip (choosing from four trip options) for their 25th wedding anniversary. This written argument was then evaluated in terms of whether the argument had a clear claim, reason, supporting evidence, warrants and counterarguments. (More information on the rubrics can be found in Section III. Analytical Methods, p. 31).

At the end of the unit I provided students with a new case narrative, one that asked them to imagine themselves as a student Residence Assistant (RA) needing to make a logical argument to the head Residence Life Director at ISU. The case narrative described four different applicants for an RA position and asked them to write a letter to their boss arguing which applicant should be hired, with specific reasons for the choice and evidence to support those reasons. The second case study was carefully designed to be similar in structure to the trip argument that students were asked to write about at the beginning of the unit.

While data from the diagnostics provided the majority of my research data, I also sought data from student reflections, coursework, and focus groups. Through this variety of sources I hoped to gather information that would fill out my assessment of student
performance. Using diverse techniques to gather information yields a more comprehensive picture of what students experience while learning about argument.

**Student reflections**

In order to gather more information about what students had learned about argument and how they felt about what they had learned, I asked students to write for 10-15 minutes on the last day of the unit about what they had learned about argument. A number of different researchers argue that valuable information can be gathered from this type of written reflection (Orland-Barak, Robbins, Beach, Swartzendruber-Putnam, Yancey). Scholars like Beed and Yagelski describe how writing is a powerful tool for engaging students in inquiry and promoting thought, and an excellent tool for developing critical reflection. Robbins argues that reflections can show teachers what and how students think about their writing and help “reshape the way we gave directions and provided practice opportunities for new skills” (Robbins 74-75). I chose to have students write reflections because I wanted additional information and feedback on the students’ experience with learning how to understand and write argument.

In the reflection exercise students were asked a series of open-ended questions. I asked students to respond to some or all of the following questions:

- What have you learned about writing an argument?
- How would you rate the difficulty of finding a claim, reason and evidence in an argument?
- What part of writing your argument paper was most difficult or puzzling for you?
- Was there a point where the concepts suddenly made sense to you or is it still a mystery?
- What exercises that we did in class helped you to understand how to make a logical argument that included a clear claim-reason-warrant?
How will you look at arguments (like editorials) differently because of what we learned about argument this semester?

My goal with the reflections was to get direct feedback about the students’ learning experience during the argument unit. Because students knew their responses would not affect their grade positively or negatively and because they were accustomed to writing a short reflection at the beginning of most class periods, the reflections they wrote in response to the above questions are quite candid and revealing (see Appendix F).

After I collected the reflections I read through them, looking for repeated themes and insights. I studied the reflections closely, interpreting them as student self-evaluations and an additional way to index growth and struggles in writing. Beach supports using reflections for this purpose and insists, “Students’ thinking about their writing serves as a direct reflection of the effect of the instruction” (164). The reflections themselves constituted qualitative research, a report on students’ perceptions of learning. As such, the student reflections provided a good balance for the type of research represented in the diagnostic exercises.

Coursework

To gather yet more information I examined samples of student coursework to find evidence of students’ success and failures with learning how to write argument. I particularly paid attention to students’ early attempts to write a thesis containing a claim and a reason. Some samples of their efforts are found in Chapter 3, pages 44 and 59.

Focus groups

Concern about the diagnostic scores from the first semester made me want some feedback on the design of the diagnostics. At the recommendation of Professor M. Graham (February 21, 2006), I added a focus group component to my research design during the second semester as a way of testing my research tools. Focus groups are a popular way to assess the limitations and strengths of diagnostic tools. Schriver describes focus groups as a
reader-focused evaluation method that uses open-ended interviews to solicit people’s attitudes, perceptions, and opinions about a text (251). Knodel notes that researchers “are increasingly recognizing the value of focus group methodology to collect qualitative data either for its own right or to be used in conjunction with quantitative data” (35). Elling is one of many scholars to report that focus groups can be effective at revealing problems with the quality of a document (Elling 451). For example, a study conducted by De Jong and Schellens used focus groups to detect and diagnose reader problems in a brochure. The authors found that focus groups worked well and boasted several advantages, such as the time-savings compared to individual interviews and the additional ideas generated from interaction between the participants (80).

In light of my need for information and the advantages of focus groups, I gathered students into three groups of eight for a 45 minute discussion at the end of the second semester. I gave each student copies of the diagnostic material we had used earlier in the semester and started our discussion as follows:

I want to get your feedback regarding the exercises I had you complete at the beginning and the end of our unit on argument. If you recall, I had you identify elements of an argument within an editorial and had you write an argument in an email regarding a vacation trip or hiring an R.A. Before I make conclusions based on your answers I want to find out if there were any problems with the exercises I had you do.

I then asked the students to take ten minutes to review the diagnostics and make light marks on their individual copies of either plus (+) for positive/clear, or minus (-) for negative/confusing. Elling, De Jong, Albrecht and other researchers attest to the effectiveness of the plus-minus method as a troubleshooting text evaluation method. The plus-minus method requires students to judge text elements individually in writing before
they are influenced by the opinion of other students. Albrecht found that focus group participants generate more ideas if they begin by writing, rather than saying, their ideas (57). De Jong argues that the plus-minus method, *is capable of collecting a lot of specific yet diverse reader feedback without disturbing the reading process too much. The method seems particularly useful for discovering unexpected problems (“eye-openers”) in documents (13).*

The focus group discussions in combination with the plus-minus method seemed like an excellent method for getting the feedback I needed on the design of the diagnostics.

After my introductory remarks I asked students in each group to take ten minutes to make plus-minus notes. Then I gathered them in a circle for our discussion. I posed open-ended questions that were designed to elicit the maximum amount of information and refrained from giving either positive or negative feedback that would sway their responses. My first oral question to the groups was always, “What did you mark as a plus or minus?” I followed that with questions like, “Which of the two editorials worked better?” “Were the directions confusing?” and “What should I change to make it more clear?”

All three discussions were videotaped in an unobtrusive way that did not hinder student answers. De Jong and Schellens report in a similar study that “video recording and careful transcription of the discussions are prerequisites for reliable group pretesting” (86). A complete transcript of student comments made during the focus group discussions can be found in Appendix G. As expected, these transcripts reveal some helpful insights in its “behind the numbers” look at the diagnostic results. Results are fully discussed in chapter 3, section V.

**I D. Researcher role**

As the instructor for the classes that provided the data, I was responsible for all the instruction and testing. I had scant experience in conducting research and analyzing
research data, so I had to learn new research skills. My concern regarding mastery of these new skills was outweighed by my desire to generate concrete data instead of general observations.

My interpretation of the student diagnostics constituted the greater part of the data for my study. Using a five-point scale (poor, formative, developing, mature and exemplary) I designed a rubric that evaluated a student’s ability to identify parts of an editorial argument and a student’s ability to write an email argument based upon a case narrative (see Appendix H). Other researchers (Choinski, Chenoweth) have used rubrics to evaluate before and after implementation of an instruction component. In Choinski’s study, “The rubric was used to evaluate the papers and to give a quantitative measure of how the . . . instruction component of the course may have influenced students . . . practices” (565). Anson and Dannels report that “the use of evaluative rubrics can ease the often bewildering process of measuring a student’s work” and “offer you and your students an excellent way to be specific about the qualities we judge” (388, 400). A rubric seemed like the appropriate tool for identifying intended student learning outcomes and assessing those outcomes before and after the unit of instruction.

In an effort to alleviate some of the bias that can occur when collecting data from one’s own classroom, I recruited two other expert raters (composition instructors with years of experience) to assist me with scoring both the Identify component and the Write component of the diagnostic. More information about the rubric design and implementation can be found in Section III B below.

II. Major Tasks Divided by Timeframe

My research process can be broken down into chronological steps, starting with the beginning of the unit and continuing on with steps taken during the unit and at the end of the unit. My decisions to use pre- and post-unit diagnostics, reflections and focus groups
were guided by discussions with Professors Mendelson and Graham and informed by supporting research. For example, Choinski and Chenoweth describe research in which they took before and after measurements to gauge student understanding and obtain objective data. Also, because I conducted my research over a two semester timeframe, I was able to make changes in response to concerns raised by the first semester results. For instance, I added focus groups the second semester in order to evaluate and troubleshoot my diagnostic documents, on the recommendation of scholars like Schriver, Knodel, Elling, De Jong and Schellens. Such scholarship is reflected in the research agenda outlined in the following sections.

II A. Beginning of unit

For the first day of the argument unit, I assigned students a chapter about argument in their textbook (Faigley and Selzer, *Good Reasons: Designing and Writing Effective Arguments*, 3rd edition, 2006). In class before any discussion of argument, I briefly explained that we were beginning the argument unit and that I would be using them as experimental subjects to test a distinct approach to teaching argument. In compliance with ISU rules for research with human subjects, I asked students to sign an “informed consent form” (Appendix I) to participate in my research (with the option to decline). I also asked students to complete a form requesting demographic information, such as gender, major, previous English classes, number of years of high school English, and previous debate-type activities. Finally, I asked my students to complete a diagnostic designed to ascertain what they knew about logical argument (Appendix B). Since my goal was to assess and compare student ability at the beginning and end of the unit, I purposefully provided no explanation of argument or its terms before I handed the students the diagnostics on the first day. Students had, however, been assigned an introductory chapter in the textbook on argument. This chapter defined the term “argument” and diagrammed examples of
arguments. It also guided the students in initial tasks like finding a topic, thinking about audience, and writing a thesis.

After students completed the diagnostics the first day of the unit, I handed out the assignment sheet for the documented position paper and PowerPoint project that would be the culmination of the argument unit (see Appendix D). I modeled the position paper/project assignment after what Faigley calls a proposal argument. A proposal argument says, “We should (or should not) do SOMETHING” (190). The steps involved in a proposal argument include identifying a current event problem that interests or annoys, stating a proposed solution, convincing readers that the proposed solution is fair and workable, and demonstrating that the solution is feasible.

In Fulkerson’s book, *Teaching the Argument in Writing*, he indicates that he regularly assigns a proposal or policy essay near the end of a first-year college composition course. Fulkerson argues that teaching students the major elements of a policy argument works well because it addresses a limited topic and a particular audience (89). Trudy Govier supports the value of writing argument to a specific reader(s):

> Without some conception of who the readers might be, the writer cannot define a stance with regard to them, risks arbitrariness or inconsistency in assumptions about their interests and knowledge, and is unlikely to present to them clear, reasonable, and persuasive arguments (80).

In light of these suggestions, I required my students to address their argument paper to a particular audience who had influence regarding their topic. I also encouraged students to choose a policy argument topic about which they had either sufficient personal knowledge or easy access to the necessary information, as Fulkerson suggests (89). As designed, the argument assignment served as a test of the students’ understanding of argument and ability to compose a clear argument. It also established clear expectations and a definite endpoint for the argument unit.
During the unit

During the intervening class time I used a number of different exercises to explain how to write a logical argument and identify parts of an argument, according to the Toulmin model. These exercises can be found in Appendix A, with class notes in Appendix J. Each of my interventions was designed to help students learn how to write a logical argument. In a systematic way, I explained how to identify the claim, reason, evidence, and to a lesser extent, the warrant and counterarguments, of an argument. A brief synopsis of the lesson plan follows:

Table 1. Argument Unit Plan

<table>
<thead>
<tr>
<th>Week 1:</th>
<th>Complete diagnostic; work with editorials to identify claim; learn indicator words for claim; review assignment sheet; discuss topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2:</td>
<td>Review plagiarism; learn how to identify reason in an argument, including indicator words for reason; discuss final topic; write thesis statement; complete paper proposal worksheet</td>
</tr>
<tr>
<td>Week 3:</td>
<td>Conduct library research; find quality sources; complete exercises to identify claim and reason in examples; review assignment sheet &amp; policy recommendation requirements; study quote vs. paraphrase; make outline</td>
</tr>
<tr>
<td>Week 4:</td>
<td>Refine claim and reason for paper; discuss counterarguments; discuss importance of knowing audience; evaluate sources; look at model of policy paper; work in groups on PowerPoint; compose annotations</td>
</tr>
<tr>
<td>Week 5:</td>
<td>Meet for individual conferences; review PowerPoint and work in PowerPoint groups; incorporate quotes and paraphrases; write rough drafts; conduct peer review</td>
</tr>
<tr>
<td>Week 6:</td>
<td>Complete the end diagnostic; write end-of-unit reflection; turn in papers; share PowerPoint presentations</td>
</tr>
</tbody>
</table>

Over the five week period, individually and in groups, we practiced writing sound arguments, starting with composing a thesis sentence that contained a clear claim and reason. We also worked on developing identification skills by looking at arguments of different kinds, trying to identify the parts of the argument. Thus, our daily exercises worked on the same skills the diagnostic evaluated: ability to write a sound argument and
ability to identify parts of an argument. The overall focus of all the exercises was to
develop skills that allowed students to write and revise a sound documented position paper.

II C. End of the unit

On the last day of the unit when students handed in their final papers, I asked them
to repeat the diagnostic from the beginning of the unit, using a different editorial and
different case study (Appendix K). I gave students ample time to write a response to the
identify and write components of the diagnostic. My goal was to learn how much my
argument pedagogy, based upon Toulmin’s model, had affected student comprehension
and ability since the beginning of the unit. Also, on the last day of the unit I had students
write a 10-15 minute reflection, as described in Section I C (p. 21). Reflections can
promote student inquiry and critical thinking and provide a different type of feedback for
teachers trying to measure student learning.

II D. Changes made between semesters

Insights from the first semester led me to change several items in the diagnostics for
the second semester. I ran a preliminary test on the first semester’s data by using a simple
1-5 rubric to assess student performance on the “Identify Parts of an Argument” and
“Writing Argument” components. I gave each student a score on his/her “before unit”
and “after unit” ability for both components. When comparing the before and after scores,
I could see that while student comprehension had improved in some cases, it had decreased
for others (Appendix L). The absence of improvement caused me to question my research
tools (in this case, the diagnostics). My concerns led me to make several changes. First, I
found different editorials to use for the identification component of the diagnostic. Since
some students had struggled to accurately identify even the claim and reason parts of the
argument, I looked for editorials which made a simple, less complicated argument that
would be easier for students to follow and understand. I also looked for editorials about
local ISU concerns that might interest students. I found several editorials in the *Iowa State Daily* which met my requirements. Another change was to add more explanatory notes in the introduction to the first set of diagnostics, hoping this would aid in comprehension (see Appendix M). For the second semester I also changed the rubric significantly (see Appendices H and N) to focus on whether students found the claim, reason and evidence. The last change I made was to add focus groups as a means to evaluate the design of the diagnostic document. Focus groups are discussed in Section I C (p. 23).

III. Analytical Methods

The next task was to analyze and compare the student responses to both the identifying and writing components to determine how five weeks of teaching and student practice affected student comprehension. In addition, I will discuss how I correlated this data with related information from the student reflections and focus groups.

**III A. Setting data limits**

For several reasons, I chose not to analyze all forty-eight responses to the diagnostic. Diagnostic resources and quantity of data dictated that the data would be too much for me to process on my own. Besides the sheer size of the data (48 students x 4 scores), another limiting factor was the ability of volunteer raters to accurately score the diagnostics in one sitting. Rater agreement would suffer if raters were asked to evaluate too many responses. In a conference with my major professor (Mendelson September 7, 2006), we determined that the data from eighteen students would be sufficiently representative.

My process for shrinking the number of diagnostic responses from 48 to 18 began when I disqualified seven students who had failed to follow the diagnostic directions. Then, using a stratified random process, I chose roughly three student responses from the top, middle and bottom levels of performance from each class. This method left me with a representative assortment of eighteen students (nine per class/semester) in the study. Next,
I double-checked to make sure I had the first and second diagnostics from the same students. Knowing it was important to preserve anonymity to ensure rater objectivity, I removed student names from their papers and substituted a code abbreviated name.

**III B. Using a rubric**

The first task in analysis was having students’ diagnostic responses evaluated by a minimum of three raters. The challenge in this task was that raters’ grading of the writing and identifying components needed to be in fairly close agreement, or else the data would be unreliable. Shriver describes the problems involved in getting rater agreement:

> ... it is extremely difficult and sometimes impossible for a group of evaluators to agree on a set of criteria and to invoke such criteria consistently and reliably. Although raters say that they agree on the predetermined criteria, they tend to fall back on other criteria while they are engaged in evaluation (246-247).

Given such obstacles, I attempted to do whatever I could to maximize the potential for rater agreement, and that meant using a rubric, with “a set of explicit criteria to judge text quality” (Shriver 246).

A related concern that could be addressed with a rubric is the need for objectivity in dealing with the data. Choinski and her collaborators call rubrics “an objective means of assessing intended student learning outcomes” and note that “use of the grading rubric by outside committee members eliminates bias that might be present if the instructor were to perform assessment directly” (572). Wyngaard and Gehrke use rubrics to evaluate student writing and find it made them feel “more like objective monitors of a process rather than subjective judges prone to extraneous influences” (70). With these benefits in mind, I created detailed rubrics to help get as uniform scores as possible from the three different raters on the identification section of the diagnostic.
The design of the rubric involved many revisions. I started with a simple numerical rubric design with values of 1-5, with 5 as best (Appendix N). After the first semester, I narrowed down the criteria considerably. I also changed to a descriptive model in a table to make it easier for the raters to be more exact in their ratings (see final version in Appendix H). Every effort was taken to standardize the language of the rubric so different raters clearly understood the criteria and evaluated student diagnostics similarly. I took the advice of Anson and Dannels who tell designers of rubrics to give the descriptive characteristics “much detail and complexity” so “by the time you evaluate students’ work, you and the students should be clear about what each of the categories in the main rubric means and what it contains or implies” (393). My intention was to get maximum agreement on evaluations from the three different raters, to obtain greater coder reliability.

After finishing my revisions on the rubric for the identification component of the diagnostic, I created a separate descriptive table rubric for the write component of the diagnostic. The identify rubric was similar in design to the final write rubric, with standardized, specific language so different raters clearly understood the criteria. I coordinated the rubric with the goals of the assignment, changing the wording to match the tasks of writing an argument instead of identifying parts of an argument (Appendix H).

III C. Rating the diagnostics

I needed to find two raters besides myself to rate both the identify and write diagnostics. Even after I limited the number of student responses to eighteen, the grading was a sizeable job requiring experienced raters. I secured the help of an ISU Ph.D. graduate student in RPC (Rhetoric and Professional Communication) and an ISU lecturer who graduated in RPC one year earlier. I chose them because both are intelligent, conscientious, experienced with teaching first-year composition, and familiar with the Toulmin method of argumentation. I was the third rater in the process. The raters
evaluated the diagnostic responses on different days, both working in the same quiet space with minimal distractions.

I met with the raters before they evaluated the diagnostics to explain the overall research design and purpose and to clarify the rubric. I showed them the original documents I had given the students for the identify and the write components, as well as an answer sheet I’d made up of the appropriate claim, reason, evidence and counterargument for the identification exercise (Appendix O). Before beginning the task of evaluating the diagnostics, we spent 15-20 minutes working through three different sample diagnostics. We compared our scores, discussed why we scored responses as we did, and tried to agree on the “right score” for the samples. When differences occurred, we agreed to adjust our scores slightly up or down in light of each others’ reasoning. I explained the importance of rater reliability so they properly understood the importance of conscientious work, using the rubric as both guide and measure.

I sat across the table from the raters and worked on my own rating as the other raters did theirs, so I was available to answer questions. I made adjustments as needed to make things easier for the raters, who were volunteers. For example, when the first rater found the two different rubrics confusing because of their similarity, I copied the identification rubric onto yellow paper to easily distinguish it from the other. Raters then read through the diagnostic responses, marking the appropriate box on a rubric table to correspond with each student’s responses. Each rater graded 72 different responses, 36 for each semester. The 36 included eighteen arguments written from the case narratives (nine pre-unit and nine post-unit) and eighteen sets of identify answers (nine pre- and nine post-). The grading took between two and three hours. All three raters labeled the rubrics they completed with their initials and stapled their graded rubric onto the diagnostic itself. The end result was a packet of grades attached to each student response, either three
yellow, graded rubrics stapled to an identification response or three graded rubrics on white paper attached to written argument responses.

**III D. Categorizing and tabulating the diagnostic data**

The research data from the diagnostics came from the evaluations of three different raters. The rubric results were easy to translate into numbers, with the lowest level ("poor") corresponding with a “1” and the highest level ("exemplary") corresponding with a “5.” The resulting number “scores” a student’s ability to identify parts of an argument and skill in writing an argument. Following the rating session, I compiled the scores in a table and analyzed rater reliability. Ideally, the scores by different raters would have an agreement of 80% or higher to provide acceptable intercoder reliability. Given the subjectivity of the process and the limited amount of time for rater training, I was allowed to count rater discrepancies of a single number as agreement. When scores that varied by just one were counted as acceptable, intercoder reliability was reached. Figure 2 shows the agreement on scores from different raters.

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2 Identifying is represented as “ID” and writing is represented as “WR”
In consultation with a statistician\(^3\) and in consultation with supervising faculty (Mendelson and Graham, October 3, 2006) I decided to average the claim, reason and evidence scores of the three raters to get one number representing each student’s performance on the four different scores from the diagnostic (writing and identifying, for both Spring and Fall). The practice of averaging three scores to get one score was agreed to be acceptable when working with small numbers in this relatively small study. I decided to not analyze the scores for the alternatives or counterargument category, since scores varied more for that category and analyzing the claim, reason and evidence already provided abundant data. This change allowed me to focus on the most important elements of the model and helped simplify my tables and charts. The individual tables of data (see Appendix P) therefore show student performance scores for claim, reason and evidence on the writing and identifying tasks from both fall and spring semesters. They reveal no significant variation in rater assessment by category (claim, reason, evidence). Scores from

\(^3\) Volodymyr Melnykov, Iowa State University Statistics Lab, September 21, 2006
different raters rarely varied by more than one. As a result, collapsing the three scores provided a workable assessment method given available resources.

**III E. Correlating information from different sources to draw conclusions**

The next step was to analyze the data to find what was significant in the findings. I started by probing and scrutinizing the diagnostic numbers by arranging tables and charts in a number of different ways, looking for any results that seemed meaningful. The resulting charts (available in chapter 3) proved most helpful by focusing my attention on the following results:

- Comparison of scores for writing versus identifying for all students, both semesters
- Comparison of start and end scores for writing and identifying claim, reason and evidence for fall and spring semesters
- Comparison of the class average scores for writing and identifying for both semesters
- Comparison of the change in student ability to write and identify claim, compared to reason and evidence

My goal in the analysis was to look for interesting results that could inform my future pedagogy. I also studied the data from the reflections closely, knowing that they offered a more personal index of what students felt they had learned and how they felt about what they had learned.

The final step in my analysis was to decide what lessons could be drawn from the data. With this much data to analyze, I had to make choices about what to investigate and what to ignore. To help me focus, I reviewed my original research question: *what could I do to improve my teaching of argument?* Secondly, I looked at the data in light of the question of whether Toulmin’s method was effective for teaching and learning argument. I studied the numbers to discover what I could learn for myself about whether my students
had learned how to identify parts of an argument and write an argument. At first I was disappointed to realize students improved only slightly. After the initial letdown I realized that lessons could be learned, whatever the results. By analyzing the data from many different angles and reviewing the data in graphic charts, I came up with a short list of possible findings from the research. I compared this short list of possibilities from the diagnostics with the data from the reflections and focus groups to see how they correlated. I eventually settled on the three main conclusions which seemed most obvious and interesting. These conclusions are discussed in chapter three. I then gathered and ordered the information from the different sources to fill out the details related to these three main findings. In most cases, the reflection data reaffirmed the diagnostic scores, but when data from the diverse research instruments conflicted, I explored the discrepancies for implications.

Overall, I am pleased with the balance I achieved in my research methods. What started as a simple “before-and-after” evaluation to discover whether using Toulmin’s model improved my teaching and my students’ learning became a more comprehensive study with the addition of the reflections and focus groups. Because I tested students over the course of two semesters, I was able to adapt my tools (change editorials, adapt case studies) and add new components (focus groups) to my research plan for the second semester. These changes resulted in a better designed study the second semester. I learned as I went, utilizing several different tools to gather helpful insights into the effectiveness of my approach to argument pedagogy. My methods produced some interesting conclusions (see Chapter 3) with direct implications (see Chapter 4) for my own teaching experience.
CHAPTER 3. RESULTS

I chose this thesis topic because my desire is to improve my own teaching of argument. My main objective in this study is to learn whether Toulmin’s method of argumentation is effective in teaching students about argument. As a Teaching Assistant at ISU, I was able to work with two classes of first-year composition students to test Toulmin’s approach. In order to find out if Toulmin’s method worked well, I gathered information from the following sources: diagnostics administered at the beginning and end of the unit, daily work during the unit, student reflections from the last day of the unit, and focus group discussions two weeks after the conclusion of the unit. The bulk of my data comes from the diagnostics which tested student ability to identify parts of an argument and write an argument. In the following chapter I report the findings from all four sources of information, focusing on three themes or conclusions that emerged from the research. The following chapter is structured according to these three main conclusions:

# 1 Conclusion: Argument is particularly challenging to teach and difficult to learn. Despite my best efforts at teaching argument using a simplified Toulmin method, student performance on the diagnostics suggest that improvement from the beginning to the end of the unit was minimal.

# 2 Conclusion: Students find it easier to write an argument than to identify parts of an argument. In the diagnostics, students performed better at writing than identifying both at the beginning and end of the unit. An interesting twist on this finding comes from the student reflections which reveal a surprisingly high level of student
confidence that they had made significant improvement in their ability to identify parts of an argument.

**# 3 Conclusion: Students came to understand claim more easily than either reasons or evidence.** The diagnostics reveal that when asked to write an argument and identify parts of an argument, students handled the concept of a claim much better than reasons or evidence (see Chapter 1 for a definition of claim, reason, and evidence in the Toulmin method). Comments in the student reflections affirm that claim is the easiest of the argument components for students to understand.

My intention in Chapter Three is to explicate how the findings from the diagnostics, the student daily work and reflections and the focus groups, support these conclusions. In explaining what led to each conclusion, I will highlight ways in which information from the different research tools agrees and reinforces each other, as well as ways in which information from various sources differs. Within each conclusion I will offer possible explanations for how both complementary and conflicting data can be interpreted. A discussion of the implications of this research for my own teaching will be explored in Chapter 4.

**Conclusion I. Argument is Difficult to Teach and Learn**

The data obtained from the pre-unit and post-unit diagnostics attest to the difficulties inherent in both teaching and learning argument. That data is augmented by information obtained from coursework, reflections and focus group discussions.

**I A. Diagnostic results related to difficulties**

The diagnostic results reveal the modest impact my teaching of Toulmin had upon students’ skill with argument. Student performance in writing an argument and identifying parts of an argument within an editorial improved only slightly from the
pre-unit diagnostic to the post-unit diagnostic. As a way of measuring impact, I tested the following measures at the beginning and end of the unit:

- students’ ability to identify parts of an argument within an editorial
- student’s ability to write an argument based upon a case narrative

Analysis of the data in all categories attests to student struggles with understanding argument.

The figures below show average scores at the beginning of the unit (blue bar) and end of the unit (green bar) for identifying and writing a claim, reason and evidence. The data bars clearly show inconsistent scores and lack of improvement in some categories. Figure 1 below shows little improvement from the start of the fall unit to the end of the unit, for both the identify and write portions of the diagnostic. One category (Identify Evidence) stays nearly the same, two improve slightly (Identify Claim and Write Reason) and three scores actually decline (Identify Reason, Write Claim and Write Evidence).
Figure 2 (spring semester) below also displays minimal improvement in scores from the beginning of the unit to the end of the unit for both identify and write components. Scores improved for three components (Identify Claim, Write Claim, Write Reason), declined for two components (Identify Reason, Write Evidence) and stayed the same for one component (Identify Evidence).
These minimal changes suggest an either/or/or conclusion: *either* Toulmin’s method of argumentation is difficult for teachers to effectively teach *or* Toulmin’s method is hard for students to learn *or* both conditions are true. These possibilities will be explored at the end of Conclusion 1.

Averaging all student scores within the writing and identify categories yields just a slightly more positive picture. Figure 3 shows that when scores for claim, reason and evidence are averaged into overall scores for writing and identifying at the beginning and end of the unit, both semesters show a slight improvement in each category.  

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4 “C” refers to claim, “R” refers to reason, “E” refers to evidence. Calculation of the standard deviation shows that responses did not vary widely.
While any improvement is better than none, the unavoidable overall conclusion is that concentrated teaching of the Toulmin method did not result in significant improvement in student ability to identify parts of an argument and write an argument.

I B. Evidence from reflections and focus groups regarding difficulty in teaching and learning argument

I looked to student work and reflections to confirm or deny my hypothesis about the difficulty inherent in teaching and learning argument. The following example of a class assignment shows their struggles to understand the nature of an argument. Two weeks into the semester the daily work assignment asked students to write a thesis containing a claim and reason. Even after 5-6 hours of teaching on claim and reason, only half of the students were able to write a thesis that contained a claim and reason.
Their responses show a lack of familiarity with argument and a reluctance to take a stand and argue a specific position. The student work shown in Table 1 illustrates how much my students struggled to identify claim and reason for their papers and how hard I had to work to make concepts like claim and reason clear for my students.

Table 2. Student's Attempts at Claim and Reason and Teacher's Response

<table>
<thead>
<tr>
<th>Student's first attempt at a thesis containing claim &amp; reason</th>
<th>My critique</th>
<th>My suggestion for a better claim and reason</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student JC</strong>&lt;br&gt;The present post-season policy in place for college football does not work for having one National Champion. Only when a playoff system is in place, there will be one national Champion possible.</td>
<td>You can combine your sentences and make the claim much clearer. Take a stand! State your conclusion! And then provide the overall rationale behind that stand.</td>
<td>A playoff system for college football postseason play should be implemented because the present system does not produce a clear national champion.</td>
</tr>
<tr>
<td><strong>Student BP</strong>&lt;br&gt;ISU students are seeking to understand the ISU dining and how privatization of the food service would benefit students.</td>
<td>You have to take a position on the issue of whether privatization of ISU dining would benefit students. What is your position on the issue? State it clearly.</td>
<td>ISU students will lose out when ISU food service is privatized because . . .</td>
</tr>
<tr>
<td><strong>Student KA</strong>&lt;br&gt;Although there are some athletes who eat healthy, exercise properly, and sleep well; there are others who use performance enhancing supplements to reach their fullest athletic potential.</td>
<td>You fail to state a claim and reason. What you state is not controversial. You need to take a position about the issue.</td>
<td>Abuse of performance enhancing supplement use by athletes should be punished more severely because use of such supplements is ruining the games.</td>
</tr>
</tbody>
</table>

Eventually each of these students was able to write a four-five page argument paper on his/her topic, but not without great effort. The examples in Table 2 show just how much of a stretch it was for students to compose a simple argument containing a claim and reason.
Comments from student reflections further underscore the difficulty of teaching argument and learning argument. Student MH wrote about his struggle to write something besides a research paper:

*Writing an argument proposal paper for me was a little bit tough.*

*When we first turned in our rough drafts for peer reviews, I don’t think I had even a close grasp on what exactly was the format of the paper. I had written it more in a form of a research paper.*

MH went on to describe some of the lessons he learned while writing an argument paper:

*First, I needed the argument ... then I needed reasons to back up my claim, which I listed throughout my paper. I also provided counterarguments in the paper, so that both sides of the argument could be represented. In writing my own argument, I had to work on making it more argumentative.*

Student reflections verify what the diagnostics suggest: students are not accustomed to taking a stand on a controversial subject and arguing a particular position.

Our focus group discussions also suggest that students have a general reluctance to take a stand on an issue. The second writing exercise in the diagnostic asked students to choose the best candidate for a job, based upon brief descriptions of each candidate. Quite a few of the students disliked this exercise because they were afraid they would choose the “wrong” candidate and make the “wrong” argument. One student even suggested an alternative way to design the exercise, in which students would be assigned to make the case for a particular candidate, and then only put effort into arguing that case. The focus group discussion suggests that students are reluctant
to make an argument because they lack confidence. Fear of making the wrong argument makes them reluctant to enter into argument.

I C. **Summary of evidence leading to Conclusion 1**

The diagnostic results, daily work, student reflections and focus group discussions combine to tell the story of how difficult it is for students to understand and implement the tools of argument. Starting with the initial diagnostic measuring student ability to identify and write an argument and continuing through their writing efforts and our discussion at the end of the semester, two persistent themes emerge: 1) students lack a basic understanding of argument and 2) students exhibit a general reluctance to engage in argument. While the slight improvement on the diagnostic tests is certainly not encouraging news for a teacher working hard to improve her argument teaching, the important conclusion here is that teaching and learning argument are surprisingly difficult. Implications of this conclusion will be explored in Chapter 4.

**Conclusion II. Better Performance with Writing Than Identifying**

Student performance on the diagnostic tests at the beginning and end of the unit shows that students could write an argument based upon a case narrative better than they could identify parts of an argument from an editorial. Samples from student coursework, reflections and focus group discussions, however, reveal a disparity between student perception and student performance.

II A. **Higher diagnostic scores for writing than identifying**

The quantifiable results from the diagnostic build a strong case for the second conclusion. As Figure 6 shows, both fall and spring students consistently scored higher
on the writing portion (green line) than the identify portion (blue line) of the diagnostic.

Figure 6. Scores for All Students, Both Semesters, In Both Writing and Identifying

Further substantiation for the conclusion that students write argument better than identify parts of an argument comes from Figures 7 and 8 which show the superiority of writing scores over identifying scores in the categories of claim, reason and evidence during both semesters. Figure 7 shows results for the fall semester, 2005.
The following Figure 8 shows similar results for the spring semester. Students performed better at writing than identifying in all categories (claim, reason and evidence).
Each of the writing scores is higher than the corresponding identifying scores, with the range of difference varying from .93 to 1.37. Students from both semesters performed better with tasks of writing argument than identifying parts of an argument, at both the beginning and end of the unit.

Yet more evidence for the higher achievement with writing argument comes from Figures 9 and 10 which compare beginning and ending scores for identifying parts of an argument and writing an argument. In each category (claim, reason and evidence) for both semesters the write scores are higher than the identify scores. None of the identify scores (blue bars) reach the height of the write scores (green bars). Standard deviation numbers for the identify scores show greater variance than the write scores,
suggesting that students are more consistent with their written arguments. The results appear quite conclusive: students both before and after the five weeks of teaching on Toulmin and argument could write an argument that contained a clear claim, reason and evidence better than they could identify those parts of an argument within an editorial. Figure 9 below provides proof:

**Figure 9. Comparison of Ability to Write and Identify Claim, Reason and Evidence, Fall Semester, Including Standard Deviation**

Figure 10 below provides additional evidence, this time from the spring semester. Students scored higher on writing claims, reasons and evidence than they did on identifying claims, reasons and evidence. ⁵

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⁵ Calculation of the standard deviation in Figures 9 and 10 shows that response accuracy varied more for the identify scores than for the write scores. This finding could be explored in future research.
The similarity in results from semester to semester, evident when comparing Figures 9 and 10 but most obviously in Figure 8, adds weight to the conclusion that students write better than they identify argument. The resemblance in numbers between the fall and spring semesters is rather surprising, given that just nine student responses were selected from each class to analyze. Symmetry between the semesters in all three areas makes the data appear more solid and the conclusions more sure.

**II B. Additional data from reflections and focus groups**

An interesting twist on the conclusion that students write argument better than identify parts of an argument comes from the student reflections, in which students
seem much more impressed with their identification skills improvement than their writing improvement. The majority of students wrote more about how they had learned to identify parts of an argument within an editorial than how they had learned to compose an argument. The reflection exercise (which took place the day they turned in their argument paper) asked them to address a variety of questions: what they had learned, what they found difficult or puzzling, what exercises helped them learn concepts, and how their learning would affect their understanding of arguments in the future. Students had the option to write on whichever questions they found most relevant. Though the prompts asked questions that equally addressed the two separate tasks of identifying parts of an argument and writing an argument, comments about new skills for identifying parts of an argument within an editorial outnumbered comments about improved ability to write a logical argument. Contrary to their poor diagnostic scores for the identify tasks, students clearly believed they had improved in this area.

Quotations from the reflections reveal student pride in their new identification skills. LC wrote,

Through practice with various editorials I have become readily able to identify each one of the aforementioned aspects of an argument. Now when I read an editorial in the newspaper I catch myself trying to figure out the claim, reasons, assumptions, and evidence.

Satisfaction with their identification proficiency came from both C-students and A-students. A C-student wrote, “I think that now that I know what an argument is, I will always look for the evidence supporting the claim in every editorial in newspapers” (SC). An A-student wrote, “When it comes to editorials it is a lot easier for me now to
pick out the claim, reason and supporting evidence to figure out what point the author is trying to send to the reader” (ST).

Students seem to appreciate that knowing how to identify parts of an argument helps them pay attention to arguments and understand arguments. Student SW wrote,

As I look through newspapers and editorials I now look for the claim and reasons that those articles are trying to make. Because I’m searching the article for the claim and reasons I end up paying more attention to the article and learn more from it.

MJ understood that her new skills make her a sharper reader:

Now that I know all of this about making an argument, I will look for the essentials in editorials now. I can find the claim, reason, evidence, and assumptions in an editorial quickly. Looking at editorials that way never occurred to me, and it makes you a smarter reader to find those essential elements when you are reading it.

Student LP expressed appreciation for how his new argument skills would come in useful: “I will look at editorials with a lot more understanding and with a lot more critiquing because I know how an editorial should be and what to look for in one.” The reflections certainly suggest that students feel the Toulmin argument unit improved their ability to identify parts of an argument.

Il C. Exploring the differences in data

The dissonance between what students’ perception of new and improved skills for identifying parts of an argument and student performance on the identify portion of the diagnostics is striking. The challenge is to find explanations for the differences so the data from various instruments can be synthesized. One explanation for students’ inability to appreciate their skills in writing argument is that they do not envision
themselves using argumentative writing skills on a regular basis, whereas they might expect to read editorials in some kind of a newspaper almost daily. As first-year students, most of my class had not thought ahead to their post-college experience, so they did not realize how important writing skills would be. Consequently, they undervalue writing skill and underestimate how often they will be expected to compose written arguments.

Another explanation for why students wrote more about their new identification skills than their new writing skills is that writing is a demanding and humbling exercise. It is generally easier to talk about writing than to write. Student AA’s reflection illustrates how students feel more confident talking about writing than writing itself. In the first half of her reflection she wrote about her identification skills: “I learned a lot about what an argument really is, and how to find one. I learned about finding the claim and the reason, and also the supporting facts and the hiding assumptions . . .” Like others, she expressed satisfaction with her ability to find the claim and reason in newspaper articles. When AA turns to reflecting about writing arguments, her tone grows more somber: “I also learned it is a lot harder to write your own argument than I thought it would be. In order to make a good strong argument you need to put a lot of thought into how you present your claim and reason.” The reflections reveal that first-year students feel more comfortable with reading than writing and that many feel insecure about writing in general.

**II D. Summary of significant findings leading to conclusion 2**

The diagnostic tests of writing and identifying skills suggest that students are more familiar and adept at knowing what essential components to include in an argument they compose themselves. They are less able to put the right label on those components, having false confidence that they can identify different components
correctly. The noted discrepancy between students’ poor diagnostic scores and the confidence they expressed in their student reflections suggests that students have a false confidence in their own ability to identify parts of an argument. Student perception, as revealed in the reflections, does not match student performance, as revealed in the diagnostics. The implications of this conclusion that students write better than identify but are overconfident in their ability to identify, will be explored in Chapter 4.

**Conclusion III. More Improvement with Claim than Reason or Evidence**

A third finding that emerges from the diagnostic data is that students from both semesters seem to understand the concept of claim better than either reason or evidence. Student coursework and written reflections along with the focus group discussions at the end of the semester support this conclusion and provide some clues to explain this conclusion.

**III A. Diagnostic data regarding claims**

The final conclusion that can be made from the diagnostics is that students found it easier to identify claims and write claims than to identify or write either reason or evidence. Figures 11-13 on the next few pages support this conclusion. Figure 11 (on p. 56) shows the change in average claim scores. Figure 12 (p. 57) shows the change in reason scores, and Figure 13 (p. 58) the change in evidence scores of all students (both fall and spring), from the beginning of the unit to the end. While Figure 11 shows that scores for claim did not improve for all students, more students showed improvement with claim than with either reason or evidence.
Figure 11. Change in Average Ability to Write and Identify CLAIMS By All Students

Figure 12 (on p. 57), which shows scores on reason, reveals a greater number of negative scores for both writing and identifying (eight for claim compared to thirteen for reason). This illustrates how students improved more in their ability to write and identify claim and less for their ability to write and identify reasons between the beginning of the unit and the end of the unit.
Figure 12. Change in Ability to Write and Identify REASON Scores By All Students

Figure 13 (on p. 58), which shows change in evidence scores, reveals even more negative scores for evidence than for writing or identifying claim or reason. Student ability to write and identify evidence actually decreased for more students than it increased. The number of negative scores for evidence is seventeen, compared to eight for claim and thirteen for reason. In comparison to Figures 11 and 12, which showed performance change for claim and reason, the evidence data attests to the problems students had with using evidence appropriately in their own writing and identifying evidence accurately in someone else’s writing.
When compared, the charts show that there were fewer negative scores for the claim component than with the reason or evidence. In addition, the negatives for reason and evidence were also greater, as evidenced by the length of the negative green and blue bars. Figures 3 and 4 (see pages 41 and 42) also reveal that scores for claim, both write and identify, were higher both semesters. Students clearly began the unit with a better understanding of what a claim is than their understanding of reason and evidence, and ended the semester with an improved understanding of claim, compared to their understanding of either reason or evidence.

**III B. Additional data from coursework, reflections and focus groups**

More proof that students understand claim better than reason and evidence comes from the daily exercises mentioned earlier (p. 44). When asked to write a thesis that included a claim and reason, students struggled to choose an appropriate reason to
accompany their claim. More examples are shown on Table 3 below. Despite the number of exercises we did in class to help students focus their argument and understand the basic elements of claim and reason, some students failed to understand reason and its importance to argument. Table 3 shows three examples of students’ first attempts to write a thesis containing a claim and reason, my critique of their argument, and my suggestion for a better claim and reason.

Table 3. Student’s Attempts at Claim and Reason and Teacher’s Response

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><em>Student SK</em></td>
<td>What you wrote is an introduction, not a thesis. It is catchy, like a slogan, but it doesn’t convey your claim and reason. The reason should answer the “why” or explain the “because” of the claim.</td>
<td>Rodeos should discontinue their ban on advertisements for chewing tobacco because . . .</td>
</tr>
<tr>
<td><em>In rodeo, a sport where your next ride could be your last, the bull isn’t the only killer in the arena.</em> (SK)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Student RG</em></td>
<td>Where is your reason? What is the “why” or “because”? You also need to narrow this down and speak to a specific audience.</td>
<td>Funding for research and development of alternative fuel sources should be increased because. . .</td>
</tr>
<tr>
<td><em>More funding should be put towards the research and development of alternate fuel sources.</em> (RG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Student JI</em></td>
<td>You use the word “because” to signal a reason but you fail to provide a solid reason. WHY will troops be able to come home soon?</td>
<td>Troops will be able to come home from Iraq soon because U.S. forces are gaining more and more control.</td>
</tr>
<tr>
<td><em>Iraq will begin to be stable enough to allow our troops to come home because the activities of our troops is slowing down.</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The examples in this chart reveal the variety of problems students had with striping an argument down to its essential ingredients. Some students failed to take a stand with their claim while others failed to provide a reason to support their claim. It appears that student understanding of argument was poor, even several weeks into the unit.
While a few students provided just a topic and failed to make a claim, even more students failed to provide a satisfactory reason to accompany their claim.

Another picture of student learning comes from the student reflections written on the last day of the unit. Instead of showing what they actually learned (evaluating homework and comparing performances at the beginning and end of the unit) the reflections show what students believe they learned about the basic components of an argument, claim, reason and evidence. Once again, perception does not match performance. In these reflections students express a great deal of optimism and satisfaction about what they think they learned.

In answer to the question of what they had learned about writing and analyzing argument, virtually every student answered the question with a short explanation of how an argument is composed of a claim, reason and evidence. Student LH complimented me by reporting that she learned these essentials the very first day:

*Before the argument unit I knew what a argument was but I was not sure what the essentials were. After just the first day of the unit you made it clear what the essentials of a argument were, and I think those will always stick with me.*

Student RG demonstrated her understanding of the parts of an argument and how that relates to writing a thesis:

*The most important thing I learned is in order to have a good thesis for an argument, you must have a claim and a reason. That made it easier to come up with the thesis as well. I had no problem writing the thesis when I kept the claim and reason in mind.*

About one fourth of the students included in their summary a discussion of the key indicator words involved with an argument: MJ’s summary was succinct:
You have to have a claim, reason, and support. When writing an essay, you have to have a “because” statement. The claim is something you are trying to change, the reason is why it should be changed, and the support is the evidence to back up the claim.

JB expressed a similar understanding, “. . .you must have reasons and evidence to support your claim of why you are arguing for something. These are essentials for having a quality argument paper.” Despite their poor first effort at writing a clear claim and reason, students express confidence in their understanding of the components of argument.

Some students like NH found that “the hardest part of writing the argument paper . . . was deciding on a very specific and clear claim in the beginning”; however, far more students struggled with other parts of the argument. For some, the most difficult feature to grasp was the reason: NZ wrote, “The part I had a little trouble with was the reason.” (NZ) MJ found the reason difficult, too, but understood its importance: “The reason was hard to develop, but you have to have that in order to make it an argument.” Student CT wrote about her realization that in her paper the reasons were not adequately supported by evidence:

Another thing I had to work on was making sure every reason I had for my claim was complete and understandable with at least enough evidence to support it. I think this was probably the hardest part for me because all of my reasons were not valid in this paper because I could not find enough credible evidence to back them up.

RG was one of the students who found evidence to be the most difficult part of the argument paper. He explained as follows:
[A] hard part of the argument paper was knowing which information to use and not to use. I had a problem with finding too much information and I had to narrow it down and choose only the good stuff. When it came down to it, I had to use only the sources that backed up my claim perfectly.

About one third of the students mentioned how much they learned about the importance of finding solid evidence to support their arguments. For some like CT, their research experience made quite an impression: “We had to provide substantial evidence . . . I think that was the most important thing I learned from this unit.” Student DC noted, “An argument must contain evidence that comes from a viable source, and not only that, but a variety of sources. Without support from factual evidence, your argument means nothing.” For some, research called forth new skills. Student ST wrote, “The unit helped me learn how to do research at the library using indexes and the library catalog along with finding periodicals and journals.” These comments show that students understand the concept of evidence and its importance to an argument, but many found the task of finding evidence to support their own argument rather overwhelming.

Student comments in the reflections and focus groups confirmed my decision not to evaluate students on assumptions and counterevidence. Students in each of the focus groups remarked on the difficulty they had with identifying assumptions and counterarguments. One of the A students said, “The hardest thing to do was underlying assumptions. I could never figure those out. It was confusing and hard to figure out . . . you had to understand the article.” Student IS put it bluntly: “It’s not as clear what they [assumptions and counterarguments] are.” In the reflections RG wrote, “The biggest thing I had trouble with was the unstated assumptions area. I
know what they are but it’s hard finding them or coming up with what they could be.” Overall, the students offered few suggestions for how to better teach argument, yet several suggested that I give more examples of underlying assumptions and alternative positions. In light of the low scores on claim, reason and evidence and the research complications introduced by additional data, my decision to focus on claim, reason and evidence seems correct.

The student reflections ended up providing what I hoped they would-- a helpful glimpse into the mind of my students so I understood their perceptions and could compare that with their performance. I looked to the reflections for clues as to why students performed better with claim than reason and evidence. One clue I found is that while students wrote in their reflections about learning all three components, what struck them the most was the claim component. In his student reflection SC wrote, “What I learned during the argument section was how to make a claim.” A student from focus group 2 stated his preference for one editorial over another and noted, “Overall, they helped me look at editorials differently. Now when I read editorials I will look for the claim” (JB). If students understood nothing else, they understood claim and the need to take a position on a topic. Reason and evidence, assumptions and alternatives were much more difficult concepts. While the reflections show that students felt confident about their understanding of claim, reason and evidence, the diagnostics show that student ability actually improved very little over the course of the unit, especially for reason and evidence. This discrepancy is puzzling and raises an important question: why do students understand the claim component better than either reason or evidence?
III C. Possible explanations for the finding

One possible explanation for students’ higher performance with claims is that I taught that subject better. While this is possible, it is unlikely, since each component was given equal time and practice. An alternative explanation emerges from the focus group discussions. When students were asked during the focus groups whether they preferred the budget editorial at the beginning of the unit or the library editorial at the end of the unit, they chose the second editorial because of their greater interest in the topic and their ease in finding the claim. Student L said she liked the library editorial because “it was easier to find the claim.” They argued amongst themselves about which was “easier” (ST) and “more simple” (SC). When asked what made an editorial more difficult to understand, Student JW said length was important: “I think when they [editorials] are long, it’s harder to find the information.” She also noted that the longer editorials (and none of them was longer than 450 words) just got “boring.” Student IS argued that the tuition editorial was more difficult to follow than the library editorial because “you had to read it all to get the claim. If you’re lazy, you might not read it all.” Student MH pointed out that the numbers involved in evidence can be confusing: “you have to read numbers and try to think about numbers.” Comments made during the focus group discussions suggest that students resisted the hard work required in identifying the more detailed and complex parts of an argument, like the reason and evidence.

III D. Summary of findings for conclusion 3

The variety of different types of research tools provides comprehensive support for conclusion 3. While the data from the diagnostics prove that students understand claim better than either reason or evidence, the student reflections and focus group comments help explain the “why” of this diagnostic finding. A theme that emerged
from the focus group discussions was that students perform better with the claim component because it is simpler than finding or writing either reason or evidence. Students acknowledged their own lack of interest and motivation to read too much or think too hard. Since claim was the easiest to understand, they performed better in that category both at the beginning and end of the unit.

IV. Related Information From Student Reflections

Besides what has been mentioned within the structure of the three main conclusions, student reflections offered other insights regarding what worked and what failed in the argument unit. For example, I looked for feedback on the argument paper assignment itself, and whether the paper was an appropriate measure of what students had learned during the argument unit. I had deliberately required that the argument paper be a position paper written to a particular audience because scholars like Fulkerson recommend this approach (1996: 88-89). Students tend to initially resist being required to write to a specific audience, so it is encouraging to read students say that they learned the value of a specific audience. Student CT wrote,

“I learned how to make your audience very specific and clear. This was helpful because once you know exactly who you are directing your paper at, it gives you a clearer focus and makes your argument center around that certain person or group of people, essentially because the paper becomes less confusing.”

Several students wrote about what they had learned about the importance of appealing to a particular audience: “I have learned that my paper will be a lot more effective in getting my argument across if I’m writing towards a specific audience or person. The more vague the audience the more vague a paper usually is” (LP). Student DC wrote about how audience affected tone: “You must appeal to your audience when writing an argument, sometimes that means that your style and reasoning must be
altered so that you don’t insult them or go over the line making accusations” (DC).

While these findings don’t have clear connections to Toulmin, the student comments certainly affirm a rhetorical approach to specific, situated assignments.

As part of my research into the general question of what helps students learn and understand argument, I studied the reflections for evidence about the effectiveness of particular exercises or assignments. Over half of the students mentioned that working with examples of arguments in class helped them learn how to identify parts of an argument within editorials. Student JW said that practice with editorials and class group activities provided “a really good reference and starting point, because it is something that we are surrounded by all day.” (JW) One student who had difficulty with finding unstated assumptions in arguments wrote that he came to understand them through our work in class. Student reflections also suggest that repetition of the basic elements helps students retain knowledge. Student CT wrote,

I also learned that an argument has to have some distinct parts. The ones we discussed in class were claim, reason, and evidence. We went over these repeatedly, however, they were hard for me to catch on to because we also had to provide substantial evidence, too.

The last sentence of the above note suggests yet one more explanation for why students struggle with learning argument and writing an argument paper. Student CT is basically pointing out that, though we went over the basic parts of argument repeatedly, it was still difficult because she was so consumed with the challenge of finding good evidence. The implication is that the many tasks required in a documented position paper can overwhelm a student so much that they cannot think clearly about argument as a whole.
V. Related Information from Focus Groups

The reason that I decided to add focus groups to my research design at the end of the second semester is that I needed feedback on the design of the diagnostics. The poor scores from the first semester led me to wonder if I had a problem with my research tools. Focus groups are a respected reader-focused method for evaluating text quality. Focus groups use group interaction to locate and diagnose problems and “give participants an opportunity to explain the reasons behind their opinions” (Elling 454). While the reflections told how students felt about the different components of the argument unit, the focus groups concentrated on evaluating the diagnostic tests I had designed for my research. Through the three small group discussions I found out what students liked and disliked in the diagnostics. Some of the focus group information has already been mentioned in the context of the three major conclusions, and a complete transcript is found in Appendix G. An analysis of the group dialogues yields three main observations regarding the effectiveness of the diagnostics themselves: 1) lack of agreement amongst students, 2) students respond best to arguments from situations they relate to, and 3) students hesitate to use their own knowledge to advance an argument.

VA. Lack of agreement endorses the diagnostic design

The first observation from the focus group discussions is that students disagreed considerably over which editorial and case narrative they prefer. For example, many students stated their preference for the written argument regarding the parents’ trip argument. One student said the email about the parent trip was his favorite because “it was easier because it related to the real world” (MHI). Another student thought it was best because “we know what our parents like, what they enjoy” (SW). Yet another said she liked it best because, “It is easier to write to siblings. It is easier to imagine sending
it to them. I knew them and what they would want to hear” (MH). However, a minority of students marked the same parent-trip case narrative as a “minus” because they found it hard to write to siblings. Student answers seemed to directly reflect the dissimilarity in how different students relate with their siblings. When student AS said writing siblings is “like an automatic yes. Siblings have similar views,” two students disagreed, saying that their siblings did not agree with them about anything. For NZ this problem was significant enough that “this exercise didn’t work with me. I’m thinking in my mind, ‘Nope.’” Students also expressed disagreement over which editorial they preferred for the identification component. Student BH said he preferred the budget model because “It was straightforward,” but two others spoke up to say they preferred the library one.

The disagreement over which was the best case narrative or finest editorial carries significance for an evaluation of the research tools. If students had overwhelmingly preferred one case narrative or editorial over the other, the poor choices made in designing the diagnostic could be blamed for compromising student performance. The fact that different students expressed equal favor for the different examples used in the diagnostic suggests that diagnostic design was not responsible for the low scores.

**V B. Students prefer arguments on familiar subjects**

A second observation from the focus groups is that students relate best to arguments that come out of real life situations to which they can relate. Regarding the identification component of the diagnostic, students liked that they were real life stories that came out of the ISU Daily. Student AS noted, “That made them more interesting. We understand the stories.” Later on, the same student noted that he was interested in the budget model editorial because, “I’m putting a lot of money into this school. I like
to know where my tuition money is going.” One student suggested that the best editorials would be on subjects students cared about so they “stir up more of a debate” (NH).

The above observation would suggest that teachers should use argument exercises involving subjects familiar to their students. However, when I tried to follow this principle and changed the editorials in the diagnostics between the first and second semesters to make them more campus and student related, the change did not result in higher identification scores the second semester (see Figure 5 on p. 43). This discrepancy between student performance and student perception of their performance is puzzling. The sure finding in all of this is that students prefer working with subjects that interest them, but more research would need to be done to learn whether greater interest in a subject improves student performance.

V C. Students hesitate to advance an argument

A third observation from the focus group discussions is that students feel insecure about using their own knowledge to make a decision about an argument. Overall, the RA written-argument diagnostic received the most negative marks for a variety of reasons. Student JW said it wasn’t as much “fun” as the parent trip case narrative. A couple students found it a pleasant challenge to look for clues for who was most suitable for the RA job, but student A found it hard to write to a boss and student CT found it time-consuming: “I spent more time trying to decide which one was best than making the argument” (CT). A few students seemed comfortable incorporating their own personal knowledge of RA work into the argument, but others were quite frustrated by not knowing what was the “right” answer (AA). As noted earlier, several students suggested that a better exercise would ask students to make the case for a particular candidate, and, then, focus only on making that argument. MH agreed that
if the decision on who was the best candidate was already made, “You would spend more time making your argument” (MH). Overall, student comments imply a reluctance to choose a side and engage in argument.

As hoped, the focus group discussions provided feedback on the diagnostic tools I used in my research. A significant finding is that students laid little blame for their low scores on the diagnostic tools. No one answered my question affirmatively that the directions were confusing. ST responded: “The directions were pretty simple. They were the same for both [before and after]. We knew what we were doing and they reminded us what to do.” Another important finding is that no student complained about a confusing or difficult component of the diagnostics that could have thrown off the data. The only clear-cut observations that emerge from the transcripts are that students disagree regarding which editorials and case narratives are best for argument, that students relate best to local and contested arguments, and that students feel insecure about the judgment calls involved in argument. The lack of “red flags” from the focus group discussions lends support to the research data.

**VI. Conclusion**

The results of this research study have significance for me as I teach argument to composition students. The data collected has added significance because of the scarcity of quantitative data on the subject and because of the variety of tools (diagnostics, student work and reflections and focus groups) used to gather information. The data collected via the different tools mostly reinforce each other. In the few cases where reflection comments seem to contradict diagnostic results, the contradictions themselves suggest some interesting possibilities which could be
explored in future research. Analysis of the data from the various research tools suggests three main themes or conclusions:

- Argument is surprisingly challenging to teach and difficult to learn.
- It is easier for students to write an argument than to identify parts of an argument.
- Students came to understand claim more easily than either reasons or evidence.

While these findings are not major breakthroughs, they do add to my own understanding of how best to teach argument to composition students. I have gained knowledge which will benefit and inform my own composition pedagogy. How I intend to respond to these conclusions in my own pedagogy will be the subject of Chapter 4, on Implications.
CHAPTER 4. IMPLICATIONS

Before speculating on what the results presented in Chapter 3 might imply, I want to remind the reader that my findings are based on the work of only eighteen students. While the consistency in the data from semester one to semester two does lend credence to my results, additional research would be essential to confirm the general significance of the results. For example, while I decided to not analyze warrant, another researcher could analyze student comprehension of just that component. Or while I evaluated change via the pretest/posttest instrument, another researcher might gather information through other research tools.

That said, I return to some comments students made in their reflections about the subject of learning argument:

- “This unit taught me that writing an argument paper is a very complex process. There are many steps to be taken so that you produce a good argument to the public.” (JB)
- “Writing an argument is a hard thing because you have to take in consideration the audience and get a lot of evidence to support your topic.” (IS)
- “Writing an argument was more in depth than what I thought” (MJ)
- “I also learned it is a lot harder to write your own argument then I thought it would be. In order to make a good strong argument you need to put a lot of thought into how you present your claim and reason.” (AA)

The above quotes from student reflections specify the difficulties involved in learning how to read and write argument, the subject of this research study. I conducted this study to find out whether the Toulmin method works effectively for teaching first-year composition students how to write and understand argument. My
investigation is a specific response to the larger issue of how best to teach argument to college students. To find answers to these questions I had students from two ISU classes fill out pretests and posttests that measured their ability to identify parts of an argument within an editorial and write an argument based upon a case narrative. I also had students write reflections and engage in focus group discussions at the end of the unit. My purpose for this research is not to make broad generalizations for how first-year composition could be changed and improved. Rather, my intention is to learn ways to improve my own pedagogy.

The research results described in Chapter 3 settled some questions but raised others. In this chapter I will discuss answers to my original questions and explore these new questions, focusing on the implications that follow from the research. I will start with what can be implied from the three main conclusions explained in Chapter 3.

1) Argument is surprisingly challenging to teach and difficult to learn.
2) It is easier for students to write an argument than to identify parts of an argument.
3) Students came to understand claim more easily than either reasons or evidence.

Each of these conclusions is explained in a section. With each section I will address questions like WHY this conclusion is true and HOW the conclusion impacts the way I should teach argument in the future. Then, I will return to the main question of whether the Toulmin model method works effectively for teaching first-year composition students how to write and understand argument. At the end of the chapter, I will list resolutions that briefly summarize the practical implications of this research.

I. Implications for Teaching Argument

First, I want to deal with the most obvious question raised by my research results. Some might conclude that the poor results described in Chapter 3 mean that teaching
argument is a not a suitable goal for first-year composition students. After all, five weeks of instruction resulted in only a small increase in student ability to identify parts of an argument and write an argument. Subsections which match the questions raised are as follows:

A. Is teaching argument to first-year composition students a worthwhile and reasonable venture? Or to make the question more personal, what do the low scores imply about WHETHER I should try to teach argument in my composition classes?

B. What can be learned from these research results about HOW to best teach argument?

I A. WHETHER to teach argument

Actually, the minimal improvement in diagnostic scores does not convince me that it is useless to try to teach argument to first-year composition students. Quite to the contrary, my intensive study of argument and experiments with argument actually lead me to believe it is more important than ever. If anything, I want to redouble my efforts to teach more about argument and to teach argument better.

The reflections students wrote at the end of the argument unit comprise a strong defense of argument. In their reflections, many of the students expressed appreciation for the importance of argumentative skills and how the argument paper made them think. Student AS wrote, “Out of all of the papers that we have done so far I believe that the argument paper made me think the most about what I was writing.” Student AA went even further, connecting the thinking required with an improvement in his ability to evaluate arguments:

I found this topic very interesting, it really made me think. Now when I look at a newspaper or a magazine article I sit and pick out the claim and reason in my head. It really helps me understand the article, and see the purpose
behind it. . . Since this unit I have also been noticing that I can pick out bad and good arguments pretty easily.

The majority of students wrote in their reflections that what they had learned about argument had changed forever the way they read and write arguments. As student NZ put it, “With the exercises that we did I will be able to identify arguments a lot easier and I now can write better arguments.” Student MJ was one of many to express pleasure with this new skill:

Now that I know all of this about making an argument, I will look for the essentials in editorials now. I can find the claim, reason, evidence, and assumptions in an editorial quickly. Looking at editorials that way never occurred to me, and it makes you a smarter reader to find those essential elements when you are reading it.

SW wrote that he thinks he will pay more attention to what he reads and learn more from his reading:

As I look through newspapers and editorials I now look for the claim and reasons that those articles are trying to make. Because I’m searching the article for the claim and reasons I end up paying more attention to the article and learn more from it.

Some students seemed to understand the impact this would have on their reading comprehension and speed. Student CT wrote,

I think I will probably look at arguments a little different now. . .I might look just to see what the claim and reasons are if I want to quickly skim through the article because that is an easy way to figure out what the author is trying to convince the audience of. I think knowing the parts of an argument might be helpful in that way.
Some students were able to express a new understanding of the complicated nature of an argument, and how opinions and facts factor into an argument. LC wrote,

_by studying editorials I realize even more that it is not fact but opinion expressed through facts to produce a desired outcome. This helps me to understand as I read that they are trying to persuade me and that it’s okay to not have the same viewpoint as the author . . ._

Besides appreciating what they had learned, several students mentioned how they enjoyed the unit more than other units. LC wrote, “I really liked writing this paper because I felt so involved in the process. It was a cause I wanted to fight for and therefore I got really interested in the paper.”

More support for the value of learning argument also came from the focus group discussions. My first question to each discussion group was, “What did you mark as a plus or minus?” One of the better students in the class responded that she had “marked as plus learning about argument” (LH). Other student comments echoed their satisfaction with their argument skills, similarly to what they expressed in the reflections. As DC put it, “Next time I read an editorial I can figure out what they’re trying to say. I like it because it seemed like a useful skill.”

Overall, the written and oral comments from students affirm the value of learning argument. The students recognize the importance of the subject, and they take pride in what they perceive as improved skills. While students are not the definitive judges of what should be included in a curriculum, their support does have meaning and value. Students learn better when they are interested, engaged and motivated, and those elements all came into play during the argument unit.

Other support for teaching argument comes from composition scholarship. For example, Browne and Keeley argue that today’s information-saturated world and the
popularity of simplistic arguments make the ability to understand arguments more important than ever:

As the complexity of the world seems to increase at an accelerating rate, there is a greater tendency to become passive absorbers of information, uncritically accepting what is seen and heard. We are concerned that too many of us are not actively making personal choices about what to accept and what to reject (xiii).

Additional support comes from Timothy Barnett, who begins his book Teaching Argument in the Composition Course with these words: “To teach students to argue knowledgeably, thoughtfully, and ethically is to equip them to participate effectively in the formal institutions of a large democracy as well as in smaller organizations” (iii). Barnett encourages instructors to teach their students to think of argument not as a method of confrontation but as a useful form for solving problems with others. Writing instructors should “help students understand that argumentation, at its most effective, is a process of working with others toward greater understanding” (iii). Fulkerson also defends the importance of learning argument, calling argument “the chief cognitive activity by which a democracy, a field of study, a corporation, or a committee functions. It is the overt sign of human rationality” (16). Fulkerson goes on to say that it is “vitally important” that college students learn how to argue well and how to critique the arguments of others.

Between student comments and input from scholars, it is easy to compile an impressive list of reasons to teach argument to college students. Composition teachers can help students rise above passivity, actively make personal choices, engage in civic affairs, and fully express their rationality. Despite what might seem like discouraging scores on the diagnostics, the evidence provided by the reflections, focus group discussions and a variety of composition scholars convince me that argument should
indeed by taught to first-year writing students. However, given my research experience, settling the WHETHER question inevitably brings up the HOW question.

I B. HOW to teach argument better

The slight improvement between the diagnostic pretests and posttests prompts a HOW question: In light of students’ lack of improvement, what can be learned from these studies about HOW to better teach argument?

The quick answer to “How?” is “very carefully.” This study serves as a cautionary indication that the subject matter is harder than one might expect. Even though I thought I had gone over the components of argument so many times that I felt sure students understood them, even when students make comments in their reflections about how often we went over the basic elements, and even though I had a second chance in the second semester to make things even clearer, the improvement was still minimal. The low scores are sobering and a clear indication that the subject is difficult to teach and learn.

While the research results demonstrate that there are no easy answers regarding how to improve argumentative teaching, I would argue that both pedagogical and curricular changes could make a difference. If argument is too complicated for students to understand in five weeks, perhaps the whole semester should be reframed and set up along the lines of argument. Earlier units like the rhetorical analysis and visual analysis could be intentionally taught as argument, using the same terms of claim, reason and evidence, so the argument concepts are more familiar to students when they begin the major argument paper. Table 4 on p. 81 sketches out changes that could be made in the syllabus of such a course.

Another potential curricular change involves teaching students their second semester of core writing later on in their college years, when they have had more time
to develop their critical thinking skills, instead of during their first year, when they are less mature and more distracted by freshman adjustments. If argument is as crucial as students and experts say, it should be studied when students are developmentally able to absorb the information. Fortunately, ISU is in the process of making this change and moving the second semester of composition instruction from the first year to the second year.

The reflections and focus groups offered students a chance to make suggestions regarding what helped them understand argument and what would help them understand and write it better. These suggestions include the following:

- Use more examples and take more time to teach how to identify assumptions and alternatives
- Practice identification of argument components with real life editorials because they are more interesting and understandable
- Practice in class with editorials that stir up a debate
- Require students to compose arguments with a specific audience in mind (less vague, more effective)
- Show students how to evaluate evidence and choose the best evidence

Now that my study has shown me how difficult it is for students to grasp argument concepts, I will make some of the above pedagogical changes. These pedagogical changes, combined with the change to a longer unit and an argument theme for the entire semester, should help students learn argument more easily.

II. Implications of Finding that Students Do Better at Writing than Identifying

The figures in Chapter 3 reveal that nearly every student from both semesters performed better at writing an argument than identifying parts of an argument (see Figure 6 on p. 47). Since we had spent hours in class working on identifying parts of
an argument within examples and editorials, this disparity is surprising. The challenge is to figure out what these results mean for how argument should be taught.

Conclusion 2 raises some interesting questions:

A. WHY did students perform better at writing than identifying parts of an argument?

B. And HOW does one reconcile this with what students expressed in their reflections and the focus group discussions about improving their identification skills?

C. What implications flow from these contradictory results?

II A. WHY students do better with writing

The first question is WHY students performed better on writing an argument than on identifying the parts of an argument. One possible explanation is that first-year college students have had little training in analyzing a piece of writing. The identification tasks require close reading. Students today read less and less, taking in information through a variety of media. The low scores could simply reflect poor reading comprehension skills. Because writing is routinely required during earlier schooling, college students have a sense of what is appropriate to put in an argument; however, they are less prepared for the more exacting task of identifying the main claim, reason and evidence within an argument.

The low scores for identification of argument components could also be due to a lack of motivation. As students noted in their reflections (see page 64), they prefer tasks that are “easier” or “more simple.” Students admitted that they resist reading long editorials because they are “boring” and “if you’re lazy, you might not read it all.” They resist having to “think about numbers” too much. The problem could be one of motivation and desire.
II B. Reconciling the contradiction

A complicating factor in interpreting the research results is that the reflections and discussions show that students felt confident that they had improved their ability to identify parts of an argument when, in actuality, students’ ability to put the right label on components is unimpressive and certainly not as good as the students perceived it to be. One benefit of the different research tools is that I would not have known that students felt so positive about their identification skills if I had just relied on data from one research tool. Nonetheless, this discrepancy in data must be explored and explained.

A possible explanation for the contradiction is that students did improve in their ability to identify the claim, reason and evidence within an editorial, but the terms and concepts are new enough to them that they still struggle to correctly identify the components. Perhaps students just need more practice and maturity before they can approach competency. Reflection comments support this explanation:

- “Now when I read an editorial in the newspaper I catch myself trying to figure out the claim, reasons, assumptions, and evidence.” (LC)
- “I think that now that I know what an argument is, I will always look for the evidence supporting the claim in every editorial in the newspapers” (SC)
- “Now that I know all of this about making an argument, I will look for the essentials in editorials now.” (MF)

The repeated word in these reflection comments is “now” which suggests that a new change has occurred. Change requires a period of adjustment. Perhaps with more practice and patience, student skills would catch up with their newly acquired knowledge. Teaching composition to slightly older, more developmentally mature students could also lead to higher identification scores.
Il C. HOW to better teach identification skills

The practical question is what can be learned about HOW argument can be taught so students learn to identify parts of an argument as well as they write arguments. In their reflections students commented that reason and evidence were harder to identify than the claim. Students also expressed feelings of being overwhelmed by the task of finding good evidence while writing their argument paper. These findings suggest the need for a pedagogical change, with more time allotted to work on reason and evidence. As mentioned earlier, the difficulties inherent in argument suggest that more time should be given to the entire subject. If the whole semester was framed according to the suggestions in Table 4, perhaps reason and evidence would become less difficult for students to understand and identify.

Table 4. Modified Semester Plan with Argument Focus

<table>
<thead>
<tr>
<th>Unit</th>
<th>Original Design</th>
<th>Recast design</th>
<th>Distinctive Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Writing a summary (2 weeks)</td>
<td>300 word summary of WHAT – the main points of an essay</td>
<td>300 word summary of the argument advanced in an essay</td>
</tr>
<tr>
<td>2</td>
<td>Rhetorical Analysis (4 weeks)</td>
<td>750 word analysis of HOW the author makes his/her point in a particular essay, looking at appeals to logos, pathos, ethos, and stylistic decisions like organization and language</td>
<td>750 word analysis of HOW the author argues in a particular essay, reemphasizing what was taught in the summary unit about understanding an essay as an argument and using argument terms</td>
</tr>
<tr>
<td>3</td>
<td>Visual Analysis (3 weeks)</td>
<td>Poster display which analyzes a visual such as an advertisement; expectation of discussing appeals to logos, pathos and ethos as well as how different visual elements and principles are used</td>
<td>Foster display which analyzes the argument made in a visual like an advertisement; expectation of discussing appeals and visual elements and principles, all in the context of claim, reason, etc.</td>
</tr>
<tr>
<td>4</td>
<td>Documented Position Paper (six weeks)</td>
<td>1000 word paper and short PowerPoint presentation identifying a problem and offering a policy solution that is well supported</td>
<td>Have students write a short argument paper without evidence first before writing their argument paper with sources.</td>
</tr>
<tr>
<td>5</td>
<td>Profile (two weeks)</td>
<td>500 word paper that requires an interview and interweaving of quotes</td>
<td>Discontinue</td>
</tr>
</tbody>
</table>
Another answer to HOW to teach identification skills is to continue to work with arguments in context during class. In their reflections, students commented favorably on working with newspaper articles and other short paragraph examples of arguments. Students also indicated a preference for examples whose topics interested them. Student LC wrote, “Through practice with various editorials I have become readily able to identify each one of the aforementioned aspects of an argument.” Using interesting, real-life, controversial examples can motivate students to learn and make practice more tolerable. Basically, students need more practice, more practice than one might expect. The only way to increase reading comprehension and analysis is to require more reading and analysis.

III. Implications of Finding that Students Understand Claim Better Than Reason or Evidence

The figures in Chapter 3 convincingly show from several different perspectives how students comprehended claims better than either reason or evidence. This conclusion prompts exploration of several different issues:

A. WHY do students both identify and write claims better?

B. HOW can I help students do better with reasons and evidence?

III A. WHY students do better with claim

There are several possible explanations for why claim scores are higher at both the beginning and end of the unit. Perhaps my teaching of claim was better than my teaching of reason or evidence. Maybe my background with debate and writing made me see the component of “evidence” as familiar and straight-forward, so I incorrectly assumed that evidence was easy for students to comprehend. An alternative explanation for the difference is that claim is inherently easier for students to grasp and reason and evidence more difficult. The reflections and focus group comments verify
that, if students understood anything, it was claim. The claim is the first step in making an argument, and some students were able to grasp that concept but unable to move consistently beyond that first step. This possibility raises another question:

**III B. HOW reason and evidence can be taught better**

It is difficult to know how to make reason and evidence more understandable, so students do as well with it as claim. Certainly, more time should be given to defining each component and having students identify each component in argument examples. Incorporating the components of argument into earlier units in the semester might help students understand the terms better and work with reason and evidence more proficiently. For example, since students felt overwhelmed by the task of finding strong evidence to support their claim, I would ask students to write a short one-page argument paper without documentation first before asking them to write the complicated Documented Position Paper (see Table 4, p. 81). By concentrating on claim and reason before adding the clutter of evidence from various sources, students might perceive the lines of an argument more clearly. Students would benefit from additional time to find quality evidence to support their arguments.

**IV. Verdict on the Toulmin Model**

After exploring what is implied in the data about 1) the difficulty in teaching and learning argument 2) the higher scores for writing than identifying, and 3) the better performance with claim, than reason or evidence, I will move on to the main question I set out to answer at the beginning of this study. The final question I will address in this chapter is this:

A. Is the Toulmin model effective for teaching argument to students?

B. Should I continue to use it with my students?
C. If so, how can I improve the way I present it and, hopefully, motivate a better student response?

**IV A. Whether to use the Toulmin model**

Frankly, the adaptations I had to make to the Toulmin model in order to accommodate the abilities of my students mean that this study provides limited insight into the effectiveness of the Toulmin method. The realities of my research context signify that this study does not directly address the full complexity of the Toulmin model. I discovered, like Fulkerson, that the model is “more complex than it first appears. Its apparently simple form belies a number of complex underlying processes, ones not easy to apprehend or to generate consciously” (58).

First, I had to leave out the component of assumptions, because this critical feature of the Toulmin theory of “moving” from reasons to claims proved too difficult for first-year students. As Fulkerson notes, students “have a great deal of trouble identifying appropriate warrants to link data to claims. . . apparently the cognitive act of inferring an appropriate warrant for a given argument isn’t intuitive” (59). Fulkerson is speaking to fellow composition teachers when he writes,

. . .we can hardly expect students to understand intuitively the concept of a Toulmin warrant if most composition scholars who write about it fail to understand it. If we hope to make the model useful in the classroom, we will be compelled to master it ourselves, then present it to students at some length, and discuss the contrast and connection between the apparent simplicity of the model and the complexity of extended argument. (62)

The next adjustment I had to make to the model was to leave out the component of alternatives, to simplify my data collection and analysis. The data I ended up
evaluating in the diagnostic tested only part of Toulmin’s model, the claim, reason and evidence components, which are not unique to Toulmin, but date back to Aristotle.

The verdict on the usability of Toulmin’s method must include an acknowledgement that argument and logic are complicated subjects and that his method developed as one of many efforts to make the intricacies of formal logic understandable and practical. While questions remain about the effectiveness of Toulmin’s method, the same can be said for more formal approaches with their complicated syllogisms and innumerable fallacies. Even Fulkerson, whose reservations about Toulmin have been noted, points out that “No procedure for teaching written argument can currently claim any empirical proof of its effectiveness” (66).

Even though no proven, easier system for teaching argument exists, teachers should be cautioned that they need some training in logic and rhetoric before they can use Toulmin’s model effectively. Teachers need to understand that while Toulmin works well for describing argument, there are difficulties involved in teaching the concept of warrant. While I will use Toulmin with my students in future semesters, I would not encourage others to use it unless they study it thoroughly, develop lesson plans and useful examples appropriate for first-year students, and spend more time during the semester on argument.

IV B. My plan with my students

Despite the fact that my research did not test the complete Toulmin method, I still believe it provides helpful information about the workability of Toulmin’s basic method. With future classes I will continue to use Toulmin’s framework and terms: claim, reason, evidence, warrant and alternatives. Even though the diagnostic scores failed to show significant improvement from pretest to posttest, the reflections and focus group discussions show that students felt they had learned new and useful
concepts. My plan is to continually refine and revise my argument methodology, believing that this will further student acquisition of important argumentation skills.

Despite student difficulty with warrants and counterarguments, I will continue to teach these components to students. Although I chose not to analyze the diagnostic results on alternatives, student reflections reveal that teaching about counterarguments was key for some students. As LP wrote in his reflection,

“The skill I’ve valued the most is thinking of counterarguments. The more I think about counterarguments the more it gives me to write about. I know not all counterarguments can be addressed but it helps me make my writing a lot better.”

Many students described their difficulties with understanding warrants and counterarguments but still affirmed their value. Students seemed to appreciate the knowledge yet be unable to identify these components consistently. My overall assessment is that Toulmin does provide a helpful descriptive model or layout of what an argument should include, and that this model can, in turn, facilitate student learning.

**IV C. Resolutions**

These research study results and their implications have led me to make a number of resolutions regarding my own teaching. I make these resolutions fully aware that part of the joy and challenge of teaching is that it is a continuous, never-ending process. Studies like mine serve a useful purpose in providing stimulus and new ideas for how to improve teaching in first-year composition. My research leads me to resolve the following:

- **Have realistic expectations for how difficult it is to teach argument.**
In my future classrooms, I hope to be more cognizant of the challenges inherent in teaching argument. I will not be overconfident that students will easily catch on to the components and structure of logical argument. This resolution means I will reframe the semester in terms of argument, give the argument paper more time during the semester, and continually look for new and better ways to effectively explain difficult concepts. I will devote significant class time to teaching students how to identify the components of argument within real-life argument, and I will have patience with the time required in acquiring these complex skills.

- **Work to overcome the liabilities today’s students have in terms of learning argument.** Today’s college students have surprisingly limited skills in reading comprehension and analytical thinking. My results make me resolve to engage in extensive reading and writing in my classroom, knowing there are no shortcuts to improvement and no substitute for practice. I will persistently look for ways to stimulate student interest in inquiry and critical thinking. I will do whatever I can to convince students that these skills are important so they desire to develop them.

- **Make argument the theme for the entire semester instead of just one unit.** Even though argument is the general theme of ISU’s second semester of composition instruction, I’ve seen how that theme can easily be diluted in the list of different types of papers to write. Student comprehension would improve if units typically taught during this semester of composition were more deliberately reframed in terms of argument. As Moss explained in his plea for a new methodology in first-year composition, every theme can become “an experiment whose method is argument and whose purpose is persuasion” (219). Repeated exposure to the terms and mindset of argument will help students be less
overwhelmed by what is expected in the Documented Position Paper. Claim, reason and evidence can become familiar concepts if they are covered consistently.

- **Delay the second semester writing course until later in college when students are more developmentally mature.** Some of the problems students had with critical thinking and inquiry simply reflect their stage of intellectual development. Reasoning skills can develop more easily even one year later in college. As students are asked to engage in analytical thinking throughout other college courses, they will be more equipped to understand and write argument. The decision to move the course to the second year of the college experience has been part of the ISUComm curricular plan, and my study supports this change.

- **Allow an extra week during the semester for the argument unit.** During the two semesters involved in this study students seemed rushed and insecure about finding adequate evidence to support their claim and reason. Another week could be given to this unit so students are less overwhelmed by the variety of tasks involved in the major argument theme. I hope that with more time, students could have a better chance to understand more complicated concepts like warrant and alternatives.

- **Work through many examples of argument during class.** Students’ reflections show that they liked working with editorials, but the diagnostics reveal that students needed better instruction on how to identify different components like the reason and evidence within editorials. I would plan more time in class to work through examples of sound and unsound argument and continually look for new exercises that might help students learn to identify and emulate good reasoning. With more practice, both identifying and writing skills should improve.
• **Continue to use the Toulmin model because no better argumentation model for composition exists.** After all my reading and all my research, my final verdict on Toulmin is to endorse it with a cautionary note that it is more complicated than it first appears. I agree with Fulkerson that Toulmin should only be used in the composition classroom if “we teachers of writing . . . understand it and adapt it at a much more sophisticated level than has usually been the case” (65). Some components, like warrant, are difficult for students to grasp, though that difficulty might be lessened if the course was taught to older students, the unit was longer, and the argument theme was carried out throughout the semester. I will continue to use Toulmin’s clear definitions and illustrations because they help students focus their thinking, understand the shape and layout of an argument, and develop critical thinking skills.

This research study has convinced me more than ever that students need to learn to think through issues and write about their convictions. A rather nebulous factor in this whole process is how to interest students in argument and convince them of its importance in their lives. One important enticement I will continue to offer is to let students choose their own argument topics and require them to address their argument paper to a specific audience. Students learn better when they are interested, engaged and motivated. It was gratifying to read the following reflection comment, because it shows argument working as it should, encouraging and enabling students to engage with the world’s issues.

I have always read about problems and issues facing today’s society with interest. But I never looked at them systematically to find where the claim, proposal and reasoning was. Now I will look more carefully towards where these parts of the argument are at when reading editorials or when reading articles about problems. (JM)
Such comments affirm my commitment to continue to use Toulmin’s method, simply because it offers practical reasoning about everyday situations using ordinary language as opposed to the more intimidating vocabulary of formal logic. I want whatever is least likely to offend and scare away students as well as what is most likely to motivate and invite them to engage in critical thinking. As Malcolm Forbes pointed out (quote p. 1), education’s purpose is to replace an empty mind with an open one. By teaching the skills of argument, I hope to do my part to open my students’ minds. I look forward to more opportunities in future classrooms to be part of this rewarding but demanding process.
APPENDIX A: List of exercises used in argument unit

Exercise 1: Student Exercise to Practice Writing Warrants
Goal: help students become more comfortable with writing out assumptions and point out how the different assumptions we bring to an argument change the shape of the argument.
Steps: In a computer lab, have each student type a claim about any subject. Suggestions might be “vandalism is a terrible crime” or “people should not drive SUVs.” Then have students rotate chairs, moving one seat all in the same direction, so they are sitting in front of their neighbor’s computer screen. Have them type in data or reasons that could be used to support the claim the other student had written. Then rotate one more time, so a third student is at the computer. Student #3 should then figure out what assumption would connect the claim and the data.

Exercise 2: Writing Warrants Together as a Class
Goal: Help students start to see when a warrant fails to be the bridge between the claim and the reasons to support the claim and begin to make suggestions for identifying better warrants.
Steps: Assign students to write a tentative thesis sentence on the subject of their position paper. Ask them to write out their claim, reason, and assumption, using their Assumption Model notes as a reference. In class, write some of the claim-reason-assumption arguments on the board and read through them out loud with the students. Ask the class whether the warrant works and revise (erase and write new) as needed. The goal is to have the students start to see when a warrant fails to be the bridge and begin to make suggestions for better warrants.

Exercise 3: Student Exercise Writing Outlines Using Assumption Theory
Goal: Help students see relationships between different parts of the arguments and understand the structure of claim-reason-assumption.
Steps: After reviewing the Assumption Model, ask students to write a simple outline on their argument topic. The outline should have at least one main claim, three main pieces of data or backing and as many assumptions as are required. In the outline the
roman-numeral levels should function as claims, capital-letter levels should function as assumptions and Arabic-numeral levels should function as data or backing.

Example: **CLAIM**  I. A national program of health care should be adopted
    **WARRANT**  A. A national program is necessary to deal with the magnitude of the problem
    **EVIDENCE**  1. Millions of people cannot afford health care
                   2. States and charities cannot afford to provide for so many people
    **WARRANT**  B. A national program is a moral imperative
    **EVIDENCE**  1. Poor health care causes unnecessary death and suffering for millions
                   2. Failing to act to correct this problem leaves us morally responsible
                   3. Do unto others as you would have them do to you

Example taken from Kneupper 1978: 240

*************************

**Exercise 4: Finding Macroscopic and Microscopic Claims**

**Goal:** Help students identify macroscopic and microscopic claims within an argument and realize the multiple levels upon which an argument functions.

**Steps:** Have students meet with a partner to look the rough draft of their position paper. Have students find and write out the macroscopic claim as well as three microscopic claims for their papers. Then exchange papers and do the same for the partner. Discuss the differences and share questions and lessons learned in a class discussion. This will help students be able to analyze the overall macroscopic approach to argument as opposed to microscopic approach which looks at the argument as a series of smaller arguments.

Note: Refer to the bibliography article by Hart for suggestions on treating an argument macroscopically as one argument and read Kneupper for suggestions on treating it microscopically as a series of kernel arguments.

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Exercises 5: Teaching How to Consider Multiple Points of View When Forming Arguments

Goal: Help students understand the perspectives of a variety of audiences and reflect on the importance of context to argumentation.

Steps: Fold paper lengthwise and write a narrow claim statement across the top of a piece of paper. Beneath the claim on the left half of the paper, list many (3-6) reasons to support that claim. Then hand the paper to a partner, who should read the claim and use the right side of the paper to write counterarguments to the claim. The partner should try to imagine audiences likely to oppose the claim and list many alternative positions that could be taken on the issue.

- Example taken from A.E.B. Coldiron’s article “Refutatio as a Prewriting Exercise” in Timothy Barnett’s book Teaching Argument in the English Class

Exercises taken from Asking the Right Questions on finding the claim, reasons, assumptions such as the Thinking Map on p. 56
Identify Parts of an Argument
In order to show me what you know about logical argument, read the following editorial, looking to identify the following parts of the argument:

- claim (the author’s message that s/he wishes you to accept)
- reason (a proposition that supports the claim, answering the question “why”)
- supporting evidence (personal observations, research studies, case examples and analogies used to support the claim)

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Put riverboat fiction to rest

The State of Mississippi has an opportunity, as it undertakes its recovery from Hurricane Katrina, to eliminate a particular bit of nonsense. Mississippi legalized casinos in 1990 but required that they be situated on water—the Mississippi River or the Gulf of Mexico. This followed a campaign to promote the notion that 19th-century riverboat gambling represented something precious in the nation’s culture and that its restoration would be good for tourism and recreation.

The hurricane severely damaged most of the 13 water-based casinos. Now Gov. Haley Barbour is proposing to let them rebuild on or near the shore, conceding, “We have learned the hard way that making them float on water is not a good idea.”

The state could just as well let that happen. The notion of recapturing the romance of the riverboat era has become a stale joke in most of the country, with stationary, relatively windowless slot-machine chambers bearing little resemblance to a paddle-wheeler of the 1850s.

Additionally, environmental reasons exist to minimize coastal and offshore development in the sensitive Gulf area, where development-related erosion and the encroachment of salt water have caused long-term damage to ecologically significant areas. Protection of these areas, and their preservation for future generations, should take precedence over the fiction of water-based gambling.

Casinos are just as efficient in their harvest if operated on land. As Barbour said, making them float on water is not a good idea.

List the following parts of the argument, using either quotes or paraphrases from the editorial:
- claim
- reason
- supporting evidence
APPENDIX B (cont)

Write an Argument

Please do your best to write a logical argument that includes a claim, a reason and supporting evidence. To simplify this job, use the case narrative provided.

Case narrative: Your siblings and you have decided to go together to give your parents a trip for their 25th anniversary. You want to surprise them with airplane tickets to somewhere you think they would enjoy. You’ve been put in charge of finding the vacation that best meets their needs. These are the pertinent facts to consider:

- You can’t spend more than $1,200 on airfare for two of them
- Consider your parents’ interests: History? Art? Sports?
- Consider the kind of weather they would most likely experience
- Consider their activity level—do they like to walk and ride bikes or are they more sedentary?
- Consider their tastes, luxurious and expensive or simple and frugal

Your job is to choose one of the three options and write an e-mail to your siblings arguing your position. Which trip will you recommend to your siblings? What are your reasons? What evidence supports your reasons? Make a logical argument, using the attached travel ads for support.
Visit the grand old isle of England!

Round trip airfare of $899 from New York City and $

Stays in all the major metropolitan cities of England. Bus tours everywhere.

Accommodations in clean, wholesome hotels that fit your budget

“If you want to relax and enjoy yourself while others chauffeur you around, this is the trip for you,” says Mildred Harold of Chester, Indiana.

**Our promise:**
No stuffy art museums
No lectures on local history
Fun for the

Get Hot With Us

Why wait until summer to get a tan? Why suffer loneliness when many singles are looking for a swinging partner? Enjoy the beach and a beer with us in lovely Mexico

The beach beckons in Playa Del Carmen

Our hotels offer a variety of package plans just right for adults looking to party. Unlimited alcohol, nightly dances, and an active singles scene means there will be lots of action.

$1200 for two
Roundtrip from 10 different cities

Come Relax in Florida

This 5 star resort specializes in luxury accommodations for the wealthy. Spas, guided tours, and wine and cheese tastings are just a few of the treats to look forward to.

Flight cost per

<table>
<thead>
<tr>
<th>City</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>From Minneapolis</td>
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</tr>
<tr>
<td>From Chicago</td>
<td>$599</td>
</tr>
<tr>
<td>From Atlanta</td>
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</tr>
<tr>
<td>From San Diego</td>
<td>$499</td>
</tr>
<tr>
<td>From Portland</td>
<td>$599</td>
</tr>
</tbody>
</table>

All activities are planned specifically with older participants in mind.
APPENDIX C: Abbreviated Syllabus Used in Past 105 Classes

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
<th>Description</th>
<th>Grade Portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>2 weeks</td>
<td>Learn how to summarize, including paraphrase and quote.</td>
<td>10% of grade</td>
</tr>
<tr>
<td>Rhetorical Analysis</td>
<td>3 weeks</td>
<td>Study different methods a writer uses to make writing effective, such as logos, ethos, pathos, organization, language.</td>
<td>15% of grade</td>
</tr>
<tr>
<td>Visual Analysis</td>
<td>2.5 weeks</td>
<td>Learn how visual elements and principles work together to convey power and meaning.</td>
<td>15% of grade</td>
</tr>
<tr>
<td>Documented Position/Argument Paper</td>
<td>5.5 weeks</td>
<td>Learn how to compose a logical argument about a local topic of interest.</td>
<td>15% for paper</td>
</tr>
<tr>
<td>Profile Project</td>
<td>2 weeks</td>
<td>Learn how to integrate source material and quotes from an interview, built around a common theme.</td>
<td>15% for PP</td>
</tr>
</tbody>
</table>

Write a 250 word summary of an essay, choosing from several possible choices
Write 750 words rhetorical analysis on one of three possible essays. Include a summary but focus on HOW the author made his/her point.
Compose a poster of a visual, highlighting the strong visual appeals made in the visual; present poster to class.
Write a 1,200 word argument addressed to a specific audience, suggesting a policy solution. Compose a short PowerPoint presentation to give to class.
Write a 600 word essay based upon an interview with someone from another country and incorporating source material.

The remaining portion of the grades came from group presentations and daily work.
APPENDIX D: Documented Position Paper Assignment Sheet

English 105: Documented Position Argument and PowerPoint
Due March 30 and April 4 and April 17

Overview
The purpose of this assignment is to learn how to write a logical, well-supported argument concerning an issue that concerns you. It will require you to make a logical argument with a solid claim, reason and supporting evidence. The evidence will come through personal interviews and research from journals, newspapers, books and the Internet. The challenge is to then analyze your information, determine your claim and write a well-supported argument in 1000 words, plus a works cited page. Major objectives include learning how to do library research and online research, how to document sources, and how to write a well-supported argument. Time for revision is built into a syllabus, with the revision due two weeks after the first deadline.

The PowerPoint presentation will involve preparing a PowerPoint presentation with a minimum of four slides. Your slides should sum up the argument (claim-reason-evidence-assumptions) you make in your personal paper. The objective is to further refine your summarizing skills and to teach some basic skills involved with making and using slides in an oral presentation.

This assignment, more than any other this semester, requires careful planning. Your success will largely be determined by how thoroughly and diligently you follow the steps of the writing process, starting by finding a topic that interests you and narrowing it to make it manageable for a four page paper.

Steps involved in planning . . . drafting. . . revising
1. The first task is to find a topic. Your topic should be
   • a current subject that interests you
   • a subject about which you are still open to learning more about the multiple sides of the issue.
   • a topic about which you have some personal knowledge based on a work experience, organizational involvement, family connections or a course you took

   Examples would include local issues like whether Ames should get a new mall and national issues like the war in Iraq or immigration controls. Topics that are not allowed include abortion or capital punishment.

2. Do some preliminary research on your topic area. Collect evidence from a variety of sources. Take summary notes and specific quotes from the texts you want to use.

3. Once you've focused your topic, formulate a preliminary thesis that includes your claim and reason. As you write your draft or outline, continue to test and modify your thesis.

4. Complete a policy paper worksheet that documents your progress.
5. Find more support for your position from various resources. Make notes on your sources as you gather information. You need five sources (at least one from a book or interview, one from a magazine or newspaper and no more than two web sources) documented in your final paper using MLA style. For the final paper you must attach a photocopy of the front page of each different source or a transcript of each interview.

6. Next, sketch an outline of your essay. Start with stating your claim and reason in a thesis. Then use evidence to support your claim.

7. Draft your argument as a recommendation memo to a specific person or committee that has some power to consider the policy. Interweave your sources into your paper to substantiate your claim. Be careful not to rely exclusively on one source. Verify the accuracy of your information and quotations, in order to build the credibility of your argument. Remember your purpose is to persuade the person receiving the memo to consider your policy recommendation.

9. Allow yourself time to revise your essay. Continue to work to make your purpose and position clear. Look for any loopholes in your position where you need additional support. Your paper will be graded and returned to you to revise by April 13th.

10. Develop four PowerPoint slides summarizing your position and your support for your argument. Make sure your claim, reason and some evidence are clearly stated and that your PowerPoint displays good design strategies.

**Evaluation Criteria for paper (15% of total grade)**

- Appropriate audience for the argument and suitable persuasion tactics
- Logical argument with clear claim and reason in a focused topic and thesis
- Relevant, concrete, and detailed evidence that supports the thesis
- Acknowledgement of assumptions and counterarguments
- Avoidance of fallacies or other ethical problems
- Logical organization, with focused paragraphs and smooth transitions
- Language and tone adapted to your purpose and audience
- Accurate, well-documented use of five sources (paraphrasing and quoting)
- Correct documentation in-text and on works cited page
- Few or no mechanical errors

**Evaluation Criteria for PowerPoint (10% of total grade)**

- Clear representation of the claim and reason of the argument advanced in your paper
- Well-thought out thesis and supporting evidence for your position
- Optional to mention assumptions and counterarguments
- Appropriate layout for PowerPoint slides, using visual principles of design
- Effective oral delivery
APPENDIX E: Demographic Data Form

Demographic Information for study 3/06

What is your gender?

What is your major at Iowa State?

Have you taken English 104 at Iowa State or the equivalent of English 104 at another college or university?

Please indicate to what extent you participated in any debate or argument type activities within the last five years:

1 (not at all) 2 3 4 5 6 (extensive involvement)

Rate on a grading scale your evaluation of how competent a writer you are:

F D C B A
APPENDIX F: Student Reflections (from second/spring semester)

Student NZ

I just want to tell you right off the bat, this is short. Other than that I want to mention that an argument has to have a claim and reason. An easy way that I found to identify an argument is the word between the claim and reason. If you see because which justifies the claim and you have a claim and reason then it is an argument. I had to work on coming up with arguments that were clear and the reason part of it was the one I focused on the most. It was easy for me to come up with a claim like Des Moines public schools need to change its zero tolerance policy. The part I had a little trouble with was the reason. So I consistently worked on coming up with ideas that supported the claim. After thinking I came up with the Des Moines public schools need to change its strict zero tolerance policy for fighting because it lacks effectiveness that suspends students who don’t throw punches in a fight. With the exercises that we did I will be able to identify arguments a lot easier and I now can write better arguments. Sorry I didn’t have anymore information.

Student AS

Out of all of the papers that we have done so far I believe that the argument paper made me think the most about what I was writing. I believe this because while I was researching my topic of violence and video games my mood of the paper changed, so I had to type it differently then I first imagined. My first mood was that video games don’t make children violent, and through the research that I did I found out that sometimes it does change the child’s attitude. So I found that really interesting, so I kind of morphed my paper to the idea that there were other impulses that also aid to the violence in children and that it wasn’t only video games that changed the child’s views. The essential thing of this argument that I learned from this project was that I really had to persuade someone to think the way that I think. Actually, through researching, they sources that I looked up changed my mind to view this issue an different way. I think that the most important thing about this paper was giving enough detail about how I wanted people to think but not to try to seem to pushy of my views, and to allow the reader to make their view. I really had to work on the word count in this paper. I had a lot to say about my views and it was really hard to pin point the really important ideas that I wanted to get across. It was also hard to push a proposal, since I changed my view in the middle of the paper it was hard to scramble to a proposal, but I finally found an idea that worked with what I was trying to get across.

I will look at argument papers differently, those people have to put a lot of work and detail into their papers and they have to make sure that everything is factual. I also think that who ever does the argument need to show both sides of the idea to make sure that they can support their ideas even though there is a counter argument.
Student DC

I learned that writing an argument is pretty in depth. Organization and approach can make or break an argument regardless of how well supported your ideas are. Another thing that I learned is that there’s more then one way to do something. An argument must contain evidence that comes from a viable source, and not only that, but a variety of sources. Without support from factual evidence, your argument means nothing. You must appeal to your audience when writing an argument, sometimes that means that your style and reasoning must be altered so that you don’t insult them or go over the line making accusations. Arguments are quite a bit more effective when directing them towards one person, because by doing so you can assume they have a basic knowledge of the topic and therefore shorten your writing.

Argumentative writing is certainly one of the hardest writings there are. There is a fine line between making it effective and not effective.

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Student MJ

Writing an argument was more in depth than what I thought. You have to have a claim, reason, and support. When writing an essay, you have to have a “because” statement. The claim is something you are trying to change, the reason is why it should be changed, and the support is the evidence to back up the claim. There has to be a point in an argument essay, and that is what comes after your “because.” There will also be a warrant, unstated assumptions, that you can find. When reading editorials, those unstated assumptions can be found in many.

The reason was hard to develop, but you have to have that in order to make it an argument. Now that I know all of this about making an argument, I will look for the essentials in editorials now. I can find the claim, reason, evidence, and assumptions in an editorial quickly. Looking at editorials that way never occurred to me, and it makes you a smarter reader to find those essential elements when you are reading it.

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Student CT

I learned quite a lot about arguments in class because I think we spent a great deal of time focusing on how to write an argument. I learned how to make your audience very specific and clear. This was helpful because once you know exactly who you are directing your paper at, it gives you a clearer focus and makes your argument center around that certain person or group of people, essentially because the paper becomes less confusing. I also learned that an argument has to have some distinct parts. The ones we discussed in class were claim, reason and evidence. We went over these repeatedly, however they were hard for me to catch on to because we also had to provide substantial
evidence too. I think that was the most important thing I learned from this unit.

When writing my argument, I found myself forgetting to tell certain key details to the audience because I was sort of assuming they already knew. This was something I constantly had to keep checking on because I did not want to have any unstated assumptions because that would make my argument appear less weak. Another think I had to work on was making sure every reason I had for my claim was complete and understandable with at least enough evidence to support it. I think this was probably the hardest part for me because all of my reasons were not valid in this paper because I could not find enough credible evidence to back them up.

I think I will probably look at arguments a little different now, but not to the extreme. I might look just to see what the claim and reasons are if I want to quickly skim through the article because that is an easy way to figure out what the author is trying to convince the audience of. I think knowing the parts of an argument might be helpful in that way.

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Student SC

What I learned during the argument section was how to make a claim. I learned that in order to make a argument, you need a claim and a reason for you clam. When I was working on my argument paper I did not have a clear clam on the issue that I wanted to focus on. I found out that when you make a clam you need reasons and those reason need to be well supported by evidence. I think that know that I know what an argument is, I will always look for the evidence supporting the claim in every editorial in newspapers. I think that I will also understand the reason for which they wrote that article by finding the claim and [their] reasons.

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Student LP

The skill I’ve valued the most is thinking of counterarguments. The more I think about counterarguments the more it gives me to write about. I know not all counterarguments can be addressed but it helps me make my writing a lot better. I also have learned to organize my paper a lot better so that my paper supports my thesis. I have learned that my paper will be a lot more effective in getting my argument across if I’m writing towards a specific audience or person. The more vague the audience the more vague a paper usually is. I have
also learned how to make my cause and evidence more clear to make my thesis better. I will look at editorials with a lot more understanding and with a lot more critiquing because I know how an editorial should be and what to look for in one.

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Student LC

So far my favorite paper to write has been the proposal paper. By determining a problem, and in this case a problem I was very interested in, you set the “stage” for the basics of your proposal paper. Also, the problem that you are arguing for or against is generally the claim in your paper. For example, with my paper the claim was that obesity needed to be deemed a disease. After you establish the claim then you can figure out what the reasons and counterarguments are. I really liked writing this paper because I felt so involved in the process. It was a cause I wanted to fight for and therefore got really interested in the paper. Overall, to write an effective argument you need to first identify the claim, then identify the reasons and supporting evidence. After you have done that then you must identify any counterarguments and unstated assumptions. Through practice with various editorials I have become readily able to identify each one of the aforementioned aspects of an argument. Now when I read an editorial in the newspaper I catch myself trying to figure out the claim, reasons, assumptions, and evidence. Then having figured out those aspects of the article I like to challenge the views of the author of the editorial. For example, I brought in an editorial about consolidating schools and school budgets to identify unstated assumptions. As I read the article and the authors view I found myself challenging their thoughts on the subject. For example, I do not think that consolidation of schools is a bad thing and the practice of consolidation greatly benefitted my high school when I was a senior. Also, by studying editorials I realize even more that it is not fact but opinion expressed through facts to produce a desired outcome. This helps me to understand as a I read that they are trying to persuade me and that it's ok to not have the same viewpoint as the author as expressed by counterarguments.

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Student JB

The major thing I got from the argument unit was that I realized it is very difficult to create a quality argument. Before this unit, I just thought an argument dealt with stating the side you are one and explaining why you feel the way you do. However, this is simply part of the process of creating a quality argument. The first item that must be considered when writing an argument paper is stating a claim. As a writer, you must make a statement that tells your audience what you believe in. Next you must have reasons and evidence to support your claim of why you are arguing for something. These are essentials for having a quality argument paper. Some other items that must be included in an argument paper are: counterarguments and unstated assumptions. To have a quality paper, you must look at both sides of the issue to make sure you consider every possible detail before deciding to pursue your argument.
My biggest problem in writing a quality paper was that I really was one-sided and did not understand why ISU had to cancel its baseball program. I failed to initially acknowledge the facts that the AD cut the program due to budgeting and the inability to be successful. I realized I had to see both sides to write a quality paper.

From now on, I'll look at editorials much more differently from now on and will probably be more critical when judging them. This unit taught me that writing an argument paper is a very complex process. There are many steps to be taken so that you produce a good argument to the public.

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Student AZ

I learned a lot in our argument unit. There are a few parts to writing an effective argument. The main two parts are a claim and a reason. The claim is what is being suggested and a reason is the because of the argument. Also when writing an argument you need evidence also to back up your claim and reason. Sometimes there are unstated assumptions in the article or not in the article. When writing your own argument you need to make sure your argument is directed at it's correct audience and that it has a purpose. When writing my argument I had to work on narrowing down my specific claim and reason and who my specific audience was going to be.

I think I will look at arguments such as editorials different now because I know to look for their claim and their reason and why they think the reason(s) will work. Also I will recognize unstated assumptions that the author has assumed.

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Student ST

In the argument unit I learned that an argument consists of a claim and a reason. The supporting evidence and unstated assumptions are also important parts in an argument. The unit helped me learn how to do research at the library using indexes and the library catalog along with finding periodicals and journals. I had to learn how to use the microforms to find old newspapers articles which I did not know how to do before this unit. Learning how to use all those research tools will definitely help me in the future when I have to do research for other projects. As far as things I had to work on in my own argument, a big thing was staying under the word limit. I had so much important information that I wanted to include, but I had to leave some of it out to avoid going over the limit. When it comes to editorials it is a lot easier for me now to pick out the claim, reason, and supporting evidence to figure out what point the author is trying to send to the reader.

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Student DR

Doing the argument unit has taught me a few things. One of the first things was researching the topic not just by internet either. It is a lot easier to use internet to find information, but it is also important to know how to find information by other means necessary.
The next thing I learned was how important organization is in writing a paper. I thought I had a fairly decent paper the first time I handed it in, but I was so wrong. My next go around, with a little help by the writing center, felt a lot more confident in turning the paper in. I realize that it is hard for me to visualize thing that are wrong in my paper and it is good to seek help when you can’t see the error. Plus when I type, I type the way I talk so it will always be clear in my mind as to what I’m writing about.

Another thing that I learned was how I really felt about the topic I chose. I had to go with what I really felt but still wanted parts of the other side to exist.

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Student JW

Looking back on the unit of arguments, I have really gained a lot of knowledge about argument writing that I did not know about. When we first started we worked our way into the unit by bringing in newspaper articles and looking at those. That was a really good reference and starting point, because it is something that we are surrounded by all day.

We learned the basic forms about writing and argument and once again we took examples from a newspaper for that as well. Arguments must have a because/reason to make a better argument. There also are the reasons that follow that claim, and many times there are counter arguments that are brought up in the proposal. Those at times are difficult to find or bring up without making the other side sound better.

One thing that I had difficulty at first with was finding the unstated assumption. Though after practice and some in class group activities I became more aware of them, and now when I am reading editorials I find myself looking for some.

Writing our argument paper, along with the PowerPoint really gave me the hands on experience I needed to better understand arguments. I choose something that I really cared passionately about and wanted to make a difference and used that as the argument I would be presenting. Working over and over with the paper helped me to find flaws in it, and improve on making a strong argument. Since I really cared about my topic I wanted to get my opinion across strongly and in a manner that would catch my audiences attention making them feel the same way I do. I made a powerful claim, and then I followed that by reasons that I thought would help my argument the most. (I found many reasons, but I chose the ones that I thought were most important in making my argument stronger.) I tried to bring up any counter arguments that might arise in my audiences mind and address those as best I could. Me audience had a great deal of knowledge about my topic so tired to use that to my advantage as well. I thought I had a really strong paper in the end, and it helped me to better understand writing an argument paper.

The PowerPoint was a good way for me to go through and pick out the main points that I wanted to bring up. It was a good opportunity for me too choose the main things that I wanted my audience to see, and make them powerful using images as well.

Overall I have defiantly come out of this unit much more knowledgeable on reading and writing arguments. I think that my writing abilities have improved from this, and I feel much more exposed to a new style of writing.

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Student MH

Writing an argument proposal paper for me was a little bit tough. When we first turned in our rough drafts for peer reviews, I don’t think I had even a close grasp on what exactly was the format of the paper. I had written it more in a form of a research paper, which isn’t the one I needed. It did help with the peer reviews though, and I did finally realize what I needed. First I needed the argument, which was that Title IX needed to be revised (in short) to better suit today’s students. Then I needed reasons to back up my claim, which I listed throughout the paper. I also provided counterarguments in the paper, so that both sides of the argument could be represented.

In writing my own argument, I had to work on making it more argumentative. After several revisions to my paper, I feel that I did accomplish that, although I feel I could have used more information from sources in the paper. The only problem was that I looked for every book in the library here, and only 2 were not checked out. The internet was full of sources, but many provided the same information over and over again.

I will look at arguments differently from now on because I will be able to see the claim, reasons and counterarguments and all the other essential pieces of the argument.

--------------------------------------------

Student JM

During the argument section I learned about the whole formula of making an argument. There is a claim (I believe yada yada) and a reason (because yada yada). After than you must include reasons behind the argument to back it up. And with every argument, there must be cons to it. For any argument to become successful, one must show they cons to the argument and then explain why they are a small reason to not change the current ways. Usually all of the argument is presented in a proposal (So and so should do this because yada yada). This gives the reader a good base of what the paper will be about. Sometimes the claim to the argument isn’t openly said, instead it is just assumed in the paper. This becomes an underlying assumption to the paper because you must assume what the writer is trying to impose upon you.

In my paper, I started off with a simple pro-con argument paper. As far as those are concerned my paper rocked. The only problem was that there really was no proposal for what needs to be done about the problem at hand. That is when I made a proposal to the argument, but then forgot to put cons about my proposal, I only put cons about the problem at hand. In about my 12 and final revision of my paper, I shortened up the discussion about the actual problem, and opened a discussion about the documentary that was needing to be made. This really made my paper piece together into what it became as a final.

I have always read about problems and issues facing today’s society with interest. But I never looked at them systematically to find where the claim, proposal and reasoning was. Now I will look more carefully towards where these parts of the argument are at when reading editorials or when reading articles about problems.’
Student NH

I have written a few argument papers before, but I did not learn about the “because statement” that is needed. I did know that a claim and a reason was needed, with supportive evidence. The hardest part of writing the argument paper for me was deciding on a very specific and clear claim in the beginning. I also struggled a little with keeping my paper some what bias, but have it lean toward the side I wanted it to.

During the class activities when we brought in the editorials I always seemed to have some trouble finding the specific claims that were being portrayed. I could always seem to find reasons or evidence, but even knowing those it was hard to pin-point the claims. With the in class paragraphs that we looked at it was easier for me to find the specific claims and reasons.

I will definitely look at editorials or arguments differently because I will look for the “because statements” and see if there is supporting evidence and reasons for the claim given. I guess that I will be more aware of arguments because I now know specific things that make arguments, arguments. Like the claim, “because statement”, and reasons.

Student SW

While writing the argument paper I learned a lot about the structure and essentials for these kind of papers. The essentials for argument papers include having a strong claim with a strong reason. Others include supportive evidence to help back up your claim and you need to list counterarguments so you are able to prove them wrong with the evidence you’ve found.

Writing my own paper was tough because I chose a claim that didn’t have very much supportive evidence and research available. I had to use a lot of outside sources including surveys and interviews. It was also tough to prove my counterarguments wrong and to provide a solid proposal. Overall though I believe I did an average job on the paper.

As I look through newspapers and editorials I now look for the claim and reasons that those articles are trying to make. Because I’m searching the article for the claim and reasons I end up paying more attention to the article and learn more from it.

Student IS

Writing an argument is a hard thing because you have to take in consideration the audience and get a lot of evidence to support your topic. Not many topics can be supported with evidence that being my case but more on opinions and logic. This disvalues your argument and the chances of accomplishing the argument decrease a lot.

This project taught me what and how to look at an editorial. I think that now I can think more on what the writer is trying to transmit and try to figure out if I should agree or disagree.
I also learned that not every topic is easy to make an argument. Some are harder than others and you must be wise on what exactly you want to change or get.

------------------------
Student EG

I have learned quite a bit about writing an argument during this unit. I knew what an argument was, but I didn’t known about all the little details that come along with writing one. I didn’t really realize all the different parts that you have to put into an argument. I always knew you had to have the “because” part in it, but I didn’t know it was called a claim and I didn’t know the names of all the other words we went through. When writing an argument, you have to have a claim, a reason and supporting facts to back up your argument. While writing my own argument, I had to work on coming up with a strong reason and supporting facts. At times I had a little trouble putting my thoughts together. I knew what I wanted to say, but I couldn’t figure out how to put them so they made sense and would make a strong argument. I don’t know if I will look at arguments any differently really, but I will probably have a better understanding of what they are trying to say. It will probably be easier for me to pick out exactly what they are trying to argue and also the facts that support their argument.

------------------------
Student MV

In the argument unit I learned that every argument needs a statement and a reason. Most reasons usually start with a because followed by the reason statement. Most arguments need to be supported by many facts, it is hard to write a paper with just opinions. When writing my own argument I found it hard to come up with a logical order to compose my paper. We also learned that many arguments have unstated assumptions. Most unstated assumptions are in editorials, the writer just tip toes around what they are trying to say without actually saying it. They usually want the reader to come up with what they are trying to say. Know when I read editorials I look a little closer to what they are writing and see if there is any unstated assumptions.

------------------------
Student AA

I learned a lot about what an argument really is, and how to find one. I learned about finding the claim and the reason, and also the supporting facts and the hiding assumptions being made. I found this topic very interesting, it really made me think. Now when I look at a newspaper or a magazine article I sit and pick out the claim in reason in my head. It really helps me understand the article, and see the purpose behind it. I also learned it is a lot harder to write your own argument then I thought it would be. In order to make a good strong argument you need to put a lot of thought into how you present your claim and reasons. Since this unit I have also been noticing that I can pick out bad and good arguments pretty easily.
An argument is essentially a claim and reason followed by evidence to support the claim. The most important thing I learned is in order to have a good thesis for an argument, you must have a claim and a reason. That made it easier to come up with the thesis as well. I had no problem writing the thesis when I kept the claim and reason in mind. In writing my proposal argument, my main problem was probably being a little vague in some aspects, which really hindered my argument in the rough draft. In order to have a good argument, I need to be specific and be ready to back it up with very good reasons. I did more research after I got the rough draft back and by adding the new information I found, I made my argument clearer and back it up even better. Another hard part of the argument paper was knowing which information to use and not to use. I had a problem with finding too much information and I had to narrow it down and choose only the good stuff. When came down to it, I had to use only the sources that backed up my claim perfectly. I think it worked out okay too!

When I look at editorials, I will definitely look for a claim and a reason or the because clause. If the editorial doesn’t have one, then it’s probably not a very good argument, or, maybe it is but they forgot the most crucial part of it. I also found that it is hard to find a clear claim and reason in a lot of editorials. I sometimes had to read the editorial a few times before I found what it was. The biggest thing I had trouble with was the unstated assumptions area. I know what they are but it’s hard finding them or coming up with what they could be. It was even harder finding an editorial that specifically had one.

Before the argument unit I knew what an argument was but I was not sure what the essentials were. After just the first day of the unit you made clear what the essentials of an argument were, and I think those will always stick with me. For a clear and good argument you need a claim and reasons. Along with those you should have supporting evidence, and you should always share some insight about the counterarguments as well. To make an argument better the author should always try and avoid any unrealistic expectations. The author should also try to avoid and many underlying assumptions as possible, the author shouldn’t assume the reader can do anything about or knows any particular information about a topic.

In my argument I had to work on supporting evidence. There are so many facts and statistics out there about marijuana it was hard for me to pick and choose the best ones that would make my argument the strongest.

In the future I think I will be more critical of arguments and editorials. Since I now know what to look in a good argument I will be looking for those reasons, supporting evidence, and I will also look to see if there are any holes in the argument. I think it will help me out a lot to see whether or not the argument is strong or not.
APPENDIX G: Focus Group Discussions

Tuesday, May 2

**Group One**

**WHAT DID YOU MARK AS A PLUS OR MINUS?**

JW: I like how you . . . wrote out “claim” and then explained it in parenthesis.

NH: Nice when had to come up with reasons for letter regarding parents. It helped us think of what a claim should be, reasons, whatever.

MH: The email about the parent trip was my favorite. I thought it was easier because it related to the real world. That was a good one. Sometimes with other exercises in class it was hard. Directions were clear-cut.

BH: I like the budget model one. It was straightforward but also, you had to look for things.

Courtney: I think the RA one wasn’t as effective because I spent more time trying to decide which one was best than making the argument.

MJ: I agree. It was really hard to decide which one.

MH: I think what could work even better. . . could assign some students to each candidate. Some would make the case for Paul, some for Sandy, like that. You would spend more time making your argument.

LP: It got me thinking about certain things. I like how you changed things up.

RG: The hardest thing to do was underlying assumptions. I could never figure those out. It was confusing and hard to figure them out. . . had to understand the article.

JW: Sometimes the claim was hard to find, too. Especially in the introduction.

**OF THE TWO EDITORIALS, WHICH ONE WORKED BETTER? WHICH ONE WAS EASIER FOR IDENTIFYING THE PARTS?**

MH: The library one was easier.

MJ agrees.

**WHAT WAS HARDER ABOUT THE TUITION EDITORIAL?**

JW: I think when they are long, it’s harder to find the information. It’s easier. . . It was kind of boring.

MH: Numbers don’t always make the case. Read numbers and try to think about numbers.

**DIRECTIONS CONFUSING?**

ST: The directions were pretty simple. Same for both. We knew what we were doing and they reminded us what to do.

SW: I relate more to the case study with the parents. We know what our parents like, what they enjoy.

MH: It is easier to write to siblings. It is easier to imagine sending it to them. I knew them and what they would want to hear.

**WHAT SHOULD I CHANGE FOR NEXT SEMESTER?**

JW: Expand the trip one and do more. It was fun. Make it into a bigger paper.
Group 2
LH: I marked as a plus learning about argument.
DC: Next time I read an editorial I can figure out what they’re trying to say. I like it because it seemed like a useful skill.
IS: I marked two of the five elements with a minus—assumptions and alternatives. It’s not as clear what they are.
AS: Maybe have a couple examples to explain what underlying assumptions are.
DC: I didn’t like the letter to siblings. You can convince them so easily. It would be easier to write to someone else. Would be easier to write to someone you don’t know as well.
AS: it’s like an automatic yes. Siblings have similar views.
IS: My sibling would want to go against me and do the opposite.
NZ: My sibling and I can’t agree on anything. It is impossible to agree. So this exercise didn’t work with me. I’m thinking in my mind, “Nope.”
KF: If you do this one again, have a third option that is more difficult because Mexico and Florida are similar.
JB: with the library editorial, needed more supportive evidence. I wanted to know more information, like at other universities are there lower rates. And how high would we raise in ratings if we had a fee.
AS: I liked that these are real life stories. These came out of the Daily. That made them more interesting. We understand the stories.
MV.: Real life editorials. I had read these earlier. I like it when you use actual examples.
IS: The editorial about the library was easier than the budget one. It didn’t have so much information. For the tuition one you had to read it all to get the claim. If you’re lazy, you might not read it all.
LH: I liked the library one. It was easier to find the claim.
AS: I liked the new budget model editorial better because I’m putting a lot of money into this school. I like to know where my tuition money is going.
JB: I probably thought the library one was easier. Overall, they helped me look at editorials differently. Now when I read editorials I will look for the claim.
IS: Of the arguments we had to write I liked the RA one better. I liked the options and for me it was looking for clues. Who was most suitable for the job. And it was easier than writing to siblings.

IF I WERE TO USE THESE EXAMPLES AGAIN WHAT SHOULD I CHANGE?
JM: Try using our papers for the editorials. Take the best of our papers and use them as examples.
IS: Probably try putting more examples of underlying assumptions and alternative positions. I don’t know how to do it but. . .
MV.: Probably try to get more on the alternative positions. We talked about it a couple of days in class, but it was still . . .

NZ: I would say get editorials that stir up more of a debate.

**Group #3**

AZ: I marked that the assumptions and alternatives were hard to identify. It depended on the argument we were trying to break down.

ST: I also marked assumptions as harder to figure out.

AA: The alternative positions were harder to find.

WAS ONE OF THE EDITORIALS MORE CLEAR THAN THE OTHER?

ST: I thought the tuition editorial was easier. It stated the reason, where they money would go, and it was easier to pick out supportive facts.

SC: The library one we could relate to. It was more simple.

AZ: I liked the editorials. It was pretty easy to identify the claim and reason. Sometimes it was hard to do that with the editorials we brought into class.

EG: I liked the argument we were to write to a sibling.

AA: It was easy to find reasons. More than just the facts you gave us.

ST: There were more choices on the RA one.

AZ: There were more choices and I just sort of chose one that would kind of be like an RA I would like.

**WHAT IS HARDER ABOUT WRITING THE EMAIL TO A BOSS?**

AA: The boss one had to be more professional.

**WHAT WOULD YOU SUGGEST THAT I CHANGE IF I DO THIS EXERCISE AGAIN?**

ST: I would use the vacation one.

AA: Maybe you should say there isn’t a right answer for the RA one so we don’t work so hard to find that.
### APPENDIX H: Final Diagnostic Rubrics

#### ON STUDENT WRITING: Rubric for Evaluating Student E-Mail Arguments In Response to Case Narratives

<table>
<thead>
<tr>
<th></th>
<th>POOR</th>
<th>FORMATIVE</th>
<th>DEVELOPING</th>
<th>MATURE</th>
<th>EXEMPLARY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLAIM</strong></td>
<td>Student's argument fails to state clear claim for argument</td>
<td>Student's argument implies a claim without making a clear statement</td>
<td>Student's argument makes a partial claim for argument</td>
<td>Student's argument accurately states editorials' claim for argument</td>
<td>Student's argument states reasonable claim with precision</td>
</tr>
<tr>
<td><strong>REASON</strong></td>
<td>Student's argument fails to provide any reason for the argument</td>
<td>Student's argument provides a reason without making it clear</td>
<td>Student's argument provides a partial or unclear reason for the argument</td>
<td>Student's argument provides an adequate reason to support the argument</td>
<td>Student's argument clearly states an appropriate reason</td>
</tr>
<tr>
<td><strong>EVIDENCE</strong></td>
<td>Student's argument provides no evidence to support argument</td>
<td>Student's argument provides evidence that is confusing and works against the argument</td>
<td>Student's argument provides some decent support for the argument</td>
<td>Student's argument provides an adequate amount of evidence to support argument</td>
<td>Student's argument provides comprehensive evidence to support argument</td>
</tr>
<tr>
<td><strong>COUNTER-ARGUMENT</strong></td>
<td>Student's argument provides no counterarguments</td>
<td>Student's argument provides unproductive counterarguments</td>
<td>Student's argument provides partial but incomplete counterarguments</td>
<td>Student's argument provides adequate counterarguments</td>
<td>Student's argument clearly provides several major counterarguments</td>
</tr>
</tbody>
</table>

#### ON STUDENT READING:

Rubric for Evaluating Student Ability to Identify Parts of Argument Within Editorials

<table>
<thead>
<tr>
<th></th>
<th>POOR</th>
<th>FORMATIVE</th>
<th>DEVELOPING</th>
<th>MATURE</th>
<th>EXEMPLARY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLAIM</strong></td>
<td>Student fails to state main claim of the argument</td>
<td>Student identifies wrong claim for the argument</td>
<td>Student identifies just part of the claim for the argument</td>
<td>Student adequately identifies claim</td>
<td>Student states claim with clarity &amp; completeness</td>
</tr>
<tr>
<td><strong>REASON</strong></td>
<td>Student fails to provide any reason for the argument</td>
<td>Student identifies a reason that is unclear and/or confusing</td>
<td>Student identifies a minimal reason for the argument</td>
<td>Student identifies an adequate reason for the argument</td>
<td>Student identifies an appropriate reason with special clarity &amp; completeness</td>
</tr>
<tr>
<td><strong>EVIDENCE</strong></td>
<td>Student identifies no evidence for the argument</td>
<td>Student lists some insignificant evidence for the argument</td>
<td>Student lists some solid support for the argument</td>
<td>Student lists an adequate amount of evidence for the argument</td>
<td>Student identifies a comprehensive amount of evidence</td>
</tr>
</tbody>
</table>
APPENDIX I: Informed Consent Form

INFORMED CONSENT DOCUMENT

Title of Study: Ideas for Teaching Written Argument to College Freshman

Investigators: Allison Greenwald, M.A. student
Michael Mendelson, Professor of English

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

INTRODUCTION

The purpose of this study is to learn about what helps students learn the process of writing written argument. Writing a position paper is one of the major assignments in English 105. My plan is to devise a variety of exercises that will help students grasp this difficult concept and process. I will test my ideas with students this semester and next semester, evaluating what you know at the beginning and the end of the unit and asking you to write a reflection on what you learned by the end of the unit. You are being invited to participate in this study because you are in the English 105 section I teach.

DESCRIPTION OF PROCEDURES

If you agree to participate in this study, your participation will last for four weeks while we do the position paper. During the study you may expect the following study procedures to be followed:

- At the beginning of the unit and after reading the book’s explanation of claim-reason-warrant, you will be asked to write a claim-reason-warrant that show what you understand about writing a logical argument.
- Over the course of several weeks, you will participate in various learning activities designed to clearly explain the process of writing logical argument, including the structure of claim-reason-warrant.
- After you are done writing the final position paper, you will be evaluated again to show how well you understand the structure of a logical argument and how well you can write a logical argument.
- At the end of the unit, each of you will also write an open-ended reflection on your learning process, detailing what explanations and exercises were least and most helpful.

RISKS

There are no foreseeable risks at this time from participating in this study.
BENEFITS

If you decide to participate in this study there will be no direct benefit to you, though I hope that some of my learning exercises will make this difficult topic more understandable. I believe that the information gained in this study will benefit other students and teachers because it will identify what is the most effective pedagogy. I will then use this information to inform my future teaching and share it with other teachers, as well.

COSTS AND COMPENSATION

You will not have any costs from participating in this study. You will not be compensated for participating in this study. I will not make completion of this study the basis for grading or rewards of any kind.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled.

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken.

- You will be given a code name that corresponds with your initials and only I will have access to that code.
- I will keep the code confidential in my private office, which is locked.
- Only you code name will be used in any reports and findings. If the results you are published, your identity will remain confidential.
- The data will be destroyed by 12/06.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study.
• For further information about the study contact Michael Mendelson at 294-6856 or mendy@iastate.edu
• If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office of Research Assurances, Iowa State University, Ames, Iowa 50011.

************************************************************************

PARTICIPANT SIGNATURE

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

Participant’s Name (printed) ____________________________________________

_________________________________________ (Participant’s Signature) (Date)

_________________________________________ (Signature of Parent/Guardian or Legally Authorized Representative) (Date)

INVESTIGATOR STATEMENT

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

_________________________________________ (Signature of Person Obtaining Informed Consent) (Date)
APPENDIX J: Class Teaching Notes From Argument Unit (fall semester)

10-13

I explained that we were beginning a new unit on argument and I would be doing a study on the teaching of argument that would be part of my master’s thesis.

I passed out the informed consent forms and explained that I would appreciate their participation but they were free to not participate if they had reason for doing so.

Showed them how to find the student information sheet to complete on the computer and the “identify exercise” which asked them to label parts of an editorial. They put the student demographic information and their response to the “identify parts of an argument” exercise in the Novell drop box for me before they left.

Their assignment for Tuesday was to write a logical argument using the case narrative I provided about vacation planning with siblings. It was to be an e-mail to a sibling, arguing to send mom and dad on an anniversary trip and which trip would be best. They were also asked to read chapter 18 in Everything’s an Argument and bring an example of an editorial.

10-18

In class today I had students that were absent our first day provide demographic data, sign informed consent forms and complete the “identify parts of an argument” exercise.

I also collected the memos students wrote for the “write an argument using a case narrative” exercise. Students seemed fine with their task of writing their siblings to convince them of a certain trip to send mom and dad on for their anniversary.

I asked students to take out the editorials they’d brought with them to class and work with them to see if they could identify the claim. They were then to meet with a partner, sharing their examples, thoughts and questions.

Then we discussed as a class how hard it is to find the claim in an editorial. They volunteered their examples and seemed pretty comfortable with it.
Next I explained how indicator words can be a clue that a claim is coming. We looked at a list of indicator words I’d given them and they tried to find an indicator word in their editorial. Several shared examples.

We went over our assignment sheet, focusing on how to choose a topic, since the topic needs to be chosen by Thursday. They had questions, and this is different than I’m used to doing it, so it will be interesting to see what they come up with.

10-20

Students started the class period by writing for ten minutes on what they learned about plagiarism from EA chapter 20. We then discussed it briefly.

I asked them to define argument and we talked about how an argument is a combination of two statements, a claim and a reason supporting a claim. I talked about the structure of reasoning being “this, because of that” and explained the “why” test and “therefore” test. We also looked at a list of indicator words for a reason. I pointed out that a key task for them will be finding what kind of evidence would be needed to prove their claim.

We also talked about EA chapter 19 on fallacies. I had them look at the examples of arguments I provided in Novell for examples of the different fallacies. They worked on that alone for awhile and then they volunteered examples they had found.

Next we went around the room and students shared their topics. I asked questions to clarify and made suggestions. I encouraged them to find a way to make their issue “local” and to choose a topic with which they had familiarity and some expertise.

10-25

Our class met in the library today because that is the best way to get students to do research! Several students told me they had never even been in the building before. Appendix ? is the worksheet I asked them to work through on their own in the library. I started by giving them the worksheet and asking them to read through it and see if they had any questions. I also asked them to turn in their thesis statements.

While they worked through their various tasks like using an index to find a magazine/journal source and finding a book source by using a keyword search on the library website, I looked over their thesis sentences. Most of them were quite poor, lacking a clear claim and reason. I made notes on their pages to explain what needed to be changed and giving some
examples of what would work. I gave them to students as they came by at the end of the period to “check out” and show me what they had accomplished. Most of them had found some good materials and some said they were pleasantly surprised by what they found. They had front pages of books and copies of articles to show me. It felt very right to take a class period for this library research because that is the only way to ensure that they do library research!

October 27, 2005

Class today went especially well. First, we worked on identifying the reason in an argument. I could tell from their thesis sentences that many of them did not understand what exactly the reason of an argument should be. I provided a list of indicator words and had them do the following with several example arguments:

1. Underline in red the indicator words
2. Highlight the conclusion and underline the reasons
3. List what questions come to mind about whether the reasons are acceptable and credible

The students seemed to do okay with this exercise.

Then I talked about the thesis statements they are writing. I explained how many of them do not yet have an approved argument thesis, and that step needs to be done through a conference or via e-mail by this Sunday. We went over the assignment sheet in more detail and I explained that a policy argument should be over what should or should not be done. Policy recommendations should include the need/problem, a plan, advantages of the plan and the disadvantages of the plan (and why they aren’t that significant). I explained why they need to choose a specifically current topic that they know something about.

We discussed our day in the library and I showed them the guides within the instructional commons, should they want to use those resources.

They turned in their paper proposals and said the hardest part of it was considering the counterarguments. I assured them we would be working on that next week!

The best part of the class was an exercise where they wrote two claims for an argument, rotated chairs one to the left, and then wrote a reason that would work for each claim. We went around and shared their best examples. I explained that not all arguments will be so obvious as “This . . . because of that” but that it is helpful to use that structure while we come to understand argument.
Finally, we talked about how to choose good sources and how to decide when to use a quote or a paraphrase. Chapter 21 (which they were to have read) explains this as well as rules for citing sources correctly. Their assignment for Tuesday is to write an annotated bibliography with three sources. I provided directions and an example of an annotated bibliography for their use.

Tuesday, November 1, 2005

I began class by asking the students to narrow down their argument position to a simple one-sentence statement like “marijuana should be legalized.” They were then to fold a clean piece of notebook paper lengthwise and write their narrowed claim statement across the top left side and write beneath the claim all the reasons they hold that position (minimum five).

Students turned in their annotated bibliographies and we discussed those challenges.

Then we talked about how to evaluate sources, using the following questions:
1. How respected is the source’s reputation?
2. How objective is the source? Does s/he have a vested interest?
3. How reliable is the claim? Is it corroborated by other independent sources?
4. How impressive is the source’s expertise/training?
5. How recent is the evidence?

The biggest problem revealed by their proposals was a lack of specific audience. We went over the assignment sheet again and discussed reasons WHY I want the paper written as an e-mail to a specific person.

Returning to the sheet with claim and reasons, I asked them to trade papers with a partner. The partner was to read the partner’s claim and support and list across from it (upper right corner) different audiences who might oppose the claim. Then I encouraged them to be as contrary as possible and fill the right side of the page with statements opposing each reason the original writer had written down. It was hard for some who had topics that were totally unfamiliar topics. Students next discussed the counterarguments they had thought of with the author and we discussed the importance of considering multiple points of view when making an argument. I underscored that these papers have to address counterarguments.
I provided an example of an outline since they have an outline due Thursday. I underscored the importance of identifying and explaining a problem/need, presenting a plan to solve it, considering the counterarguments but explaining why your plan would work. The outline needs to have minimum 20 lines, and their revised thesis and audience must be provided as well.

We looked at a paper model on the topic of legalizing marijuana. I pointed out the specific audience, the counterarguments, and how I would evaluate the sources.

We went over the schedule for the rest of the semester, including the PowerPoint presentations which are due right after the paper. Students told me their topic and we tried to find whether they could be grouped for a PowerPoint presentation with someone working on a similar topic.

**November 3, 2005**

In class today I met one on one with students to go over their thesis, audience and outline. I also went over their corrected annotated bibliographies with them and pointed out what they needed to adjust. While I did these meetings in the back room they went through a PowerPoint show on how to make a powerpoint presentation. They also started working on their own presentation, choosing a template with their group members. I also asked for them to come up with the least appropriate template for a topic. There were some good contestants!

Then we talked about writing the draft, specifically incorporating quotes and paraphrases and citing them correctly. They had to look at signal words and write some sentences that used them, including using the correct punctuation (EA pp. 417-421 helped).

Some students are still resisting getting a specific audience. I’m also surprised how a few continue to not understand what thesis would qualify as an argument and what wouldn’t. I think I need to give them a quiz, and have them mark “argument” and “not an argument.”

**November 8**

First, I had students read a short essay from OWMC entitled “Why I Quit the Company” and write out what they thought was the claim, the reason and evidence to support the argument. I wrote some of their answers on the board and we discussed the components. I can still tell that some are shaky!
Students were to prepare a rough draft for class today and bring an electronic copy and hard copy to class. Most of them did so. We spent most of the class period trying to improve their papers them in the following specific areas:

- paragraph unity and development
- logic of argument—identifying a problem and offering a feasible plan for a solution; supporting your argument with data
- making sure to incorporate quotes smoothly and punctuate them correctly
- format—addressed as an e-mail and proper works cited page

Their assignment was to finish these corrections and send it by midnight to the two classmates whose names came after theirs on the class list. With the two papers they received to evaluate they were to comment using either track changes or the comment feature or simply write one page of positive and negative comments regarding content, organization, mechanics, and expression. They were also to raise several questions the paper failed to satisfactorily address.

**November 10**

I gave the students a quiz that involved reading six sentences I provided and deciding which of them met the criteria of being an argument.

Then we did peer review, with students taking 5-7 minutes with each student whose paper they reviewed, explaining their comments and feedback.

Next we worked on the PowerPoint presentations which must be done two days after the paper. Together we went through a sheet of PowerPoint tips. Then students were told to work on their storyboard, four pieces of paper on which they sketched their plans for slides. They met with their groups to share their storyboards and discuss what would be the best order for the presentation. I encouraged them to designate a technical person, a design coordinator and a slide editor. Students continued to work on making choices for style (ie. template, font), working together or alone.

**November 15**

I began by having students hand in their position papers in folder with rough drafts, outline, peer reviews. Then I had them write for ten minutes on what they had learned through the process of researching and writing your position paper. What was hard? Was anything new? Did anything “click” at some point? What did you discover?
I also had them complete the diagnostic for identifying parts of an argument and writing an argument.

Students spent the rest of class working on their PowerPoint presentations. I guided them through decisions like who would speak first and last, the importance of good transitions, etc. I also repeated rules for length.

Students are to bring their PowerPoint presentations on a flash drive and present them to the class on Thursday.

November 17, 2005

Student presentations took the entire class period. They were all decent and some were excellent. It was good to observe them sharing their work with one another. Most of the presentations were pretty good! I think the PowerPoint requirement helped students focus on the essentials of their argument. Perhaps the different arguments presented students challenged to think about issues in different ways, which is always a good thing.
APPENDIX K: Diagnostics From End of Unit (first semester)

IDENTIFYING PARTS OF AN ARGUMENT
Please complete the following diagnostic over what you know about logical argument. Specifically, read the following essay, looking to identify the following parts of the argument:
- claim
- reason
- supporting evidence

List the claim

List the reason

List supporting evidence

Editorial Public Records for Public Interest

Last week, president David Skorton joined his counterparts, Gregory Geoffreý of Iowa State and Robert Koob of the University of Northern Iowa, in asking the state legislature to allow each university’s foundation to keep donors anonymous and activities private. This is in response to an Iowa Supreme Court ruling in February that the ISU Foundation must disclose its records to the public. We said at the time that the court’s ruling was a victory for transparency and accountability in government and find the presidents’ arguments no more persuasive now.

The presidents’ reasoning focused on the idea that their foundations need secrecy in order to recruit donors. The logic that more people will be willing to donate if their names would be kept anonymous is, however, somewhat backward. It is far more reasonable that donors will be inclined to contribute financially if they can feel comfortable the money is being spent appropriately. Indeed, this is how the court case began: The ISU Foundation violated the wishes of a donor, whose will bequeathed a 240-acre farm to the university with the stipulation that it could never be sold.

We understand that some donors may wish to remain anonymous, especially large contributors who may find themselves in other institutions’ telemarketing lists. But their interests must be weighed against the universities’ obligation to Iowa’s taxpayers—who, collectively, are rather big contributors as well.

In 2002, the trust of Wal-Mart founder Sam Walton awarded the University of Arkansas $300 million with the caveat the university must keep its chancellor on board for at least five years, according to the Atlanta Journal Constitution. If the Legislature listens to regent university presidents, such a deal might never be made public here in Iowa.

The foundations are essential to the survival of the universities: Donations have been steadily increasing, while state support has dwindled. The UI Foundation raked in $77.3 million in donations last year—up from $65.4 million in 2000—while state support declined from 21 percent of the University’s 2000-2001 budget to 14.1 percent last year. These activities should be applauded, not hidden behind a velvet cloak of anonymity.

Iowans also have a right to know where the money is going. In 2002, the UI Foundation’s then-president, Michael New, received a $55,000 raise. In 2003, the UI Foundation increased its fees to the university, while cutting 10 jobs. What about the foundation’s investments? Is it making wise business decisions that also reflect our values on human rights and equality? The public should have access to this information.

As state universities move towards relying more heavily on private donations and fundraising, they must remember they are public schools. The Supreme Court ruled the close relationship between the foundation and the university made the foundation a public entity, as well, subject to the same scrutiny as any government body. Lawmakers should remember this ruling and ignore the regent university presidents’ attempts to shroud fundraising activities.
WRITING AN ARGUMENT BASED UPON A CASE NARRATIVE

Do your best to write a logical argument for this case narrative.

Case narrative: As a Residence Life Director at ISU you are involved in hiring RAs to work on different dorm floors. The floor you need to hire for today is a co-ed floor in the old Towers dorm which has mostly older students in single rooms. 70% of the students are male. In light of the job requirements, which of the following candidates would you hire? What are your reasons? What evidence supports your reasons?

Job requirements: RAs are to coordinate the community life on the dorm floor, which means organizing socials and service projects, as well as befriending students struggling with any kind of difficulty. RAs are also to police the floor, making sure students follow rules.

Write an email to your boss, recommending one of the candidates and explaining your reasons. Remember: argument should include a claim, reason and evidence.

Paul Charlson
Age 21
Major: business
Prior work experience: bartender, YMCA camp counselor,
Career aspirations: run a summer camp
Described by references as follows: “lots of fun” – “always creating a good time” – “had difficulty disciplining campers who crossed the line”

Sandy McGee
Age 20
Major: agronomy
Prior work experiences: landscape worker for 3 summers
Career aspirations: dreams of managing an organic farm operation
Described by references as follows: “committed and focused” – “shy and reserved” – “hard worker”

Madeline Herman
Age 19
Major: Education
Prior work experience: lifeguard, youth soccer coach
Career aspirations: teacher
Described by references as follows: “energetic and vivacious” – “plays favorites and prefers the popular crowd” – “talks more than she listens”

Harold Peters
Age 22
Major: Animal Ecology
Prior work experience: forest ranger, farm laborer
Career aspirations: park ranger in western state
Described by references as follows: “inquisitive mind” – “loves to explore and learn in a natural environment” – “self-sufficient, more of a loner”
APPENDIX L: Early Data Results

Preliminary results of research with 105 students learning about argument Fall '05.

<table>
<thead>
<tr>
<th>Student</th>
<th>Identify parts in casino editorial</th>
<th>Identify parts in public records editorial</th>
<th>Write argument regarding best trip</th>
<th>Write argument regarding RA position</th>
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<tr>
<td>BM</td>
<td>10</td>
<td>10</td>
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<td>27</td>
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This data led me to make some changes in the diagnostic document design and to add focus group discussions the second semester.
APPENDIX M: Diagnostics From Beginning of Unit, Spring Semester

(see Appendix B and K for diagnostics used fall semester)

Writing an Argument
Please read the following editorial with care. Then look at parts of an argument outlined below and read the editorial a second time. As you read, look for the essential components of a complete argument: a primary **claim** and a **reason** that explains why the argument is valid. For example, here is a complete claim and reason:

*Jazz is more complicated than rock and roll* [claim], *because it involves a fuller command of ones instrument and greater knowledge of musical elements* [reason].

Arguments also include **evidence**, additional information which supports the argument. There are also **underlying assumptions** about what the audience or author believe that may not be directly stated. In the case of the jazz argument, there is the assumption that musical complexity depends upon specific knowledge. An argument sometimes acknowledges but dismisses **alternative positions** taken by those who see the issue differently.

In the following editorial please identify the following elements of argument, using either quotes or paraphrase:

List the **claim** (the author’s basic message that s/he wishes you to accept)

List the **reason** (a proposition that supports the claim, answering the question “why”; the “because” that justifies the claim)

List **supporting evidence** (particular observations, research data, specific examples or analogies used to corroborate the claim and reason)

List any **underlying assumptions** (any ideas that the author assumes that you hold which would include you to support the argument)

List **alternative positions** (any opposing ideas the author raises and perhaps dismisses)
Editorial

New budget model will improve tuition distribution

So you’re a physics major from Storm Lake taking 15 credits per semester. That means you’re paying the university $5,634 in base tuition each year. Where does that money go? We don’t know. You don’t know. Not even the bean counters in Beardshear Hall know. Your tuition may pay the down payment on a new electron microscope in Physics Hall, but it just as likely pays the hourly wages of a few nude models in the College of Design.

Thankfully, that’s about to change.

The ISU administration is currently working out a new budget model for the university, wherein a student’s tuition is tied to his or her home college and to the specific classes he or she takes. The model replaces the current system, in which tuition and state funds are lumped together and allocated haphazardly to different university units based on their budgets.

Under the new model, 25 percent of a student’s tuition goes directly to the college in which they’re enrolled. For you, the physics major, that’s $1,408 straight to the College of Liberal Arts and Sciences. The other 75 percent is divided among the classes taken — if you take a drawing class as three of your 15 credits in a semester, the College of Design will get $563.40 — good for one nude model for a whole semester.

“What we’re trying to do is get a better linkage between a college’s instructional responsibilities and the resources that flow into that college,” said Mark Chidister, assistant to the president for budget planning and analysis.

This sounds like a good plan. As ISU President Geoffroy noted in the Feb. 10 Daily article, “Budget model looks at colleges’ enrollment,” the plan could drive colleges to offer more attractive classes and encourage students from different disciplines to explore classes across curriculums. More importantly, colleges will have more incentive to run efficiently when their budgets are tied directly to the students they serve.

That said, the model does raise a few concerns. The College of Liberal Arts and Sciences is the largest on campus and serves students from every other college. Care must be taken to make sure LAS doesn’t receive a disproportionate share of student tuition at the expense of smaller colleges, such as the colleges of Agriculture and Human Sciences.

Also of concern is the transition from the current system. If not properly phased in, a system so radically different could shock the colleges’ budgets.

Chidister assured us both of these concerns would be addressed in testing and modeling of the budget plan that will be taking place within the next couple of months, well before the budget plan is approved in this summer and installed in the summer of 2007. The 25/75 tuition breakdown isn’t set, and may change to ensure each college’s budget meets its responsibilities.

We’re satisfied with that assurance, and appreciate the deliberative and careful process the Budget Model Development Committee is following. This is a critical change, and one that appears to be on the right track.

Please do your best to write a logical argument involving the following case narrative.
Case narrative: Your siblings and you have decided to go together to give your parents a trip for their 25th anniversary. You want to surprise them with airplane tickets to somewhere you think they would enjoy. You’ve been put in charge of finding the vacation that best meets their interests and needs. These are the pertinent facts to consider:

- You can’t spend more than $1,200 on airfare for both parents combined
- Consider your parents’ interests: History? Art? Sports?
- Consider their preference in weather
- Consider their activities level—do they like to walk and ride bikes or are they more sedentary?
- Consider their tastes--luxurious and expensive or simple and frugal
- Consider where they have traveled to before and whether they like to travel to new places or familiar places

Your job is to choose one of the trip options (see next page) and write an e-mail (300 words or less) to your siblings explaining why it is the best choice. Make a logical argument based upon what you know about your parents. You cannot invent another option. If this scenario doesn’t fit for your family (ie. your parents aren’t living or your mother refuses to fly on an airplane), write your argument in terms of an aunt and uncle or someone you know well. Feel free to make up as much as you want, as long as your email explains the following:

- Which trip will you recommend to your siblings?
- What are your reasons?
- What evidence supports your reasons?

(same advertisements for trips were used as in the fall – see Appendix B)
APPENDIX M (cont): Diagnostic Used at End of Second Semester

Please review the elements of an argument outlined below. Then read the attached editorial with care. Next, read the editorial a second time, trying to identify the different parts of the argument. Following the second reading, please identify different parts of the argument.

Five elements of argument
- **claim** (the author’s basic message)
- **reason** (whatever ideas or data the author uses that supports the claim; the “because” that justifies the claim)
- **supporting evidence** (particular observations, research data, specific examples or analogies used to corroborate the claim and reason)
- **underlying assumptions** (any ideas that the author assumes that you hold which would lead you to support the argument)
- **alternative positions** (any opposing ideas the author raises and perhaps dismisses)

**EDITORIAL in Iowa State Daily: A library fee should pay for research tools (3.22.06)**

Where do you go to search for information?

Google Scholar? Lexis-Nexis?

We know where you don't go: Parks Library. Attendance is dropping at the library, as the Internet and the ubiquity of personal computers have allowed students to do most of their research from home, if not in a wireless hot spot on campus or in Ames.

The people who do come to the library, it seems, come not to check out a pile of books or to leaf through journals, but to check their e-mail or to catch a quick nap between classes.

For library officials, this is a problem.

Also of concern is the ISU library system's standing among other research libraries. The system's place in the Association of Research Libraries' ratings recently dropped - to 79th out of 113. The drop in quality is attributable mostly to falling state appropriations to the university.

But the dean of the library has a solution.

Eight of the Big 12 universities have student fees in place to help fund their libraries. If Iowa State were to adopt such a fee, perhaps $25 to $100 per student, library officials say it could raise their budget by $1.25 million to $5 million per year - a dramatic increase in funding. The extra cash would be used to lure students back into the physical library - by adding a coffee shop or increasing lounge area - and to make the library more useful, with a next-generation electronic library and more technological service tools to help with class projects.
If the student fee comes to pass, we hope the dean of the library focuses much more on the latter than on the former.

Times have changed. Why should students physically go to a library when so much of the information they need is available from any computer with an Internet connection? Adding a coffee shop or more lounge area sounds nice, but does little to actually improve the research aspect of the institution or to encourage students to actually do research in the library.

If students are going to pay more for the library, the library must focus on providing services they find valuable - more online databases, more subscriptions to journals online, and more digitized and downloadable texts.

Anything less would do nothing to improve the quality of the library; it would just provide students a beverage and something to snack on while checking Facebook, and then a place to sleep when they are done.

The library can be better - it needs to be better - and in the absence of support from the state, another student fee may, regrettably, be the only answer. If it is, we sincerely hope the money raised goes toward useful research tools, not coffee shops and comfy couches.

List the claim

List the reason

List supporting evidence

Part 2 of diagnostic. Write an argument about a case study

Used identical version to first semester found in Appendix B.
APPENDIX N:  Early Rubric
(for final rubric design, see Appendix H)

Results evaluating arguments written by students

<table>
<thead>
<tr>
<th>Best trip argument</th>
<th>(evaluated on scale of 1-5, with five as best/excellent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear argument with claim and reason</td>
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</tr>
<tr>
<td>Strong details provide evidence</td>
<td>1  2  3  4  5</td>
</tr>
<tr>
<td>Consider (and dismiss) other possibilities</td>
<td>1  2  3  4  5</td>
</tr>
<tr>
<td>Sensitivity toward audience and context</td>
<td>1  2  3  4  5</td>
</tr>
<tr>
<td>Persuasive words and tone</td>
<td>1  2  3  4  5</td>
</tr>
<tr>
<td>Establishes writer’s credibility and ethos</td>
<td>1  2  3  4  5</td>
</tr>
<tr>
<td>Easy to follow line of argument</td>
<td>1  2  3  4  5</td>
</tr>
</tbody>
</table>

Total points    _______

<table>
<thead>
<tr>
<th>RA job argument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear argument with claim and reason</td>
</tr>
<tr>
<td>Strong details provide evidence</td>
</tr>
<tr>
<td>Consider (and dismiss) other possibilities</td>
</tr>
<tr>
<td>Defines ideal and measures options against it</td>
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<tr>
<td>Sensitivity toward audience and context</td>
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<tr>
<td>Persuasive words and tone</td>
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<tr>
<td>Establishes writer’s credibility and ethos</td>
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<tr>
<td>Easy to follow line of argument</td>
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</tbody>
</table>

Total points    _______
APPENDIX O: Answer Sheet Given to Raters of Diagnostics

Rubric for identifying parts of an argument  November 2005

Casino editorial

Identifies main claim
   casinos should no longer be required to be situated on water

Identifies main reason
   romantic notion is nonsense; environmental concerns

Lists several pieces of supporting evidence
   ➢ problem during hurricanes
   ➢ romantic notions less important than practical reality of how coastal development damages the environment
   ➢ make money the same wherever
   ➢ Katrina aftermath is perfect opportunity to change the law

Public records editorial

Identifies main claim
   should reject University Presidents’ request that foundation records remain private and confidential

Identifies main reason
   public deserves to know; better accountability if public knows details

Lists several pieces of supporting evidence
   ➢ secrecy won’t help fundraising—transparency will
   ➢ universities are increasingly reliant on private funding BUT
   ➢ universities are still public institutions subject to scrutiny of taxpayers
   ➢ problems can result when secrets are allowed
   ➢ Supreme Court ruled accordingly and that ruling should be upheld
Rubric for identifying parts of an argument

Best Trip editorial
- identifies main claim
  - new budget model is better

Identifies main reason
- because student tuition will be tied to their tuition

Lists several pieces of supporting evidence
- better to know where money goes
- offer better classes
- encourage to take classes across curriculums
- incentive for colleges to run more efficiently

Identifies underlying assumptions

Identifies author’s attempt to consider (and dismiss) other possibilities
- LAS should not get disproportionate share
- transition might be a shock

Library editorial

Identifies main claim
- ISU should have student fee to help fund library, focusing on electronic/technological services, not coffee shop

Identifies main reason
- ISU library isn’t being used
- Library quality is going down due to poor funding

Lists several pieces of supporting evidence
- attendance numbers as students do research on-line
- Library’s rating has slipped to 79th out of 113
- Fee would bring in $5 million/year

Identifies underlying assumptions
- better funding will lead to higher rating

Identifies author’s attempt to consider (and dismiss) other possibilities
## APPENDIX P: Tables of Diagnostic Data

<table>
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<th>Fall Identify</th>
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