

The Effect of Direct, In-Class Grammar Instruction  
on the Quality of Student Writing

by

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## **ABSTRACT**

The study behind this dissertation examines the difference in the quality of writing between two groups of students in freshman English classes at a large public university. The study compares one cohort of students, which met in traditional face-to-face class meetings as well as in an online environment and received direct grammar instruction in every class session, with a comparable group of extended studies students who took the same freshman English course but met only in an online environment, and so did not receive direct classroom instruction in grammar. The comparison between an onsite class and an extended studies class allowed an extensive analysis of the grammar-teaching factor and its effect on the quality of student writing. In addition, the study examines the issue of writing quality two ways: editorially, by looking at the number and types of errors, and stylistically, by looking at sentence structure, especially right-branching free modifiers, final free modifiers, and words per clause, criteria suggested by scholars as being essential to the fluency and maturity of college students' texts. Quantitative methods and results are balanced by qualitative analysis of students' writing reviews and interviews with composition instructors. A summarizing conclusion suggests ways that this study contributes to the grammar-and-writing knowledge base, and proposes areas that remain under-researched in the grammar-and-writing controversy even after more than 100 years of intense study.

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# CHAPTER I

## INTRODUCTION TO THE GRAMMAR-AND-WRITING CONTROVERSY AND TO THIS STUDY

The issue of how, or even whether, the teaching of English grammar helps students to improve their writing remains controversial even after more than 100 years of investigation. My own introduction to this controversy came from reading Patrick Hartwell's 1985 article "Grammar, grammars, and the teaching of grammar" as an assignment in a graduate course. Having a background in linguistics and previous study in numerous ancient and modern languages, where the value of a solid foundation in grammar is a given, I had assumed the existence of a similar consensus regarding grammar in English composition and other writing courses. Reading Hartwell's article showed me otherwise.

Apparently not only was there not a consensus about the value of grammar study in English composition classes, but, in fact, the debate was over, at least for Hartwell, who said (p. 105), "For me, the grammar issue was settled at least twenty years ago with the conclusion offered by Richard Braddock, Richard Lloyd-Jones, and Lowell Schoer in 1963":

In view of the widespread agreement of research studies based upon many types of students and teachers, the conclusion can be stated in strong and unqualified terms: the teaching of formal grammar has a negligible or, because it usually displaces some instruction and practice in composition, even a harmful effect on improvement in writing.

Learning about the 1963 “Braddock Report,” as it is usually called (the official title is *Research in Written Composition*), led me to a second major report containing research on grammar and writing, the “Hillocks report” of 1986 (the official title of which is *Research on Written Composition*). Like Braddock before him, George Hillocks also condemned grammar as unhelpful to the improvement of writing, saying

The study of traditional school grammar (i.e., the definition of parts of speech, the parsing of sentences, etc.) has no effect on raising the quality of student writing. . . . Taught in certain ways, grammar and mechanics instruction has a deleterious effect on student writing. . . . School boards, administrators, and teachers who impose the systematic study of traditional school grammar on their students over lengthy periods of time in the name of teaching writing do them a gross disservice, which should not be tolerated by anyone concerned with the effective teaching of good writing. (p. 248)

These two reports were both commissioned by the National Council of Teachers of English (NCTE), and therefore stood as statements of official policy and position on the subject of grammar and writing. Being interested in the study of grammar, and believing in its value, I felt instinctively that the conclusions of the Braddock and Hillocks reports were incorrect. However, they appeared to have the support of research on their side. I wondered if the conclusions of these reports represented the general consensus among the English teachers who made up the membership of NCTE. I found, as I searched further into the literature, that there are, in fact, other views, pro-grammar views, not represented by the Braddock and Hillocks reports, which also have research to support their

positions, and that the grammar controversy is, in fact—contrary to what Hartwell had said—not at all settled. This led me to seek additional information about the teaching of grammar and its connection to the quality of writing. It became clear to me that even at the time Hartwell wrote, in 1985, there was not nearly as much of a consensus on the grammar issue as he implied.

### **The grammar issue unresolved**

Already in 1978, well before Hartwell’s 1985 article and Hillocks’s 1986 meta-analysis, John Mellon had issued a stern challenge to the Braddock report’s condemnation of grammar’s effectiveness, calling it “one part true and two parts false” (p. 242). Though Mellon agreed with Braddock that decontextualized grammar drills are not helpful to the improvement of writing, Mellon strongly criticized the Braddock statement’s wholesale dismissal of grammar study, saying

But insofar as it pertains to the nomenclature for labeling surface structures of written sentences and to the display of these structures arrayed in certain stylistically notable sentence patterns, it maligns a method of teaching that has worked . . . throughout the history of education. (p. 253)

Then, in 1981, Martha Kolln registered an equally strong disagreement with both the conclusions and the subsequent effects of the Braddock report, concluding an in-depth critique with this objection: “That famous statement has probably had a more harmful effect on our students these past . . . years than all the time spent memorizing rules and diagramming sentences ever had” (p. 147). So, even at the

time of Hartwell's article, there was serious opposition to the anti-grammar position articulated in the 1963 Braddock report. Subsequently, David Tomlinson (1994), in an especially penetrating analysis, found a number of serious issues in Roland Harris's 1962 University of London dissertation, which had been the primary basis of the Braddock report's condemnation of grammar. Tomlinson stated, "For many years now, opponents of grammar in the classroom have been able to shut down debate by saying that scientifically rigorous studies have repeatedly shown grammar teaching to have absolutely no effect on developing writing skills. They are mistaken" (p. 20). He then went on to point out several major flaws in the Harris dissertation (these will be discussed fully in Chapter II). Tomlinson's insights showed that there is a scholarly basis, and more than just instinct and personal preference, for disagreeing with the conclusions of the Braddock report.

There is some awareness in the literature of this change in attitude. In a 1995 article, William McCleary argued that grammar teaching is making a comeback in the composition classroom after an absence of more than two decades. Among several reasons for this pendulum swing, McCleary cited improved methods of teaching grammar and the development of what has come to be called "pedagogical grammar" – grammar intended to be used in teaching writing. He listed four new grammar publications written for just such a purpose within the previous five years (1990-1994). This development provided further

evidence that any consensus against grammar teaching that Hartwell might have imagined existing in the years between 1963 and 1985, if it ever existed at all, had clearly begun to evaporate by the beginning of the 1990s.

More recently, the appearance of major publications on both sides of this issue shows conclusively that Hartwell was mistaken to think that the issue was in any way settled in 1985. While Hillocks continued to publish versions of his anti-grammar views, most recently in major research collections such as *Research on Composition: Multiple Perspectives on Two Decades of Change* (2006) and *Handbook on Writing Research* (2006, in collaboration with J. Cheville & M. Smith), in recent years there have also appeared numerous major pro-grammar statements in opposition to the Braddock and Hillocks positions. Representative examples are *Grammar and the Teaching of Writing* (R. Noguchi, 1991), *The Place of Grammar in Writing Instruction* (R. Hunter & S. Wallace, eds., 1995), *Image Grammar: Using Grammatical Structures to Teach Writing* (H. Noden, 1999), *The War Against Grammar* (D. Mulroy, 2003), and *English Grammar for Writing* (M. Honegger, 2005). The message of these pro-grammar publications is well summarized by Richard Hudson (2001), whose appraisal of the critical issues in the grammar and writing debate concluded that “the idea that grammar teaching improves . . . writing skills is much better supported by available research than is commonly supposed” (p. 5).

The reason for the lack of consensus on this issue can be illustrated by a look at some of the difficulties faced by earlier scholars who tried to arrive at clarity on this issue. Almost 50 years ago, a 1958 Modern Language Association (MLA) Conference on “The Basic Issues in the Teaching of English” created a list of 35 issues that it considered important for “the development of an increasingly higher degree of literacy in young American citizens” (p. 4). Item 12 is “How should writing be taught?” The committee stated, “We have seen no reliable evidence that students are writing less well than comparable students wrote twenty, forty, or a hundred years ago. Nevertheless, few are satisfied with the quality of student writing, and there is little agreement on how to attack this problem” (p. 6). Then a number of questions are asked, such as, “Should the writing exercises be closely linked to formal study of grammar and rhetoric?” The paragraph concluded with the understatement, “This issue bristles with difficulties” (p. 6). Item 13 is “What kind of knowledge should the student have about the structure of the English language, and how can such knowledge, at various levels, be used to improve his ability to write well?” This item discussed in much fuller detail the “grammar” issue, noting that grammar has been taught for more than a century with “little apparent effect upon the written or spoken language of many pupils” (p. 6). It is then noted that the insights and methods of the descriptive linguists offered promise for a better way for students to both understand their own language and to transfer the grammar that they learned to

their writing. But in 1958, the insights of descriptive linguistics were just beginning to make their way into the general curriculum (see Kolln & Hancock 2005), and these English teachers had more questions than answers about the new methods.

Kolln discussed the brief renaissance of a “scientifically grounded, rhetorically focused, . . . and publicly embraced grammar within the public schools” of the United States during the 50’s and early 60’s, “inspired largely by the structural grammar of C. C. Fries,” and then skillfully traced the combination of forces that brought an abrupt end to enthusiasm for grammar teaching—forces that included the 1963 Braddock report and the 1986 Hillocks update (Kolln & Hancock 2005, pp. 11ff.). Kolln and Hancock’s competent survey provides additional evidence that the grammar issue was not settled in 1985 and is still not settled today. Furthermore, it gave me additional incentives to continue the search for answers, and a desire to contribute to the scholarship in this area of study by conducting my own research into the connection between the teaching of grammar and the quality of student writing.

### **Grammar defined in an overly restrictive way**

My initial survey of the issue suggested that part of the problem may be that even English teachers have adopted an overly restrictive view of grammar. A standard definition of grammar is “the study of the classes of words, their inflections, and their functions and relations in the sentence; a study of what is to

be preferred and what avoided in inflection and syntax; the characteristic system of inflections and syntax of a language” (Merriam-Webster’s Collegiate Dictionary, p. 543). This definition presents grammar as an all-inclusive subject which, when describing written language, would also include matters unique to written syntax, such as punctuation.

However, as one looks at the conflict regarding the teaching of grammar over the past 100 years, one thing that stands out clearly is that grammar has often been seen primarily in terms of the prevention and correction of errors in written language. As Robert Connors points out, the historical roots of this issue go back to the beginning of the nineteenth century, when mechanical correctness came to characterize much of composition instruction in America (Connors 1985). Connors discusses how the large influx of unprepared students into colleges after the Civil War, and the subsequent unmanageable workloads on college English teachers, led to a situation where

the teacher as commentator on the general communicative success of a piece of student writing – form and content – was succeeded by a simplified concept: the teacher as spotter and corrector of formal errors. Skill in writing, which had traditionally meant the ability to manipulate a complex hierarchy of content-based, organizational, and stylistic goals, came to mean but one thing: avoidance of error. (p. 67)

However, despite Connors’ negative assessment of composition’s history, recent studies suggest that consideration of the rhetorical impact a piece of writing has on readers provides some justification for the emphasis on avoidance

of error in writing pedagogy. In a study of how readers judge résumés in business and engineering, Davida Charney, Jack Rayman, and Linda Ferreira-Buckley (1992) show that errors negatively impact a writer's impression on readers. Furthermore, Michael Janopoulos (1992) discovered that university faculty are not significantly more tolerant of writing errors made by non-native-speaker students than of errors made by native-speaker students, the primary reasons being that even though "[e]rrors occurring at the sentence level may not necessarily affect overall comprehension within an extended piece of discourse, . . . such errors can result in irritation [because the reader's] expectations are not met" (p. 111). And business people are generally in agreement about the rhetorical difficulties caused to the reader by errors in writing, as shown by Larry Beason's recent survey (2001). There are thus a number of good reasons for teaching students to avoid errors in their writing.

But Connors is nevertheless correct to say that skill in writing should consist of more than avoidance of error, and in the same way considering the larger rhetorical picture makes it clear that defining grammar only in terms of error is overly restrictive. The noted rhetorician and stylist Mikhail Bakhtin (2004) takes the issue of grammar beyond the mere concern with form by noting that "grammatical form is . . . a means of representing reality" and that grammar has an "inherent representational and expressive potential" (p. 13). And Kay Halasek (2005), commenting further on Bakhtin's writings, notes that

grammatical choices are also rhetorical choices (p. 357). Mellon had earlier anticipated this more inclusive definition, noting that historically, the teaching of grammar had two primary purposes: first, it contained a set of usage prescriptions governing matters of permitted locutions and grammaticality; second, it contained syntax, which is nomenclature and definitions given together with directions for parsing sentences (1969, p. 3). The important thing about Mellon's comment is his suggestion that there is more to grammar than just issues of error. Seeing grammar as more than error moved me toward a broader and more useful view of grammar, one that is used in this study because it suggests possibilities for useful research into the connections between the teaching of grammar and the quality of student writing.

### **Broadening the definition of grammar**

Another important point of departure in the grammar debate occurred in 1969, when Mellon noted that no studies (up to 1969) had specifically targeted the question of whether teaching grammar would lead to the use of more mature syntax, and the two studies that could have made informed statements about the issue—John Milligan's 1939 study and Harris's 1962 study—chose to concentrate on the issue of error avoidance rather than what could be learned about mature syntax and syntactic fluency. Mellon's comment serves as both an insightful definition of the grammar controversy up to that point and as a helpful directive

toward the future, as well as a way out of the trap of treating grammar simply as error and error avoidance.

It is certainly true that the emphasis of most grammar research and study up to that point had concentrated on errors – their effect and avoidance. But in the 1960s, the question of how writing quality related to grammar began to attract the attention of researchers and writing theorists. Beginning with Kellogg Hunt (1965), numerous studies showed a clear relationship between writing quality and what is variously called syntactic maturity, syntactic fluency, or syntactic complexity. In addition to Hunt, these studies included research by Francis Christensen (1963), Mellon (1969), Walter Loban (1976), and Lester Faigley (1979b). Christensen developed a “generative rhetoric of the sentence” that sought to enhance syntactic fluency by means of the “cumulative sentence,” where phrasal and clausal modifiers are added to the base clause (p. 160). Mellon, desiring to accelerate the speed at which students achieve gains in syntactic fluency, found success with a newly developed method that he called “sentence-combining,” used in conjunction with formal instruction in transformational grammar. Taking a different approach, Loban conducted a 13-year longitudinal study of the oral and written language development of 211 Oakland, California students, following them from kindergarten through grade twelve. Focusing primarily on syntax, Loban found that the characteristics of more highly developed language included, among other things, the use of longer

communication units (sentences), more embedding, greater use of adjectival dependent clauses, and more use of dependent clauses of all kinds. Faigley extended Francis Christensen's generative rhetoric concepts to a study of college-level writing and noted that generative rhetoric, like sentence-combing, takes as its goal "the expansion of the student's syntactic repertoire, focusing on . . . constructions such as participial phrases, appositives, and absolutes . . . by asking students to supply content in a rhetorical situation" (p. 176). All of these studies extend the concept of grammar beyond simple mechanics and into the realm of syntactic maturity and fluency.

Despite these research-supported connections between syntax and writing quality, Brian Huot (1990) notes that there has always been a difficult relationship between syntax and judgments about writing quality, and that freedom from error has been more of an influence on judgments about writing quality than has syntactic complexity or fluency (p. 250). This may be because it is relatively easier to spot surface or mechanical errors in writing than to analyze deeper issues of complicated syntax. This conclusion is also reflected in a study by Muriel Harris (1977), who connected sentence fragments, especially those formed by "fragmented free modifiers," with the kinds of final free modifiers that characterize syntactically mature writing in Christensen's cumulative sentences (p. 177) and urged a more tolerant approach to this type of error. Kolln takes this connection further, introducing a concept that she called "rhetorical

grammar” in her book, now in its 5<sup>th</sup> edition (2006). “Avoiding the prescriptive rules of handbooks, offering instead explanations of the rhetorical choices that are available,” Kolln explains, her rhetorical grammar approach seeks “the marriage of grammar and rhetoric for the composition classroom” (p. x). She notes that “[w]riters who recognize the choices available to them will be well-equipped for controlling the effects of their words” and that “to consider the conscious knowledge of sentence structure as your toolkit . . . is the essence of rhetorical grammar” (p. x).

These comments and studies suggested to me the possibility of studying the connection between grammar and writing not just from the point of view of seeing grammar as error only, but also from the perspectives of Hunt, Mellon, Christensen, Loban, Kolln, Faigley, and others—of seeing the importance of stylistic fluency as a critical aspect of mature writing, and of studying the connection between stylistic fluency or maturity and grammar.

### **Research areas suggested**

These studies suggested a clear direction for the kind of research needed to investigate the effects of grammar teaching on the quality of student writing. First, even though some had criticized the heavy emphasis on error in previous studies of the connection between grammar and writing, it was nevertheless clear that grammar’s connection with error continues to be a major area of concern. Connors himself had noted (1985) that despite strong reaction in the 20<sup>th</sup>

century against the heavy emphasis on mechanical correctness in composition, “[t]he enforcement of standards of mechanical correctness is not . . . a tradition that can – or should – die out of composition instruction. . . .” noting also that “We cannot escape the fact that in a written text any question of mechanics is also a rhetorical question” (p. 71). In fact, a great deal of the anti-grammar sentiment of the late 20<sup>th</sup> century came about, according to Connors (2000), as a result of the anti-formalism, anti-behaviorism, and anti-empiricism within English composition studies after 1980, which doomed sentence pedagogies to a marginality from which they have still not recovered. This marginality, quite certainly, is an indication of the need for more research and more study on these error issues.

Second, it seemed also that a strong need existed for a study that would concentrate on college-level writing – primarily the freshman level that is found in first-year composition (FYC) courses, and investigate what different results, if any, might be found at the college level that are not found at younger levels of study. The Harris dissertation (1962), for instance, which is the primary basis for the 1963 Braddock report and its negative view of grammar teaching, studied 12- to-14-year-olds in Britain. The three studies on which Hillocks based his 1986 condemnation of grammar teaching are also studies of younger students (6<sup>th</sup> grade and 11<sup>th</sup> grade). Hunt’s research (1965, 1970) showed that some of the indexes of writing development are different for 4<sup>th</sup>-graders and 8<sup>th</sup>-graders than

for college students and adult writers. It appears that in the synthesis of some of the results of these past studies, the results may have been mixed across age boundaries. A study dealing only with college FYC students was needed to clarify the grammar-teaching picture for this level of student.

Third, such a study needed to approach grammar from a broader point of view than just error. As Chapter II will show, throughout the 20<sup>th</sup> century numerous grammar-as-error-only studies investigated the effect of grammar teaching on students' writing. However, the writings and studies of Mellon, Christensen, Faigley, and Kathryn Simmons, especially, showed that aspects of stylistic fluency should be included in the definition of and approach to grammar. The research of Faigley (1979b, 1979c) and Simmons (1985), in particular, suggested that two specific measures of stylistic fluency – the number of words per clause and the number of words in final free modifiers – would serve as especially valuable indicators of the stylistic maturity or fluency of college-level writers. A study was needed that would incorporate this broadened view of grammar into the more traditional error-connected approaches.

Furthermore, the marginality to which sentence pedagogies had been exiled, I was convinced, was unfounded. Connors seemed to agree when he said, “. . . if people believe that research has shown that sentence rhetorics don't work, their belief exists not because the record bears it out but because it is what people

want to believe” (2000, p. 120). Thus I felt that it was important to include grammar-as-error in my study. In light of the above-discussed mixing of age-level results in past studies, I felt that it was important to base my study entirely at the college level. And the convincing work of Christensen, Faigley, Simmons, and others regarding indicators of mature style added a third level to my project.

With this basic plan in place, I was ready to search for a research site to accommodate my proposed study. I found such a site in the TOPIC/ICON online environment of the FYC program at Texas Tech University.

### **TOPIC/ICON a natural research site for this study**

A fuller description of the TOPIC/ICON program and procedures is given in Chapter III, along with a more complete description of my dissertation methodology<sup>1</sup>. At Texas Tech, the Composition Faculty created their own rubric from the Connors-Lunsford list of “20 Common Errors” (1988) and used this rubric to create the grammar lessons contained in their custom-published textbooks (the texts used for this study are Gillis, Lang, & Kemp 2003 and Gillis & Lang 2004). The TOPIC/ICON program of freshman English instruction at Texas Tech University provided an ideal instructional environment for this study for several reasons. First, English 1301 and 1302 are the required freshman-level English courses at Texas Tech University. The essays written by students in

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<sup>1</sup> An excellent discussion of the policies and procedures of the TOPIC/ICON program at Texas Tech University, including history and background, can be found in Wasley’s *Chronicle of Higher Education* article, March 10, 2006 edition; <<http://chronicle.com/weekly/v52/i27/27a00601.htm>>

freshman English at Texas Tech, both English 1301 and English 1302 (though this study deals only with 1301), are submitted, peer-critiqued, and graded entirely online. This is important because of the need for retrieval and comparison of these essays with those written by Extended Studies (ES) students. The ES students are those students, usually from other locations, who enroll in English 1301 with the knowledge that they will be taking the course entirely online – that they will have no face-to-face instruction during the entire time of their enrollment. Second, every piece of writing that is submitted by a 1301 student during any semester is saved on the English department servers and can be retrieved for later study. In a typical semester more than 50,000 samples of freshman writing are collected and saved. This makes TOPIC/ICON a fertile area for many kinds of writing research, now and for years to come. Third, and most importantly, the TOPIC/ICON environment fits this research study very well because the ICON curriculum is structured to include formal grammar in every chapter (Gillis, Lang, & Kemp 2003; Gillis & Lang 2004; this is true for the four semesters of this study – fall 2003 through spring 2005; possible subsequent changes in the program are not considered or discussed). As the semester progresses, students are exposed to most of the basic points of written English grammar and the mechanics of written English conventions.

This unique course architecture made the TOPIC/ICON system an appropriate environment for this research because of how it created two valuable

student populations for study and comparison: one is the standard FYC “cohort” classes, and the other is the ES classes. The key factor in the comparison is that the ES English 1301 classes take the same course of study that the onsite English 1301 classes took: they have the same textbook, the same lessons, the same assignments, and the same rubrics for grading. The primary difference between them is that onsite classes receive direct, in-class instruction in grammar, while ES classes do not. This is the basis for how this study proposes to investigate the effects of the teaching of grammar on the two samples of student writing.

### **My research questions**

Specifically, this study examines the following main question: *Does regular exposure to in-class, direct instruction in grammar improve the quality of student writing?*

To investigate the main research question, this study compares two types of university freshman-level writing classes in the English 1301 program at Texas Tech University: the traditional onsite English 1301 “cohort” classes, which received direct, face-to-face instruction in grammar as part of the class’s regular face-to-face activities, and Extended Studies (ES) English 1301 classes, which received no direct grammar instruction because, by definition, they do not meet in a traditional classroom setting.

This study also seemed to have another unique quality in its approach to investigating the difference between a hybrid online environment – the onsite 1301 classes, where face-to-face instruction was combined with online feedback and interaction – and a totally online environment – the ES classes, where no face-to-face activity occurred. Literature and discussion of this aspect of the study will be addressed in Chapter II.

### **Overview of this study's methodology**

The analysis for this study was performed on essays written in freshman English, English 1301, at Texas Tech University during the school years 2003-2004 and 2004-2005. The quality of writing was judged by an analysis of two criteria: (1) a count and analysis of grammar errors in the essays, and (2) a count and analysis of selected markers of stylistic maturity or fluency found in the essays – specifically (a) words per clause, (b) number of final free modifiers, and (c) words per final free modifiers, as explained more fully in Chapter III.

### **Brief definitions**

The important terms governing this study are briefly defined here; fuller definitions and discussion is provided in Chapter III.

Grammar. In this study, the term “grammar” is defined as the generally accepted conventions of standard written English, especially academic English, as used, taught, and expected in university-level writing courses. Following the rubric created by the composition faculty at Texas Tech, which is based on the

twenty common errors studied and classified by Connors and Lunsford (1988), grammar includes punctuation, syntax, and usage.

During 2003-2004 and 2004-2005, the grammar taught in English 1301 at Texas Tech is outlined clearly in the custom-published ICON textbook (Gillis, Lang, & Kemp 2003) used in all classes. English 1301 is structured so that students write four essay assignments during the semester: an exploratory essay, a textual analysis, a feasibility essay, and a classical argument, which serves as the capstone assignment for the semester (p. iii). In each of these assignment cycles, students produce three drafts, appropriately numbered (e.g., 1.1, 1.2, and 1.3, etc.). There are thus twelve major drafts during the semester, though they differ in length (i.e., draft x.1 is 400 words, x.2 is 800 words, and x.3 is 1200 words). The ICON textbook contains one chapter for each of these draft assignments, and each chapter contains a grammar lesson. Students are therefore exposed during a typical 1301 semester to twelve grammar lessons that discuss what the composition faculty at Texas Tech feels are the most important issues facing freshman writers as they navigate through the four major assignments for English 1301.

A listing of the grammar topics in the order of presentation shows which grammar issues are being taught in the English 1301 classes and the errors and stylistic issues that are being evaluated in student essays.

- Chapter 1 – Parts of speech: The parts of speech (p. 15)
- Chapter 2 – The concept of the sentence: Basic sentence patterns (p. 37)
- Chapter 3 – Prepositional phrases: Identifying prepositional phrases (p. 63)
- Chapter 4 – Identifying and correcting sentence fragments (p. 83)
- Chapter 5 – Identifying run-ons and comma splices (p. 111)
- Chapter 6 – Using commas with compound sentences (p. 143)
- Chapter 7 – Using commas in introductory elements and misuse of commas (p. 171)
- Chapter 8 – Spelling and homonyms (p. 191)
- Chapter 9 – The apostrophe (p. 227)
- Chapter 10 – Pronouns (p. 259)
- Chapter 11 – Restrictive/nonrestrictive clauses or elements (p. 283)
- Chapter 12 – Dangling/misplaced modifiers (p. 309)

Comparing this list with the list of twenty common errors of Connors and Lunsford (1988), as modified by the Texas Tech composition faculty, shows that these twelve chapters covered approximately sixteen of the twenty errors (I say

“approximately” because of possible overlap in coverage and discussion). This provides a general summary of what is understood in this study by “grammar.”

Improve. In this context, the term “improve” is defined as (1) fewer grammar errors and (2) more markers of stylistic fluency. In each essay that is analyzed, errors and stylistic markers are quantified and classified to allow full analysis, which is performed with the assistance of the SPSS 14.0 statistical program.

Quality. Despite Huot’s (1990) notation of the difficult relationship between syntax and the evaluation of writing quality, the studies of Hunt (1965), Christensen (1968), Mellon (1969), Loban (1976), and Faigley (1979b) have shown the clear relationship between writing quality and what is variously called syntactic maturity, syntactic fluency, or syntactic complexity. Therefore, following the support of this research base, in this study the term “quality” is defined to mean (1) fewer errors and (2) more markers of stylistic fluency or mature style.

Error. The term “error” is defined as a combination of (1) syntactical and other grammatical (in the linguistic sense) errors, such as missing inflected endings or incorrect subject-verb agreement (numbers 6 and 14, respectively, in Connors and Lunsford’s list of 20 common errors (p. 406)) and (2) what are commonly called “mechanical errors,” including punctuation errors, which

undermine the communicative value and rhetorical effectiveness of written sentences; examples of this category would be a missing comma after an introductory element, a missing comma with a non-restrictive (non-essential) element, and a comma splice error (numbers 1, 5, and 8 on the Connors-Lunsford list).

Stylistic Fluency. Following primarily the work of Christensen (1968), Faigley (1977, 1979b, 1979c), and Simmons (1985), stylistic fluency is defined as writing that is characterized by more words per clause, more right-branching or final free modifiers, and more words per right-branching or final free modifier. These are the criteria by which stylistic fluency is measured in the essays that are analyzed for this study.

### **Classroom instruction and distance education**

A major point of concern in the technological expansion of educational opportunities made possible by the Internet has been whether classes taught by “distance education” or “extended studies” are as educationally viable or rigorous as those taught in the traditional classroom. Several studies, including Bernard et al. (2004), Cavanaugh et al. (2004), Rivera, McAlister, and Rice (2002), and Owens and Volkwein (2002), have indicated that there is no appreciable difference in quality regarding student outcomes between the two modes of instructional delivery. These studies are discussed more fully in Chapter II.

### **The significance of this issue**

The controversy over whether grammar should be taught in the writing class goes back more than 100 years, into the late 19<sup>th</sup> century, and probably even further. One factor that may have led to the controversy over the teaching of grammar is the fact that by the early years of the twentieth century, “less able children, whose counterparts a century earlier do not even attend school, have proved unable to learn grammar readily or at all, with the result that its study have been extended to nearly all grade levels” (Mellon, p. 4). This fact helps to account for why those in the early years who attempted to assess the effectiveness of grammar “seem to have been motivated by predilections against the subject in general” (Mellon, p. 4).

However, the value of direct instruction in grammar has also been proven by insights gained from language-learning pedagogy. Halstead (2002) shows how direct instruction improves the ability of second-language learners to interpret English reflexive pronouns in a native-like manner. Similarly, Erlam (2003), in a study that investigates the acquisition of direct-object pronouns in French as a second language, shows evidence in favor of grammar instruction that is deductive (that is, involving rule presentation and metalinguistic information) rather than inductive (that is, focusing on form with no explicit grammar instruction). Erlam states specifically that the study supports “the effectiveness of deductive language instruction in a teacher-centered classroom

language learning environment” (p. 257). These studies illustrate the importance of continuing the study of the “grammar issue,” and they highlight the solutions that continue to emerge from the patient research of skilled scholars. What is abundantly clear is that, *contra* Hartwell’s premature assertion, the grammar and writing issue continues to find significance among researchers in multiple disciplines.

### **Organization of this dissertation and overview of chapters**

Having introduced the basic issues that I plan to investigate in this study and having provided some background material as a basis for my study, I will now outline how the rest of the dissertation will proceed.

Chapter II provides a review of the literature that has been generated over the past one hundred-plus years in the teaching-of-grammar controversy and argues for the validity of my study within the context of the other studies that have been done on this subject.

In Chapter III I outline the methodology I use in this study, giving more precise definitions of terms and methods than in Chapter I, and specifying data-gathering processes and statistical analysis procedures.

Chapter IV presents the data that results from the study, both quantitative and qualitative, and provides a full explanation of each.

Chapter V concludes the dissertation with a discussion of the results, implications of the study, and suggestions for further research.

**CHAPTER II**  
**BACKGROUND TO THE**  
**GRAMMAR-AND-WRITING CONTROVERSY**  
**AND ARGUMENTS FOR THIS STUDY'S VALIDITY**

In chapter I, I explore and summarize the basic issues involved in the long-standing grammar-and-writing controversy, and express the primary research questions that guide this investigation of the effect of direct grammar instruction on the quality of student writing. In Chapter II, I now discuss the historical background of this controversy, with a primary focus on the published literature of the past 100-plus years that relates to this issue. The purpose of this chapter is to situate my study within the previous work that has been done on this topic and to show that the research I propose is relevant, meaningful, and needed within the larger scope of grammar-and-writing studies.

The basic flow of this chapter is chronological. I look first at the early history of the controversy, assessing studies of grammar and writing from the early 20<sup>th</sup> century. This assessment leads to an exploration of how reactions to the early studies caused a division of opinion within the English teaching ranks that eventually led to the establishment of official National Council of Teachers of English (NCTE) policy statements in the form of the 1963 Braddock report and the 1986 Hillocks meta-analysis. Next, I examine studies since 1986 in order to bring the grammar-and-writing issue up to date and to fully situate this study

within the larger controversy. Finally, I discuss the unique approach this study brings in its discussion of the grammar teaching issue by a comparison of a hybrid online environment with a totally online environment.

### **The historical situation: Early studies**

As noted by Boraas (1917), the controversy over whether grammar should be taught in the writing class goes back more than 100 years, into the late 19<sup>th</sup> century. However, the first modern study of the connection between grammar teaching and writing appears to have been Hoyt (1906), who studied whether formal grammar study leads to “the use of better English in oral and written expression” and whether it is “a considerable aid in the interpretation of language” (p. 478). Hoyt gave two hundred ninth-grade students in Indianapolis three tests: a ten-question formal, classificatory grammar test, based on stanzas from Gray’s “Elegy Written in a Country Churchyard”; an interpretation test, restating in prose four stanzas of the same poem; and a composition, giving the students a prompt and allowing them to write for forty minutes. Correlations calculated are grammar/interpretation (.21), grammar/composition (.18), and interpretation/composition (.28), all of which would generally be considered very low (Hinkle, Wiersma, & Jurs 1998, p. 120). Hoyt concluded, after correlating grammar scores with scores in other subjects, such as geography, that “there is about the same relationship existing between grammar and composition

and grammar and interpretation as exists between any two totally different subjects, such as grammar and geography” (p. 485).

One problem with Hoyt’s analysis is that testing students on knowledge of grammar by means of an objective test is not as robust as testing their ability to use grammar correctly in writing. Second, as Kolln (1981) points out, Hoyt did not compare students who studied grammar with others who did not.

In 1917, Boraas wrote a Minnesota dissertation, “Formal Grammar and the Practical Mastery of English” (which is not listed by Braddock<sup>2</sup>), where he sought to determine “[w]hat degree of relationship, if any, is there between the knowledge of formal English grammar and the practical mastery of English as shown by the ability to understand the meaning of sentences or the ability to express thoughts in various forms of composition?” (p. 1). Boraas’s study is primarily directed toward elementary school children, though in many cases in these early studies, “elementary school” means anything up through ninth grade. To do this, he applied objective tests of grammar knowledge and sentence comprehension to students throughout the state of Minnesota, and also in Boise, Idaho and other locations. He also went back more than 25 years in reporting discussions relating to grammar and writing, noting that even at the end of the 19<sup>th</sup> century, there was general disagreement as to the effectiveness of teaching

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<sup>2</sup> I mention this to point out how many important studies Braddock (and later Hillocks) do not deal with, a salient point which I discuss in more depth in my review of Braddock and Hillocks.

grammar in the writing class. In 1891, for example, the state of Connecticut dropped all technical grammar from its curriculum, stating that the study of grammar does not help students either to speak or write our language.

Boraas also compares the correlation between grammar knowledge and achievement in composition, as measured by objective tests--“ability to understand the meanings of sentences” (p. 1)--with the correlations between grammar knowledge and achievement in other subjects, such as history, geography, and even arithmetic, since overall general ability is involved in one’s ability to use correct grammar in writing (it is not clear whether he bases his ideas on Hoyt’s study or not). From this, Boraas found that the correlation between knowledge of grammar and ability in other subjects such as history and even arithmetic is actually higher than the correlation between knowledge of grammar and ability in composition, and he therefore concludes, “The teaching of formal English grammar as an elementary school subject for the purpose of developing a practical mastery of English . . . has not been justified . . .” (p. 201).

However, Boraas, unlike Hoyt and many others later, acknowledges that his study has limitations, and that, among other things, “Grammar may be a profitable study in the high school . . . , [grammar] may have a value as an end . . . , and . . . The knowledge of grammar may be valuable for certain persons in

specific situations, as, for example, a teacher who is to correct a composition” (pp. 204-205).

Some of the primary issues with Boraas’s study, as with Hoyt’s, are as follows: First, it is not based on samples of actual writing, but rather on objective tests; second, it tests the grammatical knowledge (and indirectly, the writing ability) of younger students, mostly below the age of 13, rather than college-age students, and so does not allow for differences in age-related writing development; third, and most damaging, it bases its conclusions on faulty assumptions regarding correlations.

In 1923, Asker attempted to study whether a knowledge of formal grammar is essential to correct usage. He made a statistical comparison between “knowledge of certain phases of formal grammar, ability to judge the correctness of a sentence, and the ability to use English as revealed through composition” (p. 109). To do this, he gave four tests to 295 freshmen at the University of Washington: a test judging the correctness of sentences (Test A), a test judging the parts of speech (Test 1), a test judging grammatical case (Test 2), and a test judging tense and mode (Test 3). Scores on Tests 1, 2, and 3 were averaged to form a composite score for knowledge of formal grammar. The grades of the students in Freshman Composition were also compiled.

Asker computed a Pearson product moment coefficient for several of the testing relationships. Between grammatical knowledge and the ability to judge correct sentences, the coefficient was only 0.23, considered very low. Between grammatical knowledge and ability in composition, as judged by grades, the Pearson was 0.37, which Asker considered much higher, but which is actually considered by many today to still be in the “low” range. But formal grammar is not the only factor in determining ability in English Composition; there is also the factor of general ability, as judged by overall grades. The Pearson between grades in English Comp and overall grades was 0.63 (considered today to be in the moderate range). For Asker,

This shows that the ability to write English composition depends to a considerably higher degree upon general ability than upon knowledge of formal grammar, and as this latter knowledge is undoubtedly in its turn dependent upon general ability, it follows that the importance of formal grammar for English composition is far less than would be indicated by the coefficient of correlation between them. (p. 111)

Furthermore,

The knowledge of formal grammar influences ability to judge the grammatical correctness of a sentence and ability in English composition only to a negligible degree. . . . [T]ime spent upon formal grammar in the elementary school is wasted as far as the majority of students is concerned, and . . . teachers of English composition [in the universities] must seek some other reason for the alleged generally poor ability in this subject than the neglect of formal grammar in the grade school. (p. 111)

But Asker may have overstated his conclusions. While it is true that general ability plays a role in one’s ability in English composition, it is not

necessarily correct to say that the importance of formal grammar for English composition is “far less” than would be indicated by the coefficient of correlation between them, or that knowledge of formal grammar influences ability in English composition “only to a negligible degree.” The Pearson coefficients of 0.63 and 0.37 may indicate that grammar has less of an impact on composition ability than overall ability, but not necessarily that it has virtually no impact at all, which is what Asker implies. A Pearson coefficient of 0.63, considered by Asker to be exceptionally high, is today often judged by many to be only “moderate.”<sup>3</sup> He may have overstated also in saying that time spent on formal grammar in the elementary school is “wasted” for the majority of students. An additional problem, pointed out by Braddock (1963), is the erroneous assumption that grades in freshman English reveal the quality of a student’s writing.

In contrast to these above-mentioned studies, some early studies returned positive reports on the connection between grammar and writing. Catherwood’s 1932 master’s thesis (not listed by Braddock) is an example of an early study that showed positive results between the study of grammar and writing improvement. Perhaps as a reaction to the traditional-school-grammar approaches of previous studies, Catherwood used a “functional grammar”<sup>4</sup> approach in studying 7<sup>th</sup>-, 9<sup>th</sup>-, and 11<sup>th</sup>-grade students in three Minnesota towns.

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<sup>3</sup> It is acknowledged that judgments about the relative values of Pearson coefficients vary between disciplines.

<sup>4</sup> Functional grammar is defined on p. 36 in the discussion of Fee’s dissertation.

She found that as students progressed in age and grade, they show slow but steady progress in their ability to use their knowledge of grammatical rules to correct grammatical errors in sentences. Catherwood's study, unfortunately, like those of Hoyt, Boraas, and Asker, is based on objective measures rather than on actual writing samples.

Despite the occasional positive note from studies such as Catherwood's, the weight of negative studies associated with the teaching of grammar during the first third of the 20<sup>th</sup> century began to generate increasing pressure against the NCTE to formulate some kind of official approach to the teaching of grammar. This led to what can be called the "middle years" of the grammar-and-writing controversy.

### **Reactions to the early studies: The middle years**

Kolln (2005) discusses how pressure from educators led the NCTE in 1935 to "appoint a committee to look into the role of grammar and to make recommendations for the curriculum. The result is a program called *An Experience Curriculum in English*, which recommended that grammar be taught in connection with writing, rather than as an isolated unit of study" (p. 14). It also substituted a kind of functional grammar for the formal method that teachers were accustomed to. Sadly, as Kolln notes, "while research studies continued to discredit formal grammar taught in isolation, the suggestions for teaching

grammar using functional methods laid out by the *Experience Curriculum* were never implemented” (p. 14).

This is an important development, for two reasons. First, the appearance of the *Experience Curriculum* in 1935 set the tone for many of the empirical investigations into grammar teaching for the next two decades. Second, the fact that the recommendations of the curriculum were largely unimplemented is ignored by the Braddock report. There is no mention of the *Experience Curriculum* in the Braddock report.

Perhaps the most notable study of the relationship between grammar and writing following the issuing of the *Experience Curriculum* was Ellen Frogner’s 1939 Minnesota dissertation, “A Study of the Relative Efficacy of a Grammatical and a Thought Approach to the Improvement of Sentence Structure in Grades Nine and Eleven,” listed but not discussed by Braddock. Frogner’s study, which is based on sentence patterns, was designed to test whether grammar, as claimed, contributes to mastery of sentence structure. She arranged for the teaching of cohorts of 9<sup>th</sup> graders and 11<sup>th</sup> graders in Minnesota using two methods—a “thought” method and a “grammar” method. The thought method emphasizes clear expression of thought, making sense, and whether the sentence says what the writer means to say. Grammatical terminology is not used in the discussion of sentence structure and errors. The grammar method includes the

same discussion as the thought method, but also includes the relevant grammatical terminology.

The results of the study showed that the grammar method produces better scores on grammar tests, but the thought method produces better scores on sentence structure tests. However, once again, a key point against widespread acceptance of Frogner's results by later scholars is that student improvement is tested by objective tests, not by written compositions.

Mary Fee's 1940 Kansas dissertation, "Functional Grammar and Its Relation to Correct English Usage," is one of the first studies to strongly emphasize the idea of "functional grammar," which she defined as "teaching only those grammatical forms without a knowledge of which the pupil is unable to know whether a sentence is or is not correct" (p. 5). She followed Rivlin (1930) in defining functional grammar as being "that application of the knowledge of a grammatical item which will prevent the commission of an error . . . or which will assist in the correction of an error already made" (quoted in Fee, p. 5). It is a practical, rather than theoretical or formal, approach to the sentence. Fee's study also produced valuable historical perspective on early 20<sup>th</sup>-century grammar research. Since 1913, she states, the trend has been toward teaching functional, as opposed to formal, grammar. The emphasis has shifted "to the study of language through the sentence, with grammar introduced for improved correctness" (p. 5),

and she notes that even in 1935 textbooks were saying that research had failed to show the effectiveness of grammar in the elimination of errors.

Fee's study tried to answer the following question, among others: Does a knowledge of "functional" grammatical principles function in correct English usage of high school students as measured by ability to recognize and correct errors in sentences and by accuracy in the free writing of letters and compositions? She tested this hypothesis on 10<sup>th</sup> grade students. Her conclusions were that

[t]hese results point to the probable conclusion that the teaching of functional grammar to these tenth grade students has contributed little to their ability to correct errors in sentences and to use accurate English in their free writing. . . . The amount of correlation between grammar abilities and accuracy of usage in free writing is so low in every instance as to be negligible, and the students who use the greatest accuracy in their free writing are those who have the greatest amount of *reading skill*, the most general *mental ability*, and the most *favorable cultural background*. . . . it seems doubtful whether the teaching of functional grammar has greatly affected ability to correct errors in sentences or the accurate usage of English in free writing. (97, emphasis added)

Another very important grammar study was conducted in 1953 by E. G. S. Evans, who attempted to determine experimentally the efficacy of three methods of teaching English: (1) the project method: relating English to the interests of the students through projects and other activities; no formal lessons, little corrective teaching; (2) the formal method: lessons, exercises, and drills on the mechanical aspects of written English, corrective teaching, and drills on errors; and (3) the

oral method: developing correctness and expression side by side, with lecturettes, story-telling, discussions, etc., revolving around the spoken word. Evans did a six-month study at six schools in Birmingham, England in 1951 with six classes of boys age 11-13, using six teachers.

Evans' data was derived from standardized tests of English usage and from actual compositions given both as pre- and post-tests. His analysis was based on class means, with classes made equal in number by random extraction of cases, resulting in a total of 1457 students. Evans found that, regarding the mechanical aspects of written English, in capitalization, punctuation, and sentence structure, the formal method performed "significantly higher" than the other two methods. In spelling and English usage, the three methods were equally effective.

According to Evans,

Written expression was measured by means of four types of compositions: (i) simple reproduction of a story; (ii) narrative-descriptive; (iii) imaginative; and (iv) expository. Significant methods differences in favour of the Formal approach were secured in narrative and imaginative essays. In the other two topics, the adjusted variances approached significance, but fell just short of the 5 per cent. point. The Formal method tended to be superior, and in this respect the findings were consistent with the results of the capitalisation, punctuation and sentence-structure tests. (128)

This quote indicates that the formal method showed improvement in not only objective tests of grammar and mechanics, but on actual student writing as well. Students who were taught formal grammar by regular systematic exercises

and drills had higher levels of achievement in mechanics and wrote a higher proportion of complex sentences. Notably, this dissertation is listed, but not commented on, by Braddock. Harris (1962), too, discussed Evans but explained away the positive results of Evans' study by attributing it to the unbalanced load of experienced teachers who taught the formal groups. Harris then said that "the efficacy of the formal method which incorporates grammatical terminology and instruction remains an uncertain quantity, and it remains true to say that there is little positive and no entirely satisfactory experimental evidence to support it" (p. 85). In this unjustified rejection of Evans' results, Harris anticipated Hillocks (1986), who 24 years later eliminated many grammar-positive studies from his own analysis on the basis of "teacher bias."<sup>5</sup> It is worthy to note, however, that Harris failed to control his own study in the same way.

In a study that looked at retention of knowledge as well as application of skills, Phyllis Phillips (1955) studied whether compositions written after the completion of a teaching program in the mechanics of English would reveal the elimination of the errors found in earlier compositions. Her teaching program was a comprehensive drill program in mechanics. Her subjects were 102 students at Edinburg (Texas) Regional College during the 1951-52 academic year who wrote five compositions amounting to 1,000 words total. Phillips found that the

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<sup>5</sup> I believe that it would be relatively simple, with a brief mathematical analysis, to show that Hillocks's research design criteria, ostensibly meant to provide control against teacher bias, are quite arbitrary and do not, in fact, provide any more assurance against threats to internal validity than would the random assignment of teachers to a study's classrooms.

compositions written after the teaching reveal the elimination of some, but not all, of the errors found in the earlier compositions. The students as a group made significant improvement in their knowledge of correct English usage as a result of the teaching program. Phillips concluded that

It would seem then that the elimination of composition errors is an individual problem and that each of the mechanical abilities tested in the study is a composite of abilities which the students, both as a group and as individuals, are able to apply with more success in some situations than in others in eliminating their composition errors. (p. 217)

The primary point of importance to be taken from her study is that a program of comprehensive drill in the mechanics of English written conventions did produce improvement in student writing--a fact ignored by Braddock.

John Tallent (1961), in a study not listed by Braddock, tried to determine (1) if there would be any significant differences between mean performances of two groups of tenth-grade students in mechanics of expression, effectiveness of expression, and reading comprehension resulting from the teaching of English grammar by the traditional method and by structural linguistics methods; (2) to compare the effectiveness of the two methods with regard to student ability to recognize and clarify structurally ambiguous sentences; and (3) to study student attitudes toward the study of grammar based on pedagogical method.

The control group was taught the traditional grammar method and the experimental group was taught by the structural method with Paul Roberts's

*Patterns of English*. The *Cooperative English Test* was used to evaluate student performance in mechanics of expression, effectiveness of expression, and reading comprehension.

Tallent's major findings were (1) for purpose 1, the differences between mean scores was not significant at the .05 level; in terms of total scores, there was no difference between means; (2) both groups showed improvement in recognizing and clarifying structurally ambiguous sentences; the control group showed a 9% gain over the experimental group; and (3) those taught by the traditional method showed a slightly better attitude toward grammar than the experimental group.

Regarding Tallent's study, it is again worth noting that the *Cooperative English Test* is an objective test, and so is not as effective a measurement as actual samples of student writing would be. Furthermore, showing results as "differences between mean scores only" did not show how many students in each group may have improved as a result of the teaching method. Also significant was choosing the .05 level rather than the .10 level, though it is admitted that the .05 level is customary in such studies. (For discussion of this point, see Cowles and Davis 1982.) Next, the fact that the traditionally taught group showed a 9% better score in recognizing and clarifying structurally ambiguous sentences indicates the possibility that traditional grammar would

help a student to also recognize and clarify such sentences when they appeared in his/her own writing. Finally, the results regarding attitude indicate that in at least some circumstances students react favorably to traditional grammar pedagogy.

In the 1963 Braddock report (to be discussed), the distinct impression is given that the overwhelming weight of the pre-1962 published evidence is against the teaching of grammar. From this survey of the relevant literature, it appears that Braddock's negative evaluation may have failed to fully consider all of the available evidence.

### **Official policy: Braddock and Hillocks**

The discussion of the Braddock report and its wide-ranging effects on the teaching of grammar must begin with the primary document upon which the Braddock report's condemnation of grammar teaching is based – the 1962 Harris dissertation. Kolln (2005) duly notes the irony of how this obscure British study, which “had no consequences for the teaching of grammar in England,” was manipulated so that two words, *harmful effect*, “set in motion the anti-grammar policy that has dominated the American English curriculum for forty years” (p. 16).

### **Harris's 1962 London dissertation**

The most famous dissertation about the teaching of English grammar ever written is Roland J. Harris's 1962 University of London study, “An Experimental

Inquiry into the Functions and Value of Formal Grammar in the Teaching of English, With Special Reference to the Teaching of Correct Written English to Children Aged Twelve to Fourteen.” It owes its renown not so much to its excellence as to its being singled out for special attention by the Braddock report. It is doubtful that, had Braddock not made Harris’s study famous, anyone beyond a narrow band of academicians would have ever heard of it.

Harris’s two-year study assessed the effects of instruction in formal grammar and functional grammar on the writing of 228 London students age 12-14. In his abstract at the beginning of his dissertation, Harris summarizes its results by saying, “The grammar lesson is found to be certainly not superior, and in most instances is inferior, to direct practice in writing skills” (p. 3). By “the grammar lesson” he refers to the classes that studied formal grammar for one 40-minute period per week; by “direct practice in writing” he refers to the classes that used the same 40-minute period each week as an additional period of writing practice (in addition to the one 40-minute period of writing practice that both groups had each week) (p. 128). Harris notes that, as often happens, the classes studying grammar do better on grammar tests, but this knowledge did not appear to transfer to improvement in writing.

In Harris’s experiment he used a pair of classes – a grammar class and a non-grammar class – at each of five schools. Four of the pairs of classes were

each instructed by one teacher. In only one school did two teachers teach the two classes. In fact, this was as Harris wanted it, since he apparently felt that it was more desirable to have one teacher teach both classes: “It was luckily possible to ask one teacher to take each pair of forms in all the schools except [one] . . . the unity of the teacher’s approach is thus established” (pp. 114-115). For Harris, this approach ensured that both classes were taught according to the plan that he had devised, with one emphasizing grammar and the other not. However, it is worth noting that this teaching alignment would not have passed Hillocks’s strict criteria for proper research design.

It is a major point worthy of major emphasis: The primary study on which the Braddock report based its condemnation of grammar teaching would have been considered deficient in design criteria by Hillocks and would not have been included in Hillocks’s 1986 meta-analysis.

In describing his own experiment, Harris says that the non-grammar groups “excluded *any reference to formal grammar* and specified attention to practice in writing and imitating conventional forms and structures” (p. 118, emphasis added). So, according to Harris, they studied grammar by many different classroom methods, and studied it within the context of their compositions, and within the context of the errors in their compositions, as did

the grammar groups – but they did not refer to what they were doing by grammatical terminology.

However, a closer examination of how Harris presents a sample lesson reveals that his contention that the non-grammar classes “excluded any reference to formal grammar” is not a correct description of what actually happened in the “non-grammar” classes. An error in a sentence is presented in this way: “Jim and me is going into the cave.” In the grammar group, the teacher would say something like this: “First of all, this is an error in agreement between subject and verb, so the correct verb should be ‘are.’ What else is wrong with this sentence?” In the non-grammar group, the teacher might say something like this: “How many is ‘Jim and me’?” “More than one.” “What verb is used for more than one?” “Are.” “So how should this sentence be written?” “Jim and me are going into the cave.” “Now, is there anything else wrong with this sentence?”

But one quickly notices that even in the non-grammar group, the term “verb” is used, illustrating, among other things, the virtual impossibility of discussing grammatical issues without using at least some basic grammatical terms. And so not only is it *not* true that the non-grammar groups “excluded any reference to formal grammar,” as Harris claims; they also do not even successfully exclude all instances of grammatical terminology. In fact, Bamberg

(1978) makes this exact point and characterizes Harris's non-grammar group as a "functional or applied approach" (p. 49), stating,

Some research studies concerned with the effect of grammar instruction have succeeded in showing that a particular method improves some aspects of writing significantly. All of these methods are characterized by a *functional or applied approach* in which instruction is based on student errors and encourages the use of correct forms in speech and writing. (p. 49, emphasis added)

She then describes Harris's study in this way:

Harris (1962) conducted a two year study which compared the effect of instruction in formal grammar with the effect of *applied or functional grammar instruction* on the number and type of mechanical errors and the types and complexity of sentence patterns in student essays. All significant differences between the two groups favored the *applied method*, and his study offers the most conclusive support for an *applied approach* to traditional grammar. (p. 49, emphasis added)

Finally, alluding again to Harris's study, Bamberg remarks that

research has consistently shown that an *applied approach* based on student errors and *integrated with the total writing process* improves writing, while grammatical rules learned through formal grammar study and studied apart from writing fail to transfer to later writing tasks and result in no significant improvement. (p. 57, emphasis added)

Here Bamberg may be referring to other studies as well, since in Harris's study, as described by Harris himself, the grammar group did not learn grammar rules through formal study and apart from the writing context; they learned grammatical terminology as the explanation for the errors they were studying.

But the key point is that throughout her discussion of Harris's well-known study, Bamberg never once refers to what Harris had called his "non-grammar" group

by that term; she always refers to them as the “applied” or “functional” group that studied grammar within the context of writing, which is exactly what they did. Bamberg serves as an additional independent verification of the fact that Harris mischaracterizes his own study and mislabels the character and the activity of both groups, but most especially the “non-grammar” group, within his study. This clarified explanation seriously damages the legitimacy of Harris’s conclusions, as well as the inferences that are taken from them by Braddock and others.

The results of Harris’s study are as follows: First, “[t]he non-grammar pupils wrote on the average a greater number of correct complex sentences tha[n] the grammar” (p. 189). Second, among the non-grammar classes, “[m]ajor changes were generally apparent in mechanical correctness, in the coherence, complexity or ordering of thought, in the search for a more mature and varied style, and in fluency” (p. 192). “In ten of out of the twenty five very reliable scores, significant gains (i.e. where  $t =$  more than 3) were made by the non-grammar forms . . . No significant gains were made by forms studying grammar” (p. 199). Further, “. . . the grammar lesson in these five schools was unreliable as a means of securing a greater mastery and control in children’s writing than could be secured with the entire neglect of grammar in English lessons, and its replacement by some form of direct practice in writing” (p. 202) and “These gains cover a wide field. Mechanical, conventional correctness . . . maturity of style . . .

the control of complex relationships . . . general overall correctness . . . ” (p. 203).

And finally, Harris’s concluding statement, made famous by Braddock:

. . . an extra writing period in place of grammar must in fact probably double the time given each week to actual written work in class. It seems safe to infer that the study of English grammatical terminology had a negligible or even a relatively harmful effect upon *the correctness of children’s writing* in the early part of the five Secondary schools (p. 208, emphasis added)

Emphasis is added to Harris’s statement to draw attention to two facts.

First, Harris’s “harmful effect” statement concerned issues of *correctness* relating primarily to matters of mechanics and the conventions of written usage. Second, when Braddock appropriated Harris’s statement for the Braddock report’s condemnation of grammar teaching, the wording was manipulated. Braddock’s statement became “a harmful effect on *the improvement of writing*” (p. 38, emphasis added) – wording that implies a much larger and broader impact than Harris’s study intended or justified.

The Harris study, though flawed, was not without merit. Its good points are as follows: (1) it had a three-month pilot study; (2) it was a two-year study; (3) it used actual writing samples to assess improvement in student writing; and (4) it had 228 students in the sample. However, and much more importantly, it also contains several major flaws. The bad points of the Harris study are as follows: (1) the non-grammar group actually did study grammar, only under a different name; (2) the so-called “grammar group” received explicit grammar

instruction in only one 40-minute period per week; (3) the eleven criteria used to judge maturing style can be argued as to validity; (4) the study is not controlled for teacher bias; (5) it claims that the results of the first 9-months assessment are inconclusive, but this is debatable; (6) its statistical procedures are not explained fully, although this is not surprising for an early 1960s study.

Often overlooked in discussion of Harris is the fact that both of Harris's groups actually learned grammar. The "direct method" students, though not taught grammatical terminology, learned about language in the context of writing – what today we would probably call "functional grammar" (p. 28).

Regarding the flaws of Harris's study, Tomlinson (1994) levels a much more serious charge. He too notes that the study is not controlled for teacher bias, and that the students in the non-grammar class "are, in fact, also being taught grammar" (p. 24). But the more serious issue is that the non-grammar groups, the groups that showed the most improvement on the posttests, "seem to have been coached in avoidance of the common errors Harris looked for when scoring their final essays" (p. 25). In speaking about the activities of the non-grammar groups, Harris specifically said, "Teachers do naturally keep in mind the elimination of particular errors listed in the 'common errors' in appendix 1" (p. 131). As Tomlinson points out, "[m]ost good teachers coach for exams, but it

is doubtful whether this should have been allowed in a research experiment” (p. 25).

There are then, according to Tomlinson, two major flaws in Harris’s study. The first is that Harris does not actually measure what he set out to measure. He said he wanted to measure the effect of teaching formal, traditional grammar to one class and of not teaching it to a parallel control class. What in fact he does, according to Tomlinson, is to compare *two ways of teaching grammar*: a formal, rigidly structured way and an informal, practical way. And “the result is a foregone conclusion. The pupils who showed most improvement are those who have benefited from two years’ informal grammar discussion of their written work—not to mention their coaching in error avoidance” (p. 25). The second flaw is the type of grammar taught to the “grammar” classes: “detailed taxonomic grammar of the most arid kind . . . not grammatical knowledge of a kind that could carry over into the written work of 12- and 13-year-olds” (p. 26).

Tomlinson summarized by saying, in an understated way, “To conclude on the basis of teaching parts of speech to 12- and 13-year-olds that grammar teaching, even the teaching of traditional grammar, had no value in the secondary school, is, if not specious nonsense, certainly a *non sequitur*” (p. 26).

Mellon (1969) assesses Harris’s study by noting that of fourteen common errors, Harris found that in the grammar group thirteen occur one or more times

in more post-test compositions than in pre-test ones. In the direct-method group, six are more frequent at post-test than at pre-test, while six are less frequent. In addition, Harris found that significant differences favored the direct-method classes in number of words per common error and in number of correct minus incorrect sentences. Thus, “the work of Harris merely confirms the results of earlier research favoring direct methods over approaches based on traditional grammar” (p. 6). This being the case, there was little valid reason for Braddock to make Harris the foundation for his wide-ranging condemnation of grammar teaching, and even less reason for Braddock’s assertion to receive the widespread acceptance that it did.

### **The 1963 Braddock report**

According to Mellon (1978), “[t]he most widely quoted sentence in all writing research pertains to grammar” (p. 253). Here he refers to the (in)famous statement in Braddock: “The teaching of formal grammar has a negligible or, because it usually displaces some instruction and practice in actual composition, even a harmful effect on the improvement of writing” (p. 37). However, according to Mellon, the sentence, though popular, is only one part true but two parts false. “Insofar as it pertains to the involvement of overtly stated grammatical principles in right/wrong drillwork aimed at changing usage or dialect, it is exactly on target” (p. 253). This is what most people today, even those in favor of teaching grammar, would agree on: Teaching drill-based formal

grammar exercises that are not contextualized to the student's specific writing situation will not help students very much in improving their writing.

But then Mellon exposes the other two-thirds of the Braddock statement that are false.

But insofar as it pertains to the nomenclature for labeling surface structures of written sentences and to the display of these structures arrayed in certain stylistically notable sentence patterns, it maligns a method of teaching that has worked ... throughout the history of education. (p. 253)

As Mellon (1978) goes on to point out, to discuss words, one has to use words—and grammatical terms and diagrams are the words and graphic devices invented for just that purpose.

Moreover, according to Mellon,

... the sentence is flatly wrong in its "harmful effect" contention. This fact has most recently been demonstrated by a 3-year longitudinal study of the role of grammar in the secondary English curriculum, a study conducted in New Zealand ... Two groups of students studied grammar; a third studied no grammar but was given extra reading and writing. Not one of the 102 comparisons on a variety of test factors over the 3-year period (including analyses of student compositions) favored the no-grammar-but-extra-writing group. ... [T]he New Zealand study constitutes powerful research evidence *disproving the contention that merely by displacing extra writing practice, grammar teaching exerts a harmful effect on the improvement of writing. It is just not so.* (p. 254, emphasis added)

Another major scholarly opposition was lodged against the anti-grammar view by Martha Kolln, whose 1981 article "Closing the Books on Alchemy"

detailed a number of ways in which the Braddock report failed to properly assess the available evidence.

Bereiter and Scardamalia (1986) show that one of the inherent weaknesses of the types of studies reviewed by Braddock is the “proliferation of variables” (p. 264). The authors suggest, in fact, that what they call “Level 2 research” (within their six-level scheme of “levels of inquiry” into writing expertise) (p. 265), which is referred to as “empirical variable testing” (p. 263), has much less to contribute to our knowledge about writing than the 1963 Braddock monograph implies.

Hagstrum (1964) asks some incisive questions about Braddock’s synthesis of the Harris dissertation:

(a) results that are inconclusive after one year became significant after two. What might have happened after three or even four? . . . (c) The results in general are what one would expect. Instruction in composition improved composition, including one of its constituent virtues, correctness. Instruction in grammatical definition improved the students’ ability to define grammatical terms. But why are these separate and legitimate aims of instruction placed in competition? Why shouldn’t both be taught? Haven’t we in fact been presented with a false issue? (p. 54)

An equally serious issue involves the large number of grammar-positive studies from the first half of the 20<sup>th</sup> century that are either not listed at all or listed but not discussed by the Braddock report (I have referred to many of these earlier). This fact makes it difficult, if not impossible, to take seriously the Braddock report’s statement about “the widespread agreement of research

studies based upon many types of students and teachers” and its insistence that “the conclusion can be stated in strong and unqualified terms” regarding the “harmful effect” (p. 38) of the teaching of formal grammar. One cannot help but wonder how Braddock could make such a statement, knowing – as he must have known – how much relevant information he was omitting.

Hillocks (1986), discussing the superiority of his (at that time) new meta-analysis research synthesis method, indirectly criticized the Braddock report’s more primitive (and, by implication, less valid) methods of research synthesis when he said

Traditional reviews of research have grouped studies by the variables examined and have reported, for example, the number of studies with significantly positive results, the number with no significant differences, the number with mixed results, and so forth. Such boxscore reviews can be useful, *particularly when all studies concerned have similar results*. Braddock, Lloyd-Jones, and Schoer (1963) used such a review to conclude that the study of formal grammar had *no effect on the quality of writing*. . . . However, this box-score method cannot compare the power of treatments across studies, and it relies on tests of the significance of differences, which to some extent depend upon sample size. Unfortunately, the focus on the significance of differences leads one to ignore the size of gains. For example, with a sample size of several hundred, a very small gain might be statistically significant, but not meaningful in the sense that an observer would be able to examine a writer's pretest and posttest and predict treatment group membership. On the other hand, *a study indicating no significant difference might obscure very large gains for both experimental and control groups*. Because meta-analysis is based on the size of gains (effect sizes), it can avoid such problems. (p. 103-104, emphasis added)

Three brief comments are in order: First, the Braddock report's conclusions are suspect precisely because all the studies concerned do not have similar results. Braddock omits many studies from consideration that would have showed positive results for grammar teaching. The only way Braddock could appear to justify a statement such as "the widespread agreement of research studies based upon many types of students and teachers" is by looking only at the studies that showed negative results for grammar teaching and disregarding the studies that showed positive results. Second, Hillocks was not correct to say that Braddock had concluded that the study of grammar had "no effect on the quality of writing." Braddock makes it very clear that, as far as its conclusions are concerned, the study and teaching of grammar had a "harmful effect" on the quality, or improvement, of writing. Third, Hillocks was correct when he noted that a weakness of general research synthesis is that "a study indicating no significant difference might obscure very large gains for both experimental and control groups." However, Hillocks uses this fact to his advantage numerous times in his narrative account of the grammar-and-writing studies that he considers for his meta-analysis, and he violates the very point that he is making here by summarily dismissing several studies on the basis that they do not show statistical significance. All of the studies rejected by Hillocks on this basis are, not surprisingly, studies that show positive results for the teaching of grammar.

## **The 1986 Hillocks study**

A summary of Hillocks's conclusions were first published in "What works in teaching composition: A meta-analysis of experimental treatment studies" (1984). He then expanded his findings in a full-scale book treatment that became *Research on Written Composition (ROWC)* (1986).

Hillocks summarizes the grammar section of his meta-analysis as follows:

Students in the grammar and mechanics treatments scored .29 standard deviation *less* than their peers in no grammar or mechanics treatments. . . . Braddock and his colleagues (1963) argued that grammar study may have a possibly negative effect on composition ability. These data certainly support their contention . . . that nearly anything else is more effective in increasing the quality of writing. (p. 214, emphasis original)

Later in *ROWC*, Hillocks reviews what he believes to be the ramifications of his study for instructional practice by saying

The study of traditional school grammar (i.e., the definition of parts of speech, the parsing of sentences, etc.) has no effect on raising the quality of student writing. Every other focus of instruction examined in this review is stronger. Taught in certain ways, grammar and mechanics instruction has a deleterious effect on student writing. . . . School boards, administrators, and teachers who impose the systematic study of traditional school grammar on their students over lengthy periods of time in the name of teaching writing do them a gross disservice which should not be tolerated by anyone concerned with the effective teaching of good writing. (p. 248)

However, Hillocks's overall analysis of the available grammar-and-writing studies is subject to question on a number of issues. First, he constructs a very restrictive set of inclusion criteria that results in the elimination, by his own count, of "over 80 percent of the [available] experimental treatment studies" (p.

110). For the grammar studies, this means that out of 20 available studies, only three were considered by Hillocks to be of sufficient quality to be included in his study. Two of those studies contain two treatments, so his final analysis consisted of five treatments. But the elimination of 85% (17 of 20) of the available studies leaves open the question of the strength of Hillocks's database and the robustness of his analysis. A second issue concerns the nature of one of the three studies included in Hillocks's analysis – the dissertation of A. L. Thibodeau, an Ed.D. completed at the Boston University School of Education in 1963. Thibodeau's study is titled "A Study of the Effects of Elaborative Thinking and Vocabulary Enrichment Exercises on Written Composition." It presents itself as a study of five major problems, the first of which is to determine the effects of a series of lessons in elaborative thinking and vocabulary enrichment, "two subskills not ordinarily considered as subskills in the improvement of written composition" (*DAI* 25.4 [1963], p. 2388). The rest of the abstract makes no mention at all of grammar or mechanics. Though grammar is dealt with later in the dissertation, it is not the major focus of the study; it is discussed only in the most ancillary of ways. A third issue relating to the second is the close affinity of two of the three studies Hillocks uses for his grammar database. The other two are a dissertation by A. E. Thibodeau, Boston University (1963), and Elley et al. (1975). It appears that the studies by the two Thibodeaus both used the same population of students, since both were done at the same Boston-area schools,

both report the exact same number of experimental subjects in all three treatments ( $n = 266$ ), and Hillocks reports the exact same effect size (-.11) for all three experimental groups. None of this information necessarily disqualifies these studies from inclusion in Hillocks's meta-analysis, but it does raise questions about the quality of his database, his unconditional condemnation of grammar teaching, and his insistence as to grammar's absolute lack of effectiveness in the improvement of writing.

Others have registered additional problems with Hillocks's results. Stotsky (1988) suggests that "Hillocks' conceptualization of the meta-analysis is the most controversial aspect of his book" (p. 89). Larson (1987) comments on Hillocks' "strict criteria" and notes that "his presentation of the meta-analytic technique in Chapter 3 is such that the working professional reader . . . cannot grasp, let alone confirm, the conceptual bases or the logic of the procedure" (p. 210). Larson then concludes his discussion of Hillocks's meta-analysis by saying, "In one of the acute ironies in our profession today, a teacher of writing is here addressing other teachers of writing (all of whom value skillful use of language and forceful expression) in a language that, at central points, probably cannot communicate with a large number of its readers" (p. 211).

All of these issues render Hillocks's meta-analysis, considered by many to be a definitive anti-grammar statement, less than convincing as proof that grammar is not helpful to the improvement of writing.

Reading Hillocks not only did not convince me of grammar's ineffectiveness in the teaching of writing—it further stimulated my interest in researching this issue.

### **Recent approaches: Beyond Braddock and Hillocks**

Empirical studies dealing with grammar and writing that were completed too late for inclusion into Hillocks's 1986 meta-analysis (which includes studies only through 1984), or which Hillocks did not mention, are now discussed in this section.

In 1983 Graham studied the effects of the frequency of teacher feedback and marking of usage errors on the papers of junior college students over a semester of written composition assignments. Group A had every writing assignment marked for usage errors, graded, and returned; Group B had every third writing assignment marked for usage errors, graded, and returned. The study found that students who had every paper marked for usage errors did not make significantly fewer usage errors in their writings than students who had only one in three papers marked for usage errors.

Morrow (1984) used error analysis in two college freshman composition classes over an 11-week period to determine what effect this model has on students' writing. Four writing samples were divided between expository and argumentative pretest and posttest essays. Results show that grammar instruction using error analysis fails to produce significant effects on students' writing.

Couch (1987) used what she called an experimental design to test the feasibility of using sentence imitation practice as another way of bringing about constructive changes in students' syntactic structures. Her study examines the effects of a sequenced series of sentence and paragraph imitation exercises on three syntactic features (words per t-unit, clauses per t-unit, and words per clause) and overall quality of the writing of students in six sections of freshman composition. An experimental group completed imitation exercises that introduced grammar terminology, but they were not drilled or tested on the terminology. A second experimental group received instruction that used grammar as a way of analyzing students' errors in their own writing. A third group participated in no formal grammar study nor in sentence imitation exercises but spent time in peer workshops. Results showed no significant differences between the pre- and posttest writing samples of any of the groups.

Vawdrey, whose 1991 study covered eight business communication courses in four postsecondary institutions in Utah, found that a relationship did exist between students' knowledge of grammar and punctuation principles and their ability to apply those principles when editing and writing business documents. Specifically, students had an inadequate ability to apply those principles when editing and writing business documents. What is not clear is whether her study included an actual writing sample, and if so, how that writing sample was evaluated and scored.

Grammar reviews combined with peer editing were compared by Roberts (1994) against a non-grammar, professor-editing approach in college business communication classes. Nine business letters were assigned to both the experimental and control groups during the study. The experimental group received daily grammar reviews and collectively edited each others' business letters. The control group received no daily grammar reviews and had its letters graded by the professor. Results showed a statistically significant difference (at the .05 level) in favor of the experimental group on posttest business letter scores. Roberts concludes that peer editing with brief grammar reviews is a more effective method of teaching written business communication than professor grading with no grammar reviews.

The contrast between cooperative editing and the traditional textbook/lecture/discussion method was studied by Minchew (1996), who used four remedial freshman composition classes to randomly assign 79 participants to experimental or control groups. The experimental groups were taught grammar with minimal use of textbook, lecture, and discussion and intensive use of cooperative editing of actual student papers for major grammatical errors. Major errors that were emphasized included the comma splice, fragment, fused sentence, tense errors, subject-verb agreement, pronoun-antecedent agreement, pronoun reference, and case. Two types of posttest writing samples provided statistically significant improvement for the experimental groups, showing that grammar instruction improves the remedial students' ability to use standard written grammar on their own papers.

Eanes (1999) used student writing and model writing to teach grammar to an experimental group, which was contrasted with a control group that studied grammar using a traditional textbook and exercises. The measure of improvement, however, was an objective grammar examination and not a sample of actual writing. Eanes discusses the value of using student writing to study grammar, but does not use actual student writing to judge whether students have improved their ability to transfer grammar knowledge to their writing.

## **Comparing online educational environments**

As mentioned previously, the studies of Bernard et al. (2004), Cavanaugh et al. (2004), Rivera, McAlister, and Rice (2002), and Owens and Volkwein (2002), have indicated that there is no appreciable difference in quality regarding student outcomes between the traditional classroom modes of instructional delivery and the online mode. An issue that has been only recently come into focus is how what have become known as “hybrid” courses fit into the online environment. Patricia Bizzell (1999, 2002) is given credit for coining the term “hybrid” to refer to courses that combine both traditional face-to-face instructional methods with newer online delivery methods and procedures such as synchronous discussion threads, chat features, and expanded instructional use of email. Margie Martyn (2003) points out that the hybrid online model fully meets all of the accepted standards of the famous “Seven Principles for Good Practice in Undergraduate Education” developed by Chickering and Gamson (1987). However, no study has ever looked at the grammar teaching issue by comparing the difference between a hybrid online environment and a totally online environment. This study will be unique in this respect.

## **Evaluation and conclusion**

This survey of literature shows that while many studies have been done in the area of grammar and writing, none have studied the question from the same point of view or with the same aims and research focus as this study. None have

specifically studied the difference between grammar and no grammar in a comparison of traditional on-site, cohort classrooms and non-traditional extended studies classrooms, and none have included the combination of error plus style to assess writing quality at the college level. Furthermore, no one has looked at the issue of how the hybrid online environment contrasts with the totally online environment in their effects on grammar and stylistic fluency. There is thus justification for this study, which will add an additional aspect to our knowledge of whether, and under what circumstances, the teaching of grammar can help to improve student writing.

## CHAPTER III

### METHODOLOGY:

#### HOW THIS STUDY IS CONDUCTED

Moving now from my review of the relevant literature, in this chapter I provide a more detailed explanation of the research methodology that I briefly discussed in Chapter I.

#### **The research question**

The primary question examined in this study is as follows: *Does direct, in-class instruction in grammar improve the quality of student writing?* Specifically, the study investigates whether, in university freshman-level writing classes, exposure to direct grammar instruction—in this case, by an in-class instructor—has a positive effect on the quality of student writing. The comparison for analysis is made between two types of freshman English classes at Texas Tech University: onsite English 1301 classes, which have an in-class instructor who gives direct, face-to-face instruction in grammar, and Extended Studies (ES) classes, which by definition do not meet with a teacher in a direct-instruction setting.

The structure of the research question simplifies the approach to the data gathering and analysis that accompanies this study. If grammar instruction does, in fact, improve the quality of student writing, then we will expect to see fewer errors and more markers of stylistic fluency, as defined below, in the onsite 1301

essays than in the ES 1301 essays. If grammar instruction does not improve the quality of student writing, then we will expect to see the opposite: fewer errors and more markers of stylistic fluency in the ES 1301 essays than in the onsite 1301 essays.

## **Definitions**

Constructing an approach for describing and analyzing essays from the two populations used in this study requires that precise definitions be given of the major terms used. The most important terms used in this study are listed and defined as follows:

Direct Instruction. By “direct instruction” is meant a classroom where a teacher is involved in face-to-face instructional interaction with students. It is the opposite of a typical distance-learning or extended-studies class, where no teacher is present and where students have to study the material on their own, without input or help from a teacher.

Grammar. In this study, the term “grammar” is defined as referring to the generally accepted conventions of standard written English, especially academic English, as used, taught, and expected in a university-level writing course. As explained below, this includes punctuation, mechanics, syntax, and usage.

Student Writing. By “student writing,” as explained under “Sampling Techniques,” is meant the essays designated as the 4.3 assignment in English

1301 at Texas Tech University, each approximately 1,200 words long, written as semester-final assignments and also as classical argument essays.

Positive Effect, Improve, Quality. In this context, the terms “improve,” “positive effect,” or “quality” are defined as fewer grammar errors and also as more markers of stylistic fluency. In each essay that is analyzed, errors and stylistic markers are quantified and classified to allow full analysis, which is performed with the assistance of the SPSS statistical program, version 14.0. All of this is discussed more fully below under “Basic Research Methods.”

Stylistic Fluency. Because stylistic fluency is a major hinge point of this study, a fuller discussion is given of this issue.

Bakhtin (2004) connected grammar with style when he said, “One cannot study grammatical forms without constantly considering their stylistic significance” (p. 12). He continued, “Grammar is more than correctness; therefore, writers’ choices about grammar must also take into account stylistic effect” (p. 13). Schuster (1985) suggested that we should be able to agree with Bakhtin that “stylistic concerns in the composition classroom are not merely the fluff of writing instruction but a fundamental concern with our students’ ability to claim thought and meaning for themselves” (p. 598). Shopen (1974) saw grammar as concerned with the expression of meaning, but style as “a set of

principles for choosing the verbal means for expressing *ideas*" (p. 775, emphasis original).

Mellon (1969) used the term "syntactic fluency" to refer to "maturity of sentence structure" as defined by "the range of sentence types observed in representative samples of a student's writing" (p. 16). He noted that no studies (up to 1969) had specifically targeted the question of whether teaching grammar would lead to the use of more mature syntax, and those studies that could have made informed statements about the issue – Milligan's 1939 study and Harris's 1962 study – chose to concentrate on the issue of error avoidance rather than what could be learned about mature syntax and syntactic fluency.

Klinghorn, Faigley, and Clemens (1981) pointed out that the approach to style that came to be characterized as "Christensen sentence rhetoric" deals with all the office of rhetoric – invention, arrangement, and style: invention, because it focuses on generating meaning to add to the base clause; arrangement, because it incorporates an approach to the paragraph; and style, because it centers on creative manipulation of the sentence.

These scholarly statements give legitimacy to the idea of combining the study of style with the study of grammatical issues, and show further that this dissertation participates, according to Mellon's (1969) concerns, in a tradition of

study connecting grammar with style that has only rarely been seen in the past one hundred years.

### **Basic research methods**

The basic research methods of this study involved the counting and classification of grammatical and mechanical errors and the counting and classification of markers of stylistic fluency in the essays collected from two university student populations.

### **Counting and classification of errors**

The analysis for this study is performed on essays written in freshman English, English 1301, at Texas Tech University. The quality of writing is judged first by a count and classification of grammar and mechanical errors in the essays. The classification of errors is further subdivided into three types of errors: errors of punctuation or mechanics, errors of syntax, and errors of usage. This classification follows the rubric and rank order created by the composition faculty at Texas Tech, where errors of punctuation or mechanics are ranked as more serious than are errors of syntax, and errors of syntax are considered more serious than are errors of usage (explained below).

The term “error” refers to mistakes in what are commonly recognized as the standard conventions of written English. The most prominent recent survey of errors in the writing of college students is that of Connors and Lunsford (published in 1988 – not all that recent), who collected and categorized the

twenty most common errors in college students' writing. From a survey of 3,000 papers written by college students, Connors and Lunsford found the following patterns of errors, listed in order of frequency, and classified according to type of error as punctuation (p), usage (u), or syntax (s) (the classification scheme is mine):

1. No comma after introductory element (p)
2. Vague pronoun reference (u)
3. No comma in compound sentence (p)
4. Wrong word (u)
5. No comma in non-restrictive element (p)
6. Wrong/missing inflected element (s)
7. wrong or missing preposition (u)
8. comma splice (p)
9. possessive apostrophe error (p)
10. tense shift (u)
11. unnecessary shift in person (u)
12. sentence fragment (s)
13. wrong tense or verb form (s)

14. subject-verb agreement (s)
15. lack of comma in series (p)
16. pronoun agreement error (s)
17. unnecessary comma with restrictive element (p)
18. run-on or fused sentence (p)
19. dangling or misplaced modifier (u)
20. its/it's error (s)

As mentioned above, I categorize each error as either punctuation (p), syntax (s), or usage (u). With this in mind, the twenty common errors of Connors-Lunford are classified as follows: eight are punctuation errors, six are syntax errors, and six are usage errors. Furthermore, if one calculates the “rank” of each error – that is, calculates the relative number ranking of each error by its place on the list, with the smaller number being the more valuable – the list ordered itself as follows:

The six usage errors rank 2, 4, 7, 10, 11, and 19, for an average rank of 8.8. The eight punctuation errors are ranked 1, 3, 5, 8, 9, 15, 17, and 18, for an average rank of 9.5. The six syntax errors rank 6, 12, 13, 14, 16, and 20, for an average rank of 13.5. It must be remembered that the Connors-Lunford tabulation is of the *frequency* of the occurrence of these errors in the papers of college students. This

means that the lower numbers, being representative of higher ranking, occurred more often. Thus, in the writing of college students that is examined by Connors and Lunsford in 1988, usage errors occur more often, on average, than do other kinds of errors. Punctuation errors occur less frequently than usage errors but more frequently than syntax errors. Syntax errors occur the least frequently of all, on average.

The English Department at Texas Tech, as part of its ICON program, took the twenty common errors that were tabulated by Connors and Lunsford and ranked them in the order that they felt are “most injurious to an effective piece of writing” (“Writing Elements”). This indicates an awareness that a key aspect of error management in writing is not simply a tabulation of how many errors are made, but a calculation of which errors are made and how they damage the rhetorical effectiveness of the writing, what Williams (1981) calls “error perceived as a flawed verbal transaction between a writer and a reader” (p. 153). With that in mind, the following list was created from the Texas Tech English Department’s list of writing errors, ranked in order of most harmful to least harmful. In this list, I also attached the corresponding rank from the Connors-Lunsford list in parentheses next to each item:

1. run-on or fused sentence (18)
2. sentence fragment (12)

3. comma splice (8)
4. no comma after introductory element (1)
5. no comma in a compound sentence (3)
6. lack of comma in a series (15)
7. wrong/missing inflected endings (6)
8. wrong or missing preposition (7)
9. possessive apostrophe error (9)
10. its/it's error (20)
11. wrong tense or verb form (13)
12. tense shift (10)
13. unnecessary shift in person (11)
14. wrong word (4)
15. subject-verb agreement (14)
16. pronoun agreement error (16)
17. vague pronoun reference (2)
18. no comma in a non-restrictive element (5)
19. unnecessary comma with a restrictive element (17)

20. dangling or misplaced modifier (19)

Table 3.1 shows how the common errors that are listed in the Connors-Lunsford survey of 1988 are ranked by the Texas Tech composition faculty. The table also categorizes each error as to type: punctuation/mechanics (p), syntax (s), or usage (u).

Table 3.1--Common Errors by Rank

Error	TTU rank	C-L rank	category
run-on or fused sentence	1	18	p
sentence fragment	2	12	s
comma splice	3	8	p
no comma after intro element	4	1	p
no comma in compound sent.	5	3	p
lack of comma in series	6	15	p
wrong/missing inflected ending	7	6	s
wrong/missing preposition	8	7	u
possessive apostrophe error	9	9	p
its/it's error	10	20	s
wrong tense/verb form	11	13	s
tense shift	12	10	u
unnecessary shift in person	13	11	u
wrong word	14	4	u
subject-verb agreement	15	14	s
pronoun agreement error	16	16	s
vague pronoun reference	17	2	u
no comma in non-restrictive element	18	5	p
unnecessary comma with restrictive element	19	17	p
dangling/misplaced modifier	20	19	u

Table 3.2 reveals which errors, when categorized and ranked by type, are considered most serious by the Texas Tech composition faculty. There are eight punctuation/mechanics errors, six errors of syntax, and six usage errors. When the number ranks are tabulated and calculated, the punctuation/ mechanics errors average 8.13 (65/8), the syntax errors average 10.17, and the usage errors average 14.0, showing that by overall average, the punctuation/ mechanics errors are considered to be the most serious, syntax errors are next in seriousness, and usage errors are least serious. The logical conclusion from this ranking is that the more serious errors are considered to do more damage to the rhetorical effectiveness of the sentence, or at least to the communication between writer and reader.

Table 3.2—Common Errors by Category

Error	category	TTU rank	C-L rank
run-on or fused sentence	p	1	18
comma splice	p	3	8
no comma after intro element	p	4	1
no comma in compound sent.	p	5	3
lack of comma in series	p	6	15
possessive apostrophe error	p	9	9
no comma in non-restrictive element	p	18	5
unnecessary comma with restrictive element	p	19	17
		<b>65/8 = 8.13</b>	<b>76/8 = 9.5</b>
sentence fragment	s	2	12

wrong/missing inflected ending	s	7	6
its/it's error	s	10	20
wrong tense/verb form	s	11	13
subject-verb agreement	s	15	14
pronoun agreement error	s	16	16
		<b>61/6 = 10.17</b>	<b>81/6 = 15.08</b>
wrong/missing preposition	u	8	7
tense shift	u	12	10
unnecessary shift in person	u	13	11
wrong word	u	14	4
vague pronoun reference	u	17	2
dangling/misplaced modifier	u	20	19
		<b>84/6 = 14.0</b>	<b>53/6 = 8.83</b>

Some comments about this ranked list, and how it compares to the Connors-Lunsford list, are appropriate. First, it is always possible to debate the positioning of various elements in such a list. For instance, I would argue that a dangling or misplaced modifier, ranked by the Texas Tech composition faculty at 20, is much more harmful to a piece of writing than, say, an its/it's error, ranked at 10. But such debates are continual and never-ending. Overall, this list effectively instantiates the difference between what might be called an inconsequential or "technical" error and an error that seriously impedes the reader's understanding of the writer's meaning.

Second, a comparison of this list, which is ranked according to the amount of perceived “damage” the error does to writing, with the Connors-Lunsford list, which is ranked only according to frequency in a sample (though an admittedly large one) of college student writing, shows some interesting results. Some of the items are very far apart: the Texas Tech English department’s highest-listed error (referred to here as English 1), a run-on or fused sentence, is only 18 on the Connors-Lunsford (C-L) list; English 2, sentence fragment, is 12 on C-L; and English 3, comma splice, is 8 on C-L. But other items are very close: English 4, no comma after introductory element, is 1 on C-L; English 5, no comma in a compound sentence, is 3 in C-L, and English 7, wrong/missing inflected endings, is 6 in C-L. Six of the items are either the same in rank or are within one place from one list to the other. Finally, of the first ten items in the English Department list, five are quite different in rank from their position in the C-L list, but five others are very close, with one (9, possessive apostrophe error), being the same in both lists. The primary point, it would seem, is that after ranking the errors on the basis of the damage they do to the effectiveness of writing, the English Department’s list is not that different in overall impact from the C-L list. And the results one gets from using the English Department list to analyze samples of writing, as is done in this study, would not be that far removed from what one would get if one applied the better-known C-L list instead.

One final comment on the English Department list: Using the rank order of each element in the list as a way of gauging its relative importance, it is possible to assess which of the three types of errors--punctuation, syntax, or usage—is considered most damaging by the English Department at Texas Tech. The eight punctuation errors have an average ranking of 8.1; the six syntax errors average 10.2; and the six usage errors average 14.0. I thus concluded that the English Department at Texas Tech consider, overall, the eight punctuation errors in this set of twenty errors to be more damaging to writing effectiveness than the six syntax errors or the six usage errors. Furthermore, they consider the six syntax errors to be more harmful than the six usage errors, and they consider the six usage errors to be the least harmful of all.

Of course, in this regard, one could also debate whether an error like a “run-on or fused sentence,” error number 1, ranked as the most serious mistake a writer can make, which I classified as a punctuation error because it is created by writing two or more sentences together without intervening punctuation (period or semicolon), might be considered by some to be a syntax error, arguing that the real error is not the lack of punctuation but the failure of the writer to recognize the sentence boundary. This debate might possibly be somewhat productive but would, like the previously mentioned debate about where to rank errors, be continual and of diminishing returns. Whatever the possible underlying reasons for the writer’s failure to write the sentence(s) correctly, the “bottom line” is that

he/she does not put a required period or semicolon between the two sentences, and so this error, for the purposes of this study and for the sake of the simplest possible classification scheme, is classified as a punctuation error.

A final note on the issue of errors: Connors and Lunsford do not discuss every survey of error because they concentrate on errors in college writing. Other scholars have dealt with the issue of errors at other levels of writing. Baird (1963), e.g., surveys errors in 11<sup>th</sup>-grade writing and, not surprisingly, finds different errors and patterns. Further, C-L do not deal other types of problems, e.g., the much more complicated types of errors known as “awkward sentences,” which encompass more than one type of error and require multiple pedagogical approaches; see the excellent analysis by Barton et al. (1998) for a discussion of this difficult issue.

### **Counting and classification of markers of stylistic fluency**

The classification of style markers is also subdivided in this study into three separate categories: (1) the number of words per clause, (2) the number of right-branching/final free modifiers, and (3) the number of words in right-branching/ final free modifiers. The justification for this procedure involves a detailed discussion of the rhetorical theories of Christensen, Faigley, Simmons, and others.

### **Connecting grammar with style**

In 1969 Mellon lamented the abundance of error-oriented research and the fact that “one finds it difficult to uncover even a single experiment on the claim that studying traditional grammar leads to the use of a wider range of sentence types” (p. 7). Mellon’s comment is part of the motivation that led this research in the direction of measuring not just the errors in student writing, but toward a larger evaluation of writing quality, as defined both by both fewer errors and also by some appropriate measurement of mature written style or stylistic fluency.

Discovering exactly how that “mature written style” should be defined, and then deciding what would be the appropriate way to measure that style in student writing, led to a review of the literature, a study of the different approaches that have been suggested, and a distillation of a workable approach that fit the limitations and context of this study.

Corbett and Connors (1999) suggest a number of issues that could be considered within the area of style, such as the number of sentences, the length of sentences, the types of sentences, and even schemes of constructions, figures of speech, and tropes (pp. 380-411). Corbett (1986) has earlier noted that “style represents the choices one makes from the available grammatical options” (p. 25). He sees four main categories of stylistic features that can be analyzed in a piece of prose writing: diction, sentence patterns, figures of speech, and

paragraphing (pp. 25-26). Those especially appropriate to this study would involve sentence patterns. About these, Corbett says that “[m]ost of the stylistic features of sentences are objectively observable items: length of sentences (in number of words); grammatical types of sentences (simple, compound, complex, compound-complex); [and] . . . amount of embedding” (pp. 26-27). To make valid generalizations about a writer’s style, Corbett feels that one must analyze “between 1000 and 1500 words of a piece of prose” which, though not very much, is “substantial enough to allow for some valid inferences to be drawn” (p. 27). Following Corbett’s suggestion, in this study every paper analyzed is at least 1,000 words in length, and most are closer to 1,200 words.

Noguchi confirms the connection between grammar and style by noting that “[w]hile formal grammar instruction seems to offer little in the area of essay organization, it does seem more potentially beneficial in the area of style” (p. 11). He defines style as “characteristic or recurring linguistic features, . . . [including] not only syntactic and morphological forms but also salient features of punctuation and spelling” (p. 11). But, according to Noguchi, style also covers more than mechanics – it includes writers’ options that lead to effective communication of content, such as the sequencing of linguistic elements, parallelism, subordination, transitions, and pronoun reference. Because style includes these options, formal grammar instruction seems especially promising in its connection to style for four reasons. First, style, like grammar, typically has

to do with form. Thus, “we can speak of style as a recurrent or characteristic choice of form” (p. 11). Second, style can be studied with respect to sentences. Third, the style of sentences contributes significantly to the overall style of an essay. And fourth, “style is an area in which many of the technical concepts introduced in formal grammar instruction become descriptively relevant” (p. 11). Thus, formal instruction in grammar has more to offer in the area of style than in either the area of organization or the area of content. Noguchi therefore suggests that style is much more important to writing quality than has often been thought, especially by those who are opposed to grammar teaching (pp. 13-14).

Tufte (1971) offers further insight about the connection between grammar and style when she says that “it is when words are hooked together and made to work as a unit, when *syntax* is involved, that grammar makes its main contribution to style. . . . it is mainly as syntax that we can know grammar as style” (p. 2). This happens, she says, because “the real action of syntax . . . should be thought of as a disclosure made piece by piece . . . Syntax has direction, not just structure. . . . It is an order of grammar experienced *in* a certain order, not a system or arrangement so much as a succession—*syntax as sequence*” (p. 8, emphasis original). This also is the direction that Christensen takes in his approach to cumulative sentences.

## **Defining and measuring stylistic maturity or fluency**

There does not seem to be much difference in the literature in meaning or usage between the terms “syntactic maturity” and “syntactic fluency.” In this study, the expression “syntactic fluency” is preferred, but both terms are used more or less interchangeably, especially when referring to the writings of others.

### **A closer look at “syntactic fluency”**

Mellon (1978) lists “syntactic fluency” as one of the subheadings under “lexical and sentential competencies,” which is the first of his list of five in his taxonomy of compositional competencies (p. 258). He describes syntactic fluency this way:

The ability to deploy within each full sentence that one constructs all the basic statements that arise in mind and are deemed appropriate for inclusion by grammatical subordination. Possession of syntactic fluency means that, by use of syntactic processes known as coordination and embedding, the writer is readily able to combine within the surface structure boundaries of individual sentences, in forms whose predications may be finite (clauses), non-finite (verbal phrases) and conjoined elements, or wholly deleted (modifiers and compounds) as many elementary statements as arise from thought and recommend themselves for grammatical subordination within these sentence boundaries. (p. 259)

Simmons (1985), working from the influence of Christensen, Mellon, and Faigley, defines syntactic fluency as the “growth in writing” that students demonstrate as a result of using more words per T-unit, words per clause, clauses per T-unit, right-branched free modifiers, and words in right-branched free modification (p. 3). However, she later determined that only the measures related to right-

branched free modification have significance at the college level. Her insight on this issue becomes a major factor in the analytical structure of this study.

The actual measurement of written maturity seems to have begun with La Brant (1933). In an early attempt to measure the development of the written language maturity of school children, she noted that “it is impossible to determine what constitutes a sentence in an individual’s . . . written composition, unless the sentence be perfectly punctuated by marks or inflection” (p. 482). This led her to concentrate on the clause rather than the sentence as the primary construction that she investigated. She concluded that “length of clause is not a significant measure of language development for children in grades 4 to 12, inclusive” (pp. 467-468). However, she did find that as students get older, they write more and more subordinate clauses. She computed the number of dependent, subordinate clauses as compared to the number of independent, main clauses – a measurement she called the “subordination ratio” (p. 472), and found that this measure does increase significantly as students increase in age (p. 485).

But because there was disagreement between La Brant and other scholars about what constitutes a clause, Hunt (1965) devised a measurement unit called the “T-unit,” which is short for “minimal terminal unit” (p. 21), that consisted of “one main clause with all the subordinate clauses attached to it” (p. 20). This

allowed Hunt to create a new ratio for measuring the maturity level of a piece of writing: the number of all clauses (both subordinate and main) divided by the number of T-units, with the result expressed as a decimal (p. 33). This led to the use of five measures (Hunt 1970) that could be used in one way or another to measure syntactic maturity: words per sentence, T-units per sentence, words per T-unit, clauses per T-unit, and words per clause (p. 5).

When Hunt (1970) discusses the syntactic maturity of the average 12<sup>th</sup>-grader, the most useful of these indexes is words per T-unit; second most useful is words per clause; and third best is clauses per T-unit. For skilled adults, the indexes are the same, except that words per clause is as good an indicator as words per T-unit (in other words, they tied for first); clauses per T-unit is the third best indicator (pp. 6-7). He does note, however, the “directly observable increase in the number of subordinate clauses per T-unit, especially relative adjective clauses” (p. 9). Hunt summarizes these findings in this way: (b) “Older students tend to write significantly longer clauses . . . [and] Skilled adults write significantly longer clauses than twelfth graders. (c) Older students tend to write significantly longer T-units. . . . [and] Skilled adults write significantly longer T-units than twelfth graders” (p. 21).

Hunt (1970) explains these phenomena by noting that the number of “subordinate clauses do tend to increase with the maturity of the writer” (p. 55).

As students mature mentally, they tend to embed more of their elementary sentences, which Hunt says is a “psychological, a behavioral phenomenon” (p. 56). One possible explanation for this, according to Hunt, is that as the mind matures it organizes information more intricately and so can produce more intricately organized sentences that lead to the “multiple embedding that is characteristic of older writers” (p. 60).

Christensen (1968), however, questioned the conclusions of Hunt regarding the idea that T-unit length, clause length, and ratio of subordinate clauses to main clauses are actually the most reliable measures of growth in writing or of mature style (p. 574). Christensen, on the basis of his own study (1963/1978), proposed a “generative or productive rhetoric of the sentence” (p. 26) that produced what he calls the “cumulative sentence” (p. 27), characterized by “the structures that rhetoric must work with – primarily sentence modifiers, including nonrestrictive relative and subordinate clauses, but, far more important, the array of noun, verb, and adjective clusters” (p. 29). In later work (1968/1978), Christensen further explains that this type of sentence would come to represent a mature style through the use of what he called “free modifiers” – “modifiers not of words but of constructions, from which they are set off by junctures or punctuation. . . . The constructions are prepositional phrases; relative and subordinate clauses; noun, verb, adjective, and adverbial phrases or clusters; and, one of the most important, verbid phrases or absolutes” (p. 143).

Based on his study of skilled professional writers, Christensen concluded that the primary mark of mature style is a relatively high frequency of free modifiers, especially in the final position (p. 148).

To investigate Christensen's assertions, Crowhurst (1983) reviewed fifteen years of research and concluded, like Christensen, that neither T-unit length nor clause length is a good predictor of writing quality. However, Christensen objected to clause length as a basis of writing quality because counting the length of the entire clause includes all of the free modifiers that occur in initial and medial position, structures that Christensen feels are not necessarily indicative of the best writing. He prefers to count only the length of the base clause as indicative of good writing, with short being better than long (1968/1978, p. 144). This then allows the free modifiers that come after the base clause, in final position, to indicate a more sophisticated style, and thus more mature writing.

Nold and Freedman's (1977) study of college freshman essays concluded that sophistication in modification, especially words in final free modifiers producing a cumulative sentence, is indicative of good writing, and that this applies to expository, narrative, descriptive, and argumentative discourse (pp. 172-173). Faigley, in two studies, (1977, 1979a), also agrees with Christensen both that skilled writers tend more often to place free modifiers in the final position in

sentences and that mature writers use a higher percentage of words in final free modifiers than do student writers.

Other studies also have lent support to this idea. As far back as 1940, Frogner noted the increased use of the relative clause as a mark of maturity in writing (quoted in Fee, 1940). Laib (1990) connected the rhetorical strategy of amplification with Christensen's concept of adding free modifiers to the end of the basic clause. Govardhan (1994) found, in his study of ESL student writing, that higher-rated essays have longer sentences with embedded clauses and longer and larger numbers of error-free T-units (p. 5). Loban (1976), in a 13-year longitudinal study of school-age children, found that the key index of growth, and the key difference between stronger and weaker language users, is elaboration or modification within the main clause. Older and better language users tended to use longer communication units, use more embedding, and use more dependent clauses of all kinds (pp. 70-90).

Simmons (1985) tested the writing of high school seniors for writing quality and stylistic fluency by analyzing by conventional T-unit measures (words per T-unit, words per clause, and clauses per T-unit) and by measures of right-branching free modification. Her analysis suggests that conventional T-unit measures are doubtful as indicators of syntactic maturity for high school seniors, but suggests the value of measurements of right-branching free modification,

which includes the number of right-branched free modifiers and the number of words in right-branching free modification, as a valid measure of writing quality (p. 107). Specifically, Simmons states that her syntactic analyses tend to support certain conclusions:

They support those, such as Hake and Williams (1981) and Faigley (1979) who have questioned Kellogg Hunt's "syntactic maturity" measures as measures of writing quality or of "growth in writing." They support instead the insistence of Christensen (1963/1978) and others (Faigley, 1979; Nold & Freedman, 1977) on the importance of right-branching free modification. (p. 109)

Simmons also notes the prominent place that right-branching has in her study. "In this study, the use of right-branched free modification corresponded with writing quality more than any other syntactic measure – right-branched free modifiers ( $p < .01$ ) and percentage of words in right-branched free modification ( $p < .01$ ) showed significance" (p. 113).

Schultz (1994) showed that the same measures of syntactic fluency and maturity that apply to compositions in English can be successfully applied to pedagogy in other languages, such as French, and that the grammatical and syntactical ideas inherent in the concepts of "syntactic fluency" appear to apply to more than one language. For instance, "Teaching students to embed and subordinate their sentences helps them refine their core ideas by adding layers of nuanced meaning to the kernel sentence" (p. 171). She also referred to Christensen's concept of the "cumulative" sentence, "where writers add

information and detail to the main clause,” which is then “the most common and the most useful sentence type to teach in order to encourage students to refine and clarify their thinking” (p. 171). The connection between grammar and style is valid, Schultz says, because “the study of well-written complex sentences . . . demonstrates to students the rich communicative functions and possibilities of grammar” (p. 171), partly because “*effective written style is based in solid grammar skills*” (p. 172, emphasis added).

Faigley’s experiment with generative rhetoric (1979b) is structured like the sentence-combining experiments of Kerek, Daiker, and Morenberg, but it is intended to test whether Christensen’s methods, which ask students to supply content in a rhetorical situation rather than by asking students to join short sentences in an arhetorical context (sentence-combining), would produce a quantitative increase in student syntactic maturity. According to Faigley, who followed the principles of Hunt, the number of words per clause is the most important index at the college level (p. 178). The number of words per T-unit is somewhat less accurate beyond high school, as is the number of clauses per T-unit. Faigley also measured, following Christensen’s view, the percentage of total words in final free modifiers and, as he explains (Faigley 1979c), the percentage of T-units with final free modifiers (p. 201).

Tufte describes the basic grammatical patterns and structures that mesh with syntax to form the kinds of sequences she is referring to. She begins with *kernel sentences*, “the spare source from which ever other structures and sentences are generated,” which work as a sequence, however compact. “They set up a basic pattern of expected order, and are expanded with this in mind” (p. 9). More importantly for our purposes, kernels are expanded with *dependent clauses*, “for a remarkable variety of effects. The way we leave such clauses and move into the main one, . . . the whole strategy of sequence and transition accounts for the chief effects of relative and subordinate expansions” (pp. 9-10). In addition to this, a whole class of nonrestrictive modifiers, “well-named *free modifiers* by Francis Christensen, also depend on syntactic movement for its effects. . . . their weight and placement are so important to the sentence that we are warranted in using directional labels: *left-branching*, *mid-branching*, and *right-branching sentences*” (p. 10).

It may be that Christensen’s rhetoric strikes such a chord with so many because, as Levin and Garrett (1990), citing several earlier studies, have argued, English is primarily a right-branching language (p. 512). They state that the “greater difficulty of processing [left-branching] over [right-branching] sentences has been demonstrated in various practical situations” and that “the evidence seems preponderantly clear that speakers and readers find [left-branching] sentences more difficult to process than [right-branching] ones either because of

memory limitations or perceptual demands or both” (p. 512). Frazier and Fodor explain further by referring to the linguistic structure of right-branching sentences: “Right-branching constructions, unlike center-embedded constructions, are easy to parse. In a right-branching construction, by definition a higher clause is complete when the clause embedded in it begins” (p. 311).

Tufte notes that right-branching sentences are also called “cumulative sentences,” and their distinguishing feature is “the accumulation of material after the base clause is grammatically complete” (Tufte 153). In this she follows Christensen.

### **What free modifiers look like**

Wolk helps to define the way free modifiers can occur in sentences:

(1) the initial free modifier (IFM) includes all words, phrases, and clauses that precede the noun phrase which serves as the subject, regardless of punctuation (it may or may not be set off); (2) the medial free modifier (MFM) must be set off by punctuation and occur neither initially nor finally (that is, it must occur somewhere after the initiation of the noun phrase which serves as the subject but before the end of the bound predicate; (3) the final free modifier (FFM) must also be set off by punctuation and appear after the last word of the bound predicate. (p. 62)

Harris (1981) further defines these final free modifiers as “all non-essential phrases and clauses set off by commas (or other punctuation) at the end of the sentence, after the bound predicate . . . [including] non-essential prepositional phrases; relative and subordinate clauses; nominative absolutes; and noun, verb, adjective, and adverbial phrases” (p. 177). She recommends not stigmatizing

these constructions when students accidentally make fragments of them at the ends of sentences because they are the building blocks of mature writing constructions.

Broadhead, Berlin, and Broadhead (1982) identify twelve kinds of free modifiers, as illustrated here and placed in final (and by definition right-branching) position:

1. present participial verb cluster (Jim opened the door, *whistling softly*.)
2. past participial verb cluster (Jim opened the door, *startled by the noise*.)
3. infinitive verb cluster (Jim opened the door *to get outside*.)
4. detached verb cluster (Jim opened the door, *and is glad he do*.)
5. noun cluster (Jim, *an expert repairman*, opened the door.)
6. list cluster (These are the staples: *bread, cheese, and wine*.)
7. adjective cluster (Jim opened the door, *curious about the noise*.)
8. adverb cluster (Jim opened the door *slowly and carefully*.)
9. free prepositional phrase (Jim opened the door *after a while*.)
10. absolute (Jim opened the door, *his hands trembling*.)
11. free subordinate clause (Jim opened the door *when he heard the noise*.)
12. free relative clause (Jim opened the door, *which had been sealed shut*.) (p. 228)

Simmons (1985) defines free modifiers as “non-essential phrases and clauses, separated by punctuation . . . They are set off by some punctuation unless they are ‘free by position’” (usually, but not always, at the first of the sentence) (p. 87). Hartwell and Bentley (1982) suggest two primary features of free modifiers: they are set off by punctuation, and they can normally be moved

(p. 208). They list the main types of free modifiers as noun phrase, verb phrase, absolute phrase, adjective cluster, and prepositional phrase (pp. 219-226). The aspect of right-branching, or “final,” free modifiers – which are considered as the same phenomenon – they define as when the free modifier is placed after the base clause.

### **Objections answered**

The three studies of Witte (Witte & Davis 1980, Witte 1983, and Witte, Daly, & Cherry 1986) question the validity of the T-unit measures for two primary reasons: whether the T-unit length stays stable within each individual over time, and whether T-unit length stays stable across different modes of discourse. That issue is not a problem for this study, because all students are writing the same assignments and are producing the same type of essay. The essays examined, essay assignment 4.3, are the same kind of discourse mode: a classical argument. This fact eliminates any variation or instability that might theoretically be produced by writers switching from one mode of discourse to another.

In three studies (Witte & Davis 1980, Witte 1983, and Witte, Daly, & Cherry, 1986) the use of the length of the T-unit and the number of words per clause as reliable measures of maturity in writing are seriously questioned. In addition, Faigley (1980) conducted an analysis of freshman English writing that showed that Hunt’s three indices of maturity – words per T-unit, words per

clause, and clauses per T-unit— together predict less than two percent of the variance in holistic scores. One reason for this is that, as Faigley explained, “Across discourse modes and aims . . . variations in T-unit and clause length becomes even more evident. Writers of all ages adjust their syntax to some degree to suit the rhetorical context” (p. 294). Because of this, he says, “the notion of maturity in writing [remains] a very elusive concept” (p. 299). This idea is echoed by Williams (1979), who shows that “complexity” in meaning does not coincide with complexity in sentence structure:

In the past, we have implicitly equated complex sentences with mature sentences because we have assumed that the more ideas we express in a sentence, the more semantically complex a sentence must be and the more subordinate clauses it is likely to contain. But if we begin with a single semantic structure (no matter how complex) and encode that structure in clauses or in phrases, in complex or in simple sentences, then we ought to recognize that the simple sentence is more cognitively complex than the complex sentence. (p. 597)

Witte, Daly, and Cherry (1986) appear to demonstrate that the assumption that a more sophisticated command of syntax in writing is positively associated with writing quality is not necessarily true. Specifically, the idea that longer T-units, longer clauses, and more clauses per T-unit equates to higher writing quality “is predicated on the assumption of a positive and linear relationship between writing quality and syntactic complexity” (p. 151). Witte et al. assert otherwise, that “in spite of their expectations to the contrary, composition

researchers have not been able to demonstrate that syntactic complexity is strongly related to writing quality” (p. 163).

However, these objections do not negate the worth of this study because it is not the purpose of this investigation to rate these essays on a holistic scale. In one sense the original graders have already done that by assigning a grade, but not in the normal sense that holistic grading is usually understood. The focus of this study is not to see whether the essays that are examined meet some arbitrary standard of holistic quality, as determined by the usual rating procedures applied to freshman English compositions in normal classroom situations, but rather to examine how these essays compare to the unique standards of quality defined for this unique study. This is not a normal collection and study of freshman English essays, with the normal processes of grade norming, holistic assessment, and the standard definitions of writing quality applied. Rather, it is a somewhat naturalistic, descriptive study with unique parameters and definitions of what writing quality means, applied to an entirely unique means of collecting and evaluating freshman English compositions. For this reason, the objections of Witte et al. do not negate the value of the application of the chosen measures of syntactic fluency to the essays in the sample, since the selected research has shown that the chosen measures are valid for the college age level and are reliable for measuring the syntactic maturity or fluency that is the target of this investigation.

### **Focus of the study**

In summary, the above evidence leads this study to focus on three measures of syntactic fluency: (1) number of words per clause (following Faigley), (2) number of right-branching/final free modifiers, and (3) number of words in right-branching/final free modifiers (2 and 3 both following Christensen and Simmons).

### **Sampling techniques**

The two populations studied in this research are (1) onsite freshman English 1301 classes at Texas Tech university during the 2003-2004 and 2004-2005 academic years (excluding summer semesters), and (2) extended studies 1301 freshman English 1301 classes at Texas Tech University during the same time period.

Because of the nature of this study, which involves using archived essays from students who are no longer taking the designated courses, it was not possible to administer a pretest to the two sample groups or to conduct the study as a typical pretest-posttest comparison. The study was therefore conducted as a descriptive analysis of the two student populations, with a comparison of data gathered from each group and analysis of that data for insights into the differences between the groups in writing quality.

Further, because of the administrative policies followed by the office of Distance Learning and Off-Campus Instruction at Texas Tech, it was not possible

to collect any meaningful demographic information about the ES students for the semesters involved. On the application that prospective ES students are required to submit before being admitted to an ES course, the only demographic information required is name and birthday. They are also asked for their sex and race/ethnicity, but this information is optional. It was therefore not possible to generate a demographic comparison of the two groups that could have provided a more meaningful assurance of the essential similarities between the onsite 1301 students and the ES 1301 students.

However, because it is generally understood at Texas Tech that most students who take ENG 1301 by ES are either advanced high school students or are from other universities in Texas, and are taking the class by ES primarily because they can be freed from the restriction of having to complete the course within the one-semester time frame, it may be possible to assume that the demographics of a typical ES class would fairly closely match the demographics of a typical onsite ENG 1301 class. A demographic summary of the entering freshman class at Texas Tech for the 2003-2004 academic year is available, and it is presented here.

### **Demographics for the Onsite 1301 classes**

The demographics for the entering freshman class at Texas Tech for the academic year 2003-2004 are as follows:

- Regarding sex/gender, there are 2,337 men (53%) and 2,108 women (47%) for a total of 4,445.
- Regarding test scores, the average SAT verbal score is 551, the average SAT math score is 572, and the average ACT composite score is 24. As a whole, 74,3% of the class scored between 500-700 on the SAT verbal, 81% scored between 500-700 on the SAT math, 83% scored between 18-29 on the ACT composite. Further, 82% scored between 18-29 on the ACT English sub-test, 77% scored between 18-29 on the ACT math sub-test.
- Regarding high school grade achievements, 21% are in the top 10% of their high school class, 52% are in the top 25% of their high school class, and 86% are in the top half of their high school class.
- Regarding race, the class included international students, 1%; black students, 2%; native American students, 1%; Asian students, 2%; Hispanic students, 10%; white students, 83%; and students of unknown race, 1%.

To summarize, despite the inability to compare group backgrounds and abilities before analyzing the essays from each group, there are several reasons for having full confidence in the outcome of the analysis of this study. First, scholars through the years have analyzed the *t* test and found it to be extremely

robust even when normal assumptions of population variance and sample size equality are not met (Boneau 1960, Stonehouse & Forrester 1998); thus, there is no reason to feel that the lack of demographic data for the ES sample, and the resultant inability to compare the two populations, would jeopardize the validity of this study. Second, the general understanding within the Texas Tech university community – that those who take English 1301 through Extended Studies instead of by onsite classes are generally the same types, levels, and ages of the students in the onsite 1301 classes – though anecdotal information, nevertheless gives additional confidence that the two populations for this study are similar in ability and background.

### **Sampling method**

Regarding the selection of essays for this study, I made an analysis of two sets of English 1301 essays: those from onsite English 1301 classes, taught at Texas Tech University, which involve traditional “cohort” class meetings, and those from ES classes, which are administered, taught, and graded entirely online, without any face-to-face or cohort class meetings. The main difference between these two groups is that ES students do not have the benefit of meeting with a teacher in a direct-instruction setting, while onsite students do have this advantage. Otherwise, the same basic conditions exist in each setting: English 1301 students at Texas Tech University, whether onsite or ES, use the same book,

write the same essay assignments, and receive the same kinds of feedback on their writing.

Essays to be evaluated were chosen at random (using the table of random numbers) and, since the participants were already pre-selected into either the onsite or ES groups, were chosen also according to a cluster sampling method based on the following rubric: fifteen essays from each long semester in the study (from fall 2003 through spring 2005 – 4 semesters total), selected from the 4.3-level essays (the semester-final assignment) in the ICON program, from both onsite and ES classes; that is, for fall 2003, 15 essays from onsite 1301 and 15 essays from ES 1301, etc., through the four semesters of the study. Further division of selection was performed by selecting essays from three grade-receiving levels: A, B, and C. In the ICON system, it is possible to select and retrieve essays by grade. Therefore, for each semester, all of the 1301 4.3 essays with a grade of 100-90 were retrieved, and then five were chosen at random to be analyzed for this study. The same process was performed with essays that had a grade of 89-80 and essays that had a grade of 79-70. This provided a cross-section of student writing by grade level and should also have shown different levels of writing quality according to grade level.

The grading process followed by the ICON system has been as follows:  
When a student submits a draft, it is read and graded by two anonymous

graders. If the grades assigned to the draft by these two graders are within eight points of each other (e.g., 94 and 86, 88 and 80, etc.), the grades are averaged and that average is the grade that is given to the draft. For example, as above, if Grader A gave an essay a grade of 94, and Grader B gave the same essay a grade of 86, the two grades would be averaged and the essay would receive a grade of 90. If, on the other hand, the grades given to the draft are more than eight points apart, the draft is assigned to a third reader, who, it is hoped, would assign a grade to the draft that is within eight points of one or the other of the first two readers – an outcome which actually does happen in most cases. The grade assigned by the third reader is matched with the grade of whichever of the first two readers that it is closest to, and those two grades are averaged to produce the grade for the draft. This process ensures an accurate assessment of student drafts.

The sample for this study was thus intended to include 60 essays from each group, both onsite and ES, of English 1301, for a total of 120 essays, out of the approximately 4,500 essays in the 4.3 category written by Texas Tech 1301 students during the period of the study. However, because there were only 54 essays available from the ES classes during the four semesters of the study, the samples for the study became 60 essays from the onsite 1301 classes, and 54 essays from the ES classes, for a total of 114 essays for the entire study.

This level of sampling is sufficient to analyze whether there is any significant difference between the ES essays and the onsite essays in the number of grammar errors and number of mature style markers. This can be stated with confidence because of the criteria established by Olejnik (1984), who stated (p. 44) that for an independent-samples *t* test using a .05 level of statistical significance, a .7 level of statistical power, and a medium effect size, a sample of 100 would be sufficient. Since previous studies, including Braddock (1963) and Hillocks (1986), among others, have stated boldly that teaching grammar does not improve the quality of student writing, a medium effect size would be sufficient to challenge those earlier findings. The .05 level of statistical significance and the .7 level of statistical power are generally recognized levels of approved procedure (Gall, Borg, and Gall 1996). My sample of 114 is thus sufficient for a valid study.

In the ICON curriculum during the years 2003-2004 and 2004-2005, formal grammar instruction was included in every chapter. Students were therefore exposed to some point of grammar or written mechanics continually, and as the semester progressed the grammar instruction became not only cumulative but increasingly advanced. This is the reasoning behind the decision to choose the 4.3 essays for analysis – because these essays are written toward the end of the semester, at a time when students have been exposed to all of the grammar instruction that the curriculum offers, and studying these essays provides a

better opportunity to see whether the instruction in grammar has made any difference in the quality of their writing.

### **Statistical analysis of results**

As stated earlier, this study is a descriptive investigation designed to determine whether direct, in-class, grammar instruction in the onsite 1301 classes will result in fewer errors and more stylistic fluency in student writing than in the writing of the Extended Study (ES) classes, which do not receive any direct, in-class grammar instruction.

There are two measurements that result from the analysis: (1) the number of errors, sub-classified by punctuation/ mechanics, syntax, or usage, with fewer being better; and (2) the number of stylistic fluency markers, sub-classified by number of words per clause, number of right-branching/ final free modifiers, and number of words in right-branching/ final free modifiers, with more being better.

The primary statistical procedure used to analyze the results is a two-tailed *t* test, constructed to examine the differential performance on the two measurements between the onsite 1301 group and the ES 1301 group, construing that for errors, the essays from 1301 onsite would show fewer errors than would the essays from 1301 ES, and for markers of stylistic fluency, the essays from 1301 onsite would show more style markers than would the essays from 1301 ES. However, in addition to counting the total number of errors and the total

number of style markers, each measurement is divided into sub-variables which are in turn analyzed for additional connections and correlations. As explained earlier, the error category is divided into three sub-categories: errors of punctuation (and mechanics), errors of usage, and errors of syntax. The style category is subdivided into four sub-categories: number of words per clause, number of right-branching free modifiers, number of total words in right-branching free modifiers, and number of words per right-branching free modifier.

For this study, the level of significance is set at  $p < .05$ , which, though arbitrary (see Carver 1978 for an excellent discussion of statistical significance testing), is the standard level used for most quantitative studies in the humanities and social sciences.

The purpose of these statistical calculations, as stated in the research question, is to determine whether the mean scores of the onsite, grammar group resulted in a higher quality score than the mean scores of the ES, non-grammar group, with “quality score” being defined as fewer errors and more markers of fluent style. The research question suggests that there will be a positive difference in the direction favoring the onsite 1301 group, the group that received grammar teaching. To calculate the quality score, the following formula is used:

$$(S1 + S2 + S3 + S4) - TE = QS$$

where S1 is style 1, number of words per clause, S2 is style 2, number of right-branching free modifiers, S3 is style 3, number of words in right-branching free modifiers, S4 is style 4, number of words per right-branching free modifier, TE is total errors, and QS is the quality score. This formula produced a positive number between 7 and 290 for each essay, and the QS was then analyzed by statistical procedures and used for further evaluation.

All essays were initially analyzed by the principal investigator. To test further for reliability, an independent rater was hired to analyze a randomly selected sample of 10% of the essays in each group. The rater was trained in the method of analysis being used and then was given the randomly selected essays to analyze. When the rater's results were calculated, a Cronbach's alpha was computed to ensure that the rater achieved a reliability rating of at least 80% with the experimenter.

### **Additional qualitative information collected**

In addition to the above quantitative measures, I interviewed a representative sample of Classroom Instructors (CIs) to determine more precisely what they do in their in-class grammar instruction sessions: how much time they take, what they emphasize, what pedagogical principles they employ, and their feelings about the effectiveness of the effort. The representative sample included male and female CIs and CIs from both the literature and technical

communication areas of study within the English department. Five CIs were interviewed for this information.

Further, to gauge student feelings about the grammar instruction that accompanied ICON 1301 classes, instead of interviewing students about how effective they feel the grammar instruction is (which is not possible because I am using archived essays), I examine a random sample of the final Writing Reviews from 4.3 assignments. The purpose of this examination is to determine what, if any, comments are made regarding the value and effectiveness of the classroom grammar instruction and its effects on their essay writing. This added qualitative dimension increased this study's value as a tool for the analysis of the role and effectiveness of grammar instruction in the writing class.

## CHAPTER IV

### THE RESULTS OF THIS STUDY

This chapter presents the results this study, which examines the question of whether in-class, direct instruction in grammar improves the quality of student writing.

#### General statement of overall results

Table 4.1, Onsite Descriptive Statistics, and Table 4.2, ES Descriptive Statistics, show the results of the evaluation of each set of essays on the basis of the nine primary assessment criteria.

Table 4.1 -- 1301 Onsite Descriptive Statistics

	err 1-- tot pct.	err 2-- tot syn	err 3-- tot usg	tot err	st 1-- no. of wds per clause	st 2-- no. of rt- br fr md	st 3-- no. of wds in rt- br fr md	st 4-- no. of wds per rt- br fr md	qual sc
N = 60									
Mean	3.58	1.68	3.85	9.13	15.79	8.08	45.78	5.74	66.26
Med.	3.00	1.00	3.00	8.00	15.25	7.00	41.00	5.38	63.35
SD	3.84	2.43	3.40	7.07	2.39	4.90	31.12	1.81	38.68

Table 4.2 -- 1301 ES Descriptive Statistics

	err 1-- tot pct.	err 2-- tot syn	err 3-- tot usg	tot err	st 1-- no. of wds per clause	st 2-- no. of rt- br fr md	st 3-- no. of wds in rt- br fr md	st 4-- no. of wds per rt- br fr md	qual sc
N = 60									
Mean	3.74	1.20	3.35	8.35	15.32	9.04	49.20	5.39	70.60
Med.	3.00	1.00	3.00	7.50	15.00	9.00	51.00	5.04	74.08
SD	3.18	1.63	2.55	5.42	2.73	3.93	27.70	1.66	34.34

As the tables show, regarding Quality Score, which combined all of the other criteria into one score and therefore is the ultimate determiner of writing quality in this study, the ES essays performed better than the Onsite essays by a

small margin, 70.60 to 66.26. However, as we will see below, the difference is not statistically significant,

An examination of the mean scores of the individual component criteria reveals that the ES essays performed generally better in most individual categories as well. In the error criteria, the ES essays have a better mean score in every category except the Error 1 category, Total Punctuation Errors, where the Onsite essays scored 3.58 to ES's 3.74 (the lower score, denoting fewer errors, being a better score). In all of the other error categories – Error 2, Total Syntax Errors; Error 3, Total Usage Errors; and Total Errors – the ES essays have better (lower) mean scores (1.20 to 1.68 in Syntax, 3.35 to 3.85 in Usage, and 8.35 to 9.13 in Total Errors). The fairly large spread (0.78) between ES and Onsite in Total Errors is especially damaging to the primary question of this study, since the students who were not taught grammar in a direct classroom setting made fewer errors, by almost one full point, than did the students who were taught grammar directly in the classroom setting. Why this might be so is discussed more fully in chapter V.

In the style categories, the results are more evenly distributed. The Onsite essays scored slightly higher in two of the categories, the Style 1 category, Number of words per clause (15.79 to 15.32) and the Style 4 category, Number of words per right-branching free modifier (5.74 to 5.39); the ES essays scored

higher in the other two categories, the Style 2 category, Number of right-branching free modifiers (9.04 to 8.08) and the Style 3 category, Number of words in right-branching free modifiers (49.20 to 45.78).

Table 4.3 shows the results of the independent-samples  $t$  test that is conducted to evaluate the primary research question of this study. The test for difference in the “quality score” is not significant,  $t(112) = -.63, p = .05$ . Because the sample sizes are not the same ( $N_{\text{onsite}} = 60, N_{\text{ES}} = 54$ ), the test results can also be reported with a slightly smaller degrees of freedom, as reflected in Table 4.3:  $t(111.98) = -.63, p = .05$ . The  $t$  value remains the same, reflecting the previously mentioned robustness of the  $t$  test in cases where sample sizes are unequal. Based on these results, the primary implication of the research question – that students who are taught grammar in a direct, in-class setting will improve the quality of their writing – must be considered not supported.

Table 4.3 also shows the results of  $t$  tests conducted for all of the other evaluation criteria in this study. None of the tests showed statistical significance.

The results of the  $t$  test for the Quality Score variable make it possible to calculate an effect size, using the formula provided by Green and Salkind (1998, p. 169). On the basis of a  $t$  score of  $-.63$ , the resulting effect size  $d = -.12$ , which is very small but, most importantly, negative in direction.

Table 4.3—Independent-Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
<b>quality score</b>	Eq. var. ass.	.05	.83	-.63	112	.53	-4.34	6.88	-17.97	9.30
	Eq. var. not ass.			<b>-.63</b>	<b>111.98</b>	<b>.53</b>	<b>-4.34</b>	<b>6.84</b>	<b>-17.89</b>	<b>9.21</b>
grade	Eq. var. ass.	.41	.52	-.39	112	.70	-.51	1.33	-3.15	2.12
	Eq. var. not ass.			<b>-.38</b>	<b>108.11</b>	<b>.70</b>	<b>-.51</b>	<b>1.34</b>	<b>-3.16</b>	<b>2.14</b>
error 1--total punctuation	Eq. var. ass.	.03	.87	-.24	112	.81	-.16	.67	-1.5	1.16
	Eq. var. not ass.			<b>-.24</b>	<b>111.26</b>	<b>.81</b>	<b>-.16</b>	<b>.66</b>	<b>-1.46</b>	<b>1.15</b>
error 2--total syntax	Eq. var. ass.	2.24	.14	1.23	112	.22	.48	.39	-.30	1.26
	Eq. var. not ass.			<b>1.25</b>	<b>103.93</b>	<b>.21</b>	<b>.48</b>	<b>.38</b>	<b>-.28</b>	<b>1.24</b>
error 3--total usage	Eq. var. ass.	1.15	.29	.88	112	.38	.50	.57	-.63	1.62
	Eq. var. not ass.			<b>.90</b>	<b>108.52</b>	<b>.38</b>	<b>.50</b>	<b>.56</b>	<b>-.61</b>	<b>1.61</b>
total error	Eq. var. ass.	1.41	.24	.66	112	.51	.78	1.19	-1.58	3.14
	Eq. var. not ass.			<b>.67</b>	<b>109.36</b>	<b>.51</b>	<b>.78</b>	<b>1.17</b>	<b>-1.54</b>	<b>3.11</b>
style 1--no. of words per clause	Eq. var. ass.	.43	.51	.98	112	.33	.47	.48	-.48	1.42
	Eq. var. not ass.			<b>.98</b>	<b>106.14</b>	<b>.33</b>	<b>.47</b>	<b>.48</b>	<b>-.49</b>	<b>1.43</b>
style 2--no. of rt- br fr md	Eq. var. ass.	.14	.71	-1.14	112	.26	-.95	.84	-2.62	.71
	Eq. var. not ass.			<b>-1.15</b>	<b>110.56</b>	<b>.25</b>	<b>-.95</b>	<b>.83</b>	<b>-2.60</b>	<b>.69</b>
style 3--no. of words in rt- br fr md	Eq. var. ass.	.08	.78	-.62	112	.54	-3.42	5.54	-14.40	7.56
	Eq. var. not ass.			<b>-.62</b>	<b>111.99</b>	<b>.54</b>	<b>-3.42</b>	<b>5.51</b>	<b>-14.34</b>	<b>7.50</b>
style 4--no. of words per rt- br fr md	Eq. var. ass.	.89	.35	1.06	112	.29	.35	.33	-.30	1.00
	Eq. var. not ass.			<b>1.07</b>	<b>111.96</b>	<b>.29</b>	<b>.35</b>	<b>.33</b>	<b>-.30</b>	<b>.99</b>

### Correlation analyses

Despite the fact that the *t* test did not show statistical significance, I

conducted tests of Pearson product-moment correlations between the variables of the study to see what relationships might exist within each group. Correlation coefficients were computed among the ten evaluation variables of the study (including grade) for each group. Table 4.4 shows the correlations results for the Onsite essays, with the significant relationships highlighted in bold and a larger font size. Table 4.5 exhibits only the significant correlations among the Onsite essays, with the other results omitted to make the significant relationships easier to see.

The results of the correlational analyses presented in Tables 4.4 and 4.5 show that 18 out of the 45 possible relationships are statistically significant. However, the possibility of making a Type I error is increased with multiple testing of the same data (Green & Salkind 259), so a procedure called the Bonferroni correction can be applied to the results to further narrow the number of significant relationships among a group of correlations.

Table 4.4—Correlations—Onsite 1301 Essays

		grade	err 1-- total punct.	err 2-- tot syn	err 3-- tot usg	tot err	st 1-- no. of wds / clause	st 2-- no. of rt- br fr md	st 3-- no. of wds in rt- br fr md	st 4-- no. of wds per rt- br fr md.	quality score
grade	Pear Corr ( <i>r</i> )	1.00	.075	-.02	.03	.05	.06	<b>.41**</b>	<b>.37**</b>	.06	<b>.35**</b>
	Sig. (2- tailed)	-	.57	.89	.82	.71	.63	.00	.00	.65	.01
err 1-- total punct.	Pear Corr ( <i>r</i> )	.08	1.00	.24	<b>.33**</b>	<b>.79**</b>	.03	-.07	-.10	-.07	-.24
	Sig. (2- tailed)	.57	-	.06	.01	.00	.80	.61	.43	.62	.07

Table 4.4—Correlations—Onsite 1301 Essays

err 2-- total syntax	Pear Corr ( <i>r</i> )	-.02	.24	1.00	<b>.28*</b>	<b>.61**</b>	.01	-.25	<b>-.26*</b>	.02	<b>-.35**</b>
	Sig. (2- tailed)	.89	.06	-	.03	.00	.91	.05	.04	.88	.01
err 3-- total usage	Pear Corr ( <i>r</i> )	.03	<b>.33**</b>	<b>.28*</b>	1.00	<b>.76**</b>	-.01	-.14	-.16	-.04	<b>-.28*</b>
	Sig. (2- tailed)	.82	.01	.03	-	.00	.93	.29	.23	.77	.03
total error	Pear Corr ( <i>r</i> )	.05	<b>.79**</b>	<b>.61**</b>	<b>.76**</b>	1.00	.018	-.19	-.22	-.05	<b>-.39**</b>
	Sig. (2- tailed)	.71	.00	.00	.00	-	.89	.15	.09	.71	.00
st 1-- no. of words per clause	Pear Corr ( <i>r</i> )	.06	.03	.02	-.01	.02	1.00	-.00	.14	<b>.26*</b>	.18
	Sig. (2- tailed)	.63	.80	.91	.93	.89	-	.99	.30	.05	.17
st 2-- no. of rt- br free mod.	Pear Corr ( <i>r</i> )	<b>.41**</b>	-.07	-.25	-.14	-.19	-.00	1.00	<b>.90**</b>	-.07	<b>.88**</b>
	Sig. (2- tailed)	.00	.61	.05	.29	.15	.99	-	.00	.60	.00
st 3-- no. of words in rt- br free mod.	Pear Corr ( <i>r</i> )	<b>.37**</b>	-.10	<b>-.26*</b>	-.16	-.22	.14	<b>.90**</b>	1.00	<b>.33*</b>	<b>.98**</b>
	Sig. (2- tailed)	.00	.43	.04	.23	.09	.30	.00	-	.01	.00
st 4-- no. of words per rt- br free mod.	Pear Corr ( <i>r</i> )	.06	-.07	.02	-.04	-.05	<b>.26*</b>	-.07	<b>.33*</b>	1.00	<b>.33*</b>
	Sig. (2- tailed)	.65	.62	.88	.77	.71	.05	.60	.01	-	.01
quality score	Pear Corr ( <i>r</i> )	<b>.35**</b>	-.24	<b>-.35**</b>	<b>-.28*</b>	<b>-.39**</b>	.18	<b>.88**</b>	<b>.98**</b>	<b>.33*</b>	1.00
	Sig. (2- tailed)	.01	.07	.01	.03	.00	.17	.00	.00	.01	-

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 4.5—Significant Correlations—Onsite 1301 Essays

	grade	error 1-- total punct.	error 2-- total syntax	error 3-- total usage	total error	style 1-- no. of words per clause	style 2-- no. of rt- br free mod.	style 3-- no. of words in rt- br free mod.	style 4-- no. of words per rt- br free mod.	quality score
grade							<b>.41**</b>	<b>.37**</b>		<b>.35**</b>
error 1-- total punct.				<b>.33**</b>	<b>.79**</b>					
error 2-- total syntax				<b>.28*</b>	<b>.60**</b>			<b>-.26*</b>		<b>-.35**</b>
error 3-- total usage		<b>.33**</b>	<b>.28*</b>		<b>.76**</b>					<b>-.28*</b>



Table 4.6—Significant Correlations for Onsite 1301 Essays after Bonferroni Adjustment

grade	<b>.37</b>	<b>.41</b>				
quality score	<b>.98</b>	<b>.88</b>				
total errors			<b>-.39</b>	<b>.76</b>	<b>.61</b>	<b>.79</b>

Table 4.7 shows the results of the correlation computations for the ES essays, with the significant relationships highlighted in bold and a larger font size. Table 4.8 exhibits only the significant correlations among the ES essays, with the other results omitted to make the significant relationships easier to see.

The results of the correlational analyses presented in Tables 4.7 and 4.8 show that 18 out of the 45 possible relationships are statistically significant.

Table 4.7—Correlations—ES 1301 Essays

		grade	err 1-- total punct.	err 2-- tot syn	err 3-- tot usg	tot err	st 1-- no. of wds / clause	st 2-- no. of rt- br fr md	st 3-- no. of wds in rt- br fr md	st 4-- no. of wds per rt- br fr md.	qual sc
grade	Pearson Corr (r)	1.00	-.14	-.04	-.16	-.16	.13	.24	.21	-.02	.23
	Sig. (2- tailed)	-	.31	.77	.26	.25	.35	.08	.14	.90	.10
error 1-- total punct.	Pearson Corr (r)	-.14	1.00	<b>.44**</b>	.18	<b>.80**</b>	-.16	-.18	-.16	.06	<b>-.29*</b>
	Sig. (2- tailed)	.31	-	.00	.18	.00	.24	.19	.25	.69	.04
error 2-- total syntax	Pearson Corr (r)	-.04	<b>.44**</b>	1.00	<b>.36**</b>	<b>.72**</b>	-.02	<b>-.28*</b>	-.19	.09	<b>-.30*</b>
	Sig. (2- tailed)	.77	.00	-	.01	.00	.88	.04	.17	.52	.03
error 3-- total usage	Pearson Corr (r)	-.16	.18	<b>.36**</b>	1.00	<b>.68**</b>	-.18	-.11	-.12	-.08	-.23
	Sig. (2- tailed)	.26	.18	.01	-	.00	.19	.43	.40	.58	.09
total error	Pearson Corr (r)	-.16	<b>.80**</b>	<b>.72**</b>	<b>.68**</b>	1.00	-.19	-.24	-.20	.03	<b>-.36**</b>
	Sig. (2- tailed)	.25	.00	.00	.00	-	.18	.082	.15	.85	.01

Table 4.7—Correlations—ES 1301 Essays

style 1-- no. of words per clause	Pearson Corr ( <i>r</i> )	.13	-.16	-.02	-.18	-.19	1.00	.10	.25	<b>.32*</b>	<b>.34*</b>
	Sig. (2- tailed)	.35	.24	.88	.19	.18	-	.48	.07	.02	.01
style 2-- no. of rt- br free mod.	Pearson Corr ( <i>r</i> )	.23	-.18	<b>-.28*</b>	-.11	-.24	.10	1.00	<b>.85**</b>	.13	<b>.85**</b>
	Sig. (2- tailed)	.08	.19	.04	.43	.09	.48	-	.00	.33	.00
style 3-- no. of words in rt- br free mod.	Pearson Corr ( <i>r</i> )	.21	-.16	-.19	-.12	-.20	.25	<b>.85**</b>	1.00	<b>.56**</b>	<b>.98**</b>
	Sig. (2- tailed)	.14	.25	.17	.40	.15	.07	.00	-	.00	.00
style 4-- no. of words per rt- br free mod.	Pearson Corr ( <i>r</i> )	-.02	.06	.09	-.08	.03	<b>.32*</b>	.13	<b>.56**</b>	1.00	<b>.54**</b>
	Sig. (2- tailed)	.90	.69	.52	.58	.85	.02	.33	.00	-	.00
quality score	Pearson Corr ( <i>r</i> )	.23	<b>-.29*</b>	<b>-.30*</b>	-.23	<b>-.36**</b>	<b>.34*</b>	<b>.85**</b>	<b>.98**</b>	<b>.54**</b>	1.00
	Sig. (2- tailed)	.10	.04	.03	.09	.01	.01	.00	.00	.00	-

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Table 4.8—Significant Correlations—ES 1301 Essays

	error 1-- total punct.	error 2-- total syntax	error 3-- total usage	total error	style 1-- no. of words per clause	style 2-- no. of rt- br free mod.	style 3-- no. of words in rt- br free mod.	style 4-- no. of words per rt- br free mod.	quality score
error 1-- total punct.		<b>.44**</b>		<b>.80**</b>					<b>-.29*</b>
error 2-- total syntax	<b>.44**</b>		<b>.36**</b>	<b>.72**</b>		<b>-.28*</b>			<b>-.30*</b>
error 3-- total usage		<b>.36**</b>		<b>.68**</b>					
total error	<b>.80**</b>	<b>.72**</b>	<b>.68**</b>						<b>-.36**</b>
style 1-- no. of words per clause								<b>.32*</b>	<b>.34*</b>
style 2-- no. of rt- br free mod.		<b>-.28*</b>					<b>.85**</b>		<b>.85**</b>
style 3-- no. of words in rt- br free mod.						<b>.85**</b>		<b>.56**</b>	<b>.98**</b>

Table 4.8—Significant Correlations—ES 1301 Essays

style 4-- no. of words per rt- br free mod.					.32*		.56**		.54**
quality score	-.29*	-.30*		-.36**	.34*	.85**	.98**	.54**	

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The Bonferroni adjustment is then also applied to the correlations results from the ES essays, and the result is a decrease in the significant relationships from 18 to 10, all of which are significant at the  $p = 0.01$  level; these correlations are displayed in Table 4.9.<sup>6</sup> The results and interpretations will be discussed in Chapter V.

Table 4.9—Significant Correlations for ES 1301 Essays after Bonferroni Adjustment

	style 3-- no. of words in rt- br free mod.	style 2-- no. of rt- br free mod.	quality score	error 3-- total usage	error 2-- total syntax	error 1-- total punct.
style 2-- no. of rt- br free mod.	.85					
quality score	.98	.85				
style 4-- no. of words per rt- br free mod.	.56		.53			
total errors			-.36	.68	.72	.80
error 2-- total syntax						.44

<sup>6</sup> Not everyone agrees with the necessity of applying the Bonferroni correction to multiple significance tests or correlations. See Perenger (1998) for discussion and bibliography on this issue.

### **Interviews with Classroom Instructors**

As part of my study of the dynamics of grammar instruction in the onsite 1301 classes, I interviewed five classroom instructors (CIs) to obtain more information about what they do during their grammar instruction in the classroom and how they approached the task of teaching grammar to their classes.

In the interviews I asked each CI the following questions:

1. How much emphasis do you place on the grammar lesson in your classes? What do you do to stress the importance of the grammar lesson?

2. How much time, on average, do you devote to the grammar lesson in each class period?

3. What pedagogical principles or techniques do you employ in presenting the grammar lesson?

4. Are you personally interested in teaching the grammar lessons? Do you feel that the lessons belonged in the curriculum? Why or why not?

5. Do you feel that the grammar lessons are effective in helping the students to improve their writing? Why or why not?

6. Do the students seem interested in the grammar lessons? Do they seem to feel that the grammar lessons are relevant and/or helpful to their writing efforts?

7. Do the students seem to have an appropriate level of mastery of grammar in their writing?

In presenting the answers of the CIs, I do not identify any of them in any way, not even by gender. However, to preserve some sense of narrative, I do occasionally identify the CIs by number, from 1 to 5. I also use the pronoun “they” in referring to individuals and often use “this CI” or other non-specific identifiers to note who said what.

There is a mixed response to most of the questions I ask the CIs. On the first question, **How much emphasis do you place on the grammar lesson?**, all of the CIs do teach the grammar lessons in one form or another. However, it is apparent that some are sincerely trying to communicate grammatical knowledge to the students, while others just going through the motions. CIs 2 and 3 are indicative of the more committed grammar teachers. CI 2 said, *“I let them know that grammar is necessary not only in the classroom but also outside the classroom . . . I is kind of driven.”* CI 3 said, *“I guess implicitly I stressed it because it is the first thing we do. I thought it is a good way to start.”* A more neutral or middle-of-the-road approach is taken by CI 5, who said, *“Generally . . . when I do the lessons, I would*

*introduce it as something that would help them to write their papers and help them to get better grades.”* On the other hand, a less enthusiastic approach is evidenced by CIs 1 and 4. CI 1 felt frustrated by the shortcomings of what freshmen don’t have when they get to college.

*In 1301 I do talk a little about it, a very quick overview. I think I do 2 lessons, maybe. . . . there is such a marked difference coming out of all the high schools between some students having no grammar instruction and some students having a lot of grammar instruction, that it would be unfair to assume anything about their grammar instruction and say, OK, we’re going to start at square one, or, we’re not going to do anything at all. You don’t want to be unfair, but if they don’t know it by the time they’re freshmen in college, I’m not going to be able to fix that.*

CI 4 began with little enthusiasm for grammar but changed after seeing the practical need:

*I told them that grammar is important, but that we wouldn’t dedicate much time in class to talking about it. And every once in a while I’d give them a test or would review the mistakes they have made on their papers, and then I could say, See – grammar is important; now, go study it. But I don’t really devote huge sections of time in class to teaching it. Now it’s actually changed, because I think the more papers I’ve graded, the more annoyed I get at grammatically incorrect papers, Like for instance, today we do 45 minutes on subject-verb agreement. We don’t do that every day, of course, but when I feel the need because of the errors I see in their papers, I am devoting more class time to talking about their grammatical errors than I used to.*

What this shows is, first, that there is a variety of approaches to the grammar unit within the 1301 curriculum. This is common sense, even within a highly structured program like TOPIC/ICON. Not every CI is going to “toe the line” and teach the classes as they have been instructed to do, and personal philosophies and preferences are going to intrude into daily practice. Second, the

CI comments show that even though there are variations in grammar teaching practice, all CIs do, in fact, teach some grammar in their classes. Regarding the main premise of this study, we can assume with a high level of confidence that the students in the onsite 1301 population received grammar instruction in their classes, as the curriculum called for.

Continuing the same theme, the second question asked the CIs how much time they devoted to the grammar lesson in an average class period. The standard answer is “10-15 minutes,” which seems about right for an 80-minute class period. Only CI 2, who felt “driven” to teach the students more grammar, said “at least 15 minutes per day.” The reasons offered for keeping the grammar lesson to only 10-15 minutes are varied. CI 1 felt that only so much could be done in the classroom and told the students, “*Here are the things you need to know how to do, and if you don’t know how to do them, that’s when you need to seek help.*” CI 3, as already stated, used the first 15 minutes of class for the grammar section, using grammar as a bridge to both point out errors from the previous work and to introduce the upcoming lesson. The one dissenter from the 10-15 minute pattern is CI 4, who devoted only 5-10 minutes to the grammar lesson in the beginning, but later, as stated above, increased the emphasis on grammar as weariness from errors in student papers took its toll.

These responses show that the CIs are doing what they are expected to do in this regard. The grammar lesson is designed to be a small part of each class experience. A CI is expected to weave it into the class at some appropriate point, depending on preferred teaching style, the students' personalities, and the time available. In the pre-semester training sessions, CIs are told very directly that they are expected to teach the grammar lessons, and that skipping the grammar, leaving it out, telling the students to study it on their own, or ignoring it is not an acceptable option. It is supposed to be covered in class. [This is true, at least, for the four semesters which this study covered – Fall 2003 through Spring 2005. I am not aware if any changes have been made in ICON policy or procedure regarding the classroom teaching of grammar since then.] Since I interviewed only five CIs, it is not possible to say with any authority whether every CI in the ICON program taught grammar every day. And even if they do, there would be variations in enthusiasm, teaching skill, and explanation of salient points – which is a limitation of this study. It is not possible to know, using the random method of extracting papers from each semester's archive, if the student who wrote each paper is in a class that is taught by a dedicated CI who spent 10-15 minutes every day covering the appropriate grammar lesson. But from the comments given by these five CIs, we can say with high confidence that most of the onsite 1301 students are getting appropriate grammar instruction in each class period.

Regarding teaching methods and pedagogy, most CIs seemed to instinctively realize that the writing class is not well suited to the lecture style of teaching, and few employed it to any great degree in their pedagogy. In some cases, as with CI 1, the structure of the grammar lesson is different than the normal structure of a class because of a less-than-enthusiastic attitude about grammar held by CI 1, who said,

*[I]n this case my whole approach to it is different than possibly many people in the department in that I don't think that this is something that needs to be addressed all that much at this level because grammar is also addressed through reading. . . . I just chose to not talk about it because I don't think it's relevant as much."*

This view, however, is not shared by other CIs, who used small groups, class discussion, and various combinations of related techniques to present the grammar lessons. CI 2 took it even further, saying that

*what really worked well is asking them to bring in their papers and actually looking at problems they actually have, so that if I see any big problems, we can go over them again. Because that is what I thought is the best thing, to go over things again. First you have those worksheets, but those don't always work so well because one person will understand it, but one person won't. Then you come back then next time and talk about the issue. But the third step would be actually bringing the papers and doing it all over again, in the context of their actual papers. I don't think students are going to really learn grammar until they've seen their own mistakes and what they don't understand.*

CI 4 used a combination of student freewriting and peer critique to teach the grammar lesson, stating,

*[The purpose being] Mainly teaching them awareness of their own abilities in grammar, so I'd have them do a worksheet, or perhaps write for 10 minutes and*

*then have their peers grade it but just for grammar, and then point out grammar errors. Then they would believe me when I'd say, You need to fix these things. This would help them to work on patterns of error.*

Some techniques don't seem to work very well. CI 2 found this to be the case with "putting one paper up on the overhead and discussing it." CI 3 had a similar reaction to the use of PowerPoint slides, saying that "they just thought of it as reading the screen, and they hate that." CI 5 felt the same way about small group work, saying

*one thing I won't do is small group work, because odds are, if I tell them to bring their papers and correct each other's errors, most of them won't even see the errors. Those who don't understand the grammar won't be helped by the exercise because they won't see the errors that they are supposed to correct, and it is an exercise that I can't assign a grade for. So I find small group work to be basically useless.*

However, this view is not shared by the other CIs.

One thing that jumps out at us from reading the statements of these CIs is the need for a more imaginative and innovative approach to grammar teaching. Some of the objections to teaching grammar, on the part of both teachers and students, might be overcome with more imaginative approaches to pedagogy. While we cannot fault these CIs for not being experts in this area at this stage in their careers, we might suggest to them, especially to those who have less than ideal enthusiasm for grammar teaching, the possibility that a more varied pedagogy might remove some of the problems with student apathy.

When asked “Are you personally interested in teaching the grammar lessons? Do you feel that they belonged in the curriculum? Why or why not?,” four of the five CIs agreed that the grammar lessons belonged in the curriculum and that they are personally interested in teaching them, though one of the four wavered slightly and gave an equivocal answer.

CI 1, true to their original feeling stated earlier, do not feel that it is possible to interest students in grammar, stating that “*grammar is an incredibly boring subject for most people, and especially students. I personally find it interesting the more I engage with it, but it’s not very easy to get students excited about pronouns. I’ve read a few articles that say you can, but I don’t know.*” CI 5 wavered slightly in their acceptance of the place of grammar in the curriculum, saying

*When you talk about grammar lessons, it depends on what you mean. The basic grammar – such things as where to put the period, how to capitalize, etc. – that seem to be occasional problems in student papers, those things don’t interest me at all. They ought to know these things by now. When it comes to things like comma splices, OK, that’s a common error, it’s easy to fix, easy to point out how to fix it, yes, I’m interested in doing that. When it comes to the more sophisticated elements of, for example, commas, I’m not particularly interested in that, partly because I’m an intuitive grammarian. I’m able to do it myself, but I’m not necessarily able to explain how I’m able to do it, I just can do it.*

The other three CIs are more positive in their view, believing that grammar definitely belongs in the curriculum and that they are definitely interested in teaching the lessons that came with the ICON curriculum. CI 2 is typically the most enthusiastic, saying “*I think they belong. I think there should be a separate class*

*on grammar because they are coming out of high school and they still don't know the rules. There's a huge problem – commas, how to write a correct sentence, using the right words, pronouns, etc."* CI 3 touched on the issue of "cognitive dissonance" – the "noise" that a reader hears when trying to negotiate a text that is filled with errors:

*Yes, because the first thing you do when you grade, whether you want to or not, is that you notice the grammar. If you cannot read it, it just irritates you. So I do feel like it belongs in the curriculum. The only reason for writing is to have someone read it. If it can't be read because the grammatical errors are so bad, then that defeats the purpose of writing it.*

CI 4, perhaps aware of current research on this issue, stated that "Yes, the grammar belongs in the curriculum, in the context of student awareness of their own problems with grammar." Indeed, grammar taught in such a contextual way would be seen by many today as the best way to integrate into the writing classroom the knowledge that students need in dealing with sentence-level issues.

Even though they taught the grammar lessons, some of the CIs do not feel that the grammar lessons are effective in helping the students to improve their writing. CI 1 expressed what may be the feeling of many CIs:

*[W]hen I do say, If you need help, come and see me, nobody do. Nobody ever does, and nobody, to my knowledge, ever goes to the writing center specifically for grammar instruction. So I don't think that that particular approach to grammar is helpful. But I think it is complicated by the fact that on TOPIC there is a list of the 20 common mistakes that they can click on and read more about if they want to learn. If they don't, I don't want to take the time to teach them.*

CIs 4 and 5 felt more or less the same way, stating, *“A few of the lessons are effective, but not all”* and *“The grammar lessons in the textbook don’t seem to fly. They seemed kind of arbitrary and don’t really seem effective,”* respectively. CI 2 felt that the lessons are helpful, but not enough: *“Yes, but I think as instructors we need to go a lot further beyond what’s in the text. There isn’t enough there to make up for the students’ deficiencies.”* It is only CI 3 who gave a more or less unqualified endorsement of the lessons as helping students to improve, while admitting that without testing and measurement, it is not possible to know for sure: *“I think they do. It’s hard to know, but I felt like as the year went on that they are more aware of it. It’s not possible to say in every case whether the improvement is caused by the grammar lessons, but there is definitely improvement in grammar skills by some students.”*

These comments indicate the subjective difficulty of the classroom instructor in trying to gauge whether the grammar instruction that is being offered is working. Because writing involves numerous other factors, both objective and subjective, it is difficult to isolate one factor such as grammar and know for sure that it is being affected by what is happening in the classroom. This would be especially true for graduate instructors who have a cohort of students for only 80 minutes per week.

All CIs reported very little student interest in grammar, but interestingly, this led to different conclusions about how they (the CIs) should proceed. CI 1 reported a fairly extreme disinterest on the part of students:

*Just watching their faces, one of the classes, I asked them, How many of you could identify the 8 parts of speech? Nobody raised their hand, of course. Right off the bat, if I said, We're going to talk about grammar, or we're going to talk about comma splices, I'm remembering that their eyes would gloss over. There's just no real provocative way to say that. It's not like saying, We're going to have a stripper come in here and present the lesson. Maybe that would at least get their eyes open a little bit. There's just no way for me to say "comma splices" and get them excited about it – that I know of, anyway. Again, I'm pretty young and haven't have a lot of experience with this.*

The other CIs reported similar experiences. For CI 2 it is *"Groans, complaining, we do this in high school, etc. They hated it. Occasionally one or two would say thank you for the help that they got, but most do not feel that they are getting anything worthwhile,"* and much the same for CI 4, who said, *"Most are not interested. They do not think they are relevant or helpful to their writing."*

CI 3 discovered one factor that seemed to mitigate student disinterest: controlling the length of the grammar lesson: *"As long as the lesson isn't too long, they seemed interested. They are very aware that it is a basic part of their paper, so as long as I don't drone on and on, as long as I covered just one point and covered it quickly, I kept their interest."* And CI 5 is the only respondent who reported a change in student interest that corresponded to a change in CI pedagogy:

*The students don't seem too enthusiastic. When I went later to a "less grammar" approach, the times when I do introduce grammar they are more interested. Early on they saw it as "more stuff we do in high school or junior high." In more recent semesters, I have taken a "here's where you are making your mistakes, here's where I can help you" approach. I will often put lessons on the board, such as the "homophone" (or homonym) lesson, and show them how to avoid the mistakes they often make with these common words. They like this approach and buy into it much more readily than a straight grammar lesson. I also think part of it may have to do with the way I present the material, because I want student*

*participation. If I can get them responding, they seem to engage much more with the material.*

Again, here we see some of the relative inexperience of the CIs, some of whom are very young graduate students, gaining the upper hand. It may seem common sense to assume that if students are not interested in the grammar lesson, some ways to remedy that problem would be to vary the pedagogical approach, to control the length of the presentation, to use motivation and student participation to increase students' interest in the grammar lesson. But some of these ideas have not occurred to some of the CIs, and their classroom environment has suffered, at least regarding the grammar environment, as a result. This might be an area where the TOPIC/ICON directors could add some additional training for the CIs that would improve their approach to the grammar sections of the curriculum.

Finally, when asked **“Do the students seem to have an appropriate level of mastery of grammar in their writing?”** all but one of the CIs answered with definite Nos. CI 1 said, *“Yes, relative to their level as freshmen. They are not as good as they should be, but I judged it by whether what they write communicates effectively in a rhetorical sense.”* The others are curt and to the point: No, not at all. Not even close. Some felt that students today are hurt in their attempts to master grammar by such things as email and other online activities, as well as TV watching. Students today do not read literature nearly as much as they need to, and this

hurts their absorption of grammar. High schools, for many reasons, do not teach grammar the way they should. But the result is that entering college freshmen do not, on average, have nearly the grasp of English language grammar and mechanics that they should.

### **Analysis of Student Writing Reviews**

The purpose of this section is to examine student opinion about the grammar lessons in the curriculum. Since it is impossible to go back and interview students from several semesters past, I collected a random sample of the writing reviews that students wrote at the end of each assignment cycle, commenting on their paper: what they learned, the difficulties they have, and other factors they considered worthy of comment. Since essay 4.3 is the semester-final assignment in English 1301, it is expected that these writing reviews would also comment somewhat on the course as a whole. Whether they would comment on the grammar lessons is not known. My procedure was to examine twelve reviews, representing 10% of the total number of essays analyzed for the study. I chose three reviews from each of the four semesters of the study, chosen from both onsite 1301 students and ES 1301 students. The three reviews from each semester were chosen at random by retrieving from TOPIC all of the 4.3 reviews for that semester and then taking every twelfth review as they appeared on the screen. This gave a total of twelve reviews for the four semesters of the study. These twelve writing reviews are reproduced in the Appendix.

To begin with the most salient points, only four of the twelve reviews mention grammar in any way, and only one specifically mentions the grammar lessons. Review 3 from Fall 2003 said, "I also feel that my drafts can benefit by improving my grammar and sentence structure." Review 1 from Spring 2004 relegates grammar to proofreading, saying, "In English 1302, I plan on improving my writing by paying more attention to my editing. I make several careless mistakes because I do not proofread enough. The main area that I would like to improve upon is using commas correctly." Review 3 from Spring 2004 also comments on grammar, perhaps intending to link it with professionalism, stating, "With all that I have learned in 1301, I plan to improve in the areas of grammar and professionalism in my writing when I move to 1302."

The only review to comment specifically on the grammar lessons themselves is Review 1 from Fall 2004, who says, "The grammar lessons in this course helped me a lot. I have been in yearbook and journalism in high school and we used commas, colons and apostrophes much differently. I learned to use them correctly in this class." This student obviously feels that they are getting a much higher level of instruction in grammar and mechanics in 1301 than they have received in high school, which is quite a significant statement considering the high level of involvement this student has in high school with literary activities.

While it is disappointing that more reviews in this random sample did not comment on the grammar lessons or on grammar in general, it is likely that this represents a fairly accurate picture of the student 1301 population as a whole regarding their attention to grammar in their 1301 experience and their feeling about the grammar lessons in the 1301 curriculum. Putting this information together with the testimony of the CIs gives us a fairly good idea that even with all the effort that is made in the TOPIC/ICON 1301 program to introduce grammar into the curriculum and to teach it in the classroom, most of the students are not finding it of any great importance to their writing. There are a number of reasons why this might have happened, many of which would be directly the responsibility of the students themselves.

However, another way to look at this information is to note that one-third of the reviews do mention grammar in some way, and one out of twelve specifically mentions the grammar lessons. In a university freshman English program that serves 3,000 students per semester, one could say that approximately 1,000 are being influenced to see the value of improving the grammar in their writing, and approximately 250 are finding the grammar lessons that are being taught in the classroom of some value. The numerical transpositions are, of course, only rough interpretations from such a small sample, but they do allow a positive view of what is being accomplished by the inclusion of grammar in the curriculum and the teaching of the grammar lessons

in the 1301 classrooms. A significant minority of students are being affected positively by the grammar critiques they are receiving on their papers, and at least some are benefiting from the classroom grammar lessons enough that they felt motivated to say something about it in their semester-final writing reviews.

Grammar is probably one of those issues that is seldom noticed unless there is something wrong with it. The fact that so few students comment on the grammar lessons cannot be taken as evidence that the grammar instruction was not effective or did not have a positive impact.

## CHAPTER V

### DISCUSSION OF THE STUDY'S RESULTS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The analyzed results from this study provide a number of departure points for fruitful discussion. The most obvious point to start with is why the grammar group, the Onsite essays, did not show clear superiority over the non-grammar group, the ES essays.

#### **Why was the treatment not effective?**

From the beginning, it was the purpose of this study to ask the question: Does direct, in-class grammar instruction affect the quality of student writing, as defined by fewer errors and more markers of stylistic fluency? The answer for this study is negative, though only moderately so. The ES essays exceeded the Onsite essays in the Quality Score variable only slightly, 70.60 to 66.26, and the Onsite essays surpassed the ES essays in one of the 3 error variables and 2 of the 4 style variables – more or less a toss-up. The effect size calculation is  $-.12$ , a negative but nevertheless very small result. And the results of the  $t$  test is statistically non-significant.

However, the essentially even result between the two groups does not hide the fact that the teaching of grammar in a direct classroom setting to the Onsite 1301 students clearly did not have any significant effect on the quality of

their essays. So, the question is, Why not? A number of possible reasons might be suggested.

### **The online environment an unknown factor**

When this study was designed, it appeared to be a potentially excellent way to study the teaching of grammar and its effects on two different sets of student populations. And, since one student sample would be essentially isolated from the direct teaching of grammar, it seemed like an excellent way to study and describe the effects of direct grammar teaching on the other population. However, the lack of demographic information about the ES students not only prevented a meaningful comparison with the Onsite group, it also damaged the possibility of understanding how and why the ES students performed better on their essays than the onsite students..

There are numerous possible explanations. One relates to motivation. Students who enroll in a course, especially a writing course, for online credit may be more highly motivated to succeed than the average college freshman. They have essentially self-selected into the course and the extra measure of discipline and self-monitoring that an online course will require. These factors are not always present in the onsite environment.

The online environment also allows a longer amount of time for the completion of assignments. Online students at Texas Tech are allowed six

months to complete an online course, whereas the typical college semester is from three and one-half months (fall) to four months (spring) in length. This additional time could be a significant factor in the higher achievement of the ES students.

### **Grammar teaching not controlled**

Having a squad of teachers at one's disposal is a great advantage when conducting such a study as this. But the obvious disadvantage, especially when the study involves analyzing essays from previous semesters, is that one has absolutely no control over what those teachers do (or did). This problem surfaced during the interviews that I conducted with the graduate classroom instructors (CIs) who taught the 1301 classes during the semesters involved in this study. It became apparent that not all of them took seriously the requirement to teach the grammar lesson. Some taught grammar very enthusiastically, some only moderately, and some hardly at all. This fact could explain at least some of the lack of excellence in the Onsite essays. It is clear that some of the students in the Onsite classes are not receiving the direct grammar instruction that they are supposed to be receiving.

But the greater problem, from the viewpoint of this research study, is that the researcher has no way of knowing whether the CIs are teaching the grammar lesson or not, and if not, which ones are causing the problem. In a future study, a researcher would have to either bring the study into the present in order to

control the teaching more adequately, or possibly interview CIs who have taught in previous semesters and study only essays from the CIs who have seriously taught the grammar lessons in a regular and methodical manner. This would give a greater possibility that the result from the Onsite essays would be coming from students who have actually been taught grammar.

### **One semester not long enough**

This study considered the essays from four semesters, total, but the results are tabulated from one semester's work only. That is, each semester stood as a separate entity, on its own, and is researched and analyzed as a separate time frame. This procedure raises the question about whether one semester is actually a long enough period of time for grammar and other similar interventions into the writing process to take effect.

Many studies in the past suggest that one semester may not be, after all, long enough for a valid study. Harris's 1962 London dissertation, upon which the 1963 Braddock report is based, is a 2-year study of British 12-14-year-olds. The 1976 Elley study, used by Hillocks in his 1986 report, is a 3-year study of New Zealand high-school students. The excellent work in the understanding of the developmental process in writing by Bereiter and Scardamalia adds to the weight of evidence for preferring longer periods of time when studying student changes in writing ability. The structure of the ICON program and the TOPIC architecture would make it difficult, but perhaps not impossible, to develop a

multi-semester longitudinal study where one could follow individual writers through more than one course where grammar is taught in the classroom. If such a study could be executed, the longer period of time would almost certainly produce better student achievement.

### **Teaching methods not appropriate or effective**

Despite using essentially a “grammar in context” method, which has been more or less universally endorsed for the past 30 years as a valid and effective approach to the teaching of grammar, it may be that the methods used in the Onsite classrooms are either not effective because of the individual teacher, or could have been improved because of the availability of better methods. For instance, the sentence-combining method pioneered by Mellon, Daiker, and others has seen a great deal of success in helping students learn grammar. If grammar lessons are being taught but students are still not improving their essays, however the essays are evaluated, then perhaps different pedagogical methods need to be tried. Once again, here the researcher has no way of knowing, much less controlling, which methods the CIs used in their classroom teaching of grammar. A future study along these lines might interview CIs to find out which ones used which methods, and then select essays only from the classes of CIs who used approved methods.

### Correlation coefficients and significant relationships

As previously mentioned in Chapter IV, correlation coefficients were computed for both the Onsite group and the ES group, which resulted in 18 significant relationships in each group. The Bonferroni correction, which reduces the *p* value from .05 to .005, was then applied to the significant relationship results, reducing the number of very meaningful relationships from 18 to 9 in the Onsite group and from 18 to 10 in the ES group.

To aid in the discussion of these very significant relationships in the Onsite group, Table 4.6 is reproduced here.

Table 4.6—Significant Correlations for Onsite 1301 Essays after Bonferroni Adjustment

	style 3— no. of words in rt- br free mod.	style 2— no. of rt- br free mod.	quality score	error 3— total usage	error 2— total syntax	error 1— total punct.
style 2— no. of rt- br free mod.	<b>.91</b>					
grade	<b>.37</b>	<b>.41</b>				
quality score	<b>.98</b>	<b>.88</b>				
total errors			<b>-.39</b>	<b>.76</b>	<b>.61</b>	<b>.79</b>

The usual scale for judging the strength of these relationships is as shown in Table 5.1:

Table 5.1—Correlation Levels

.90 to 1.00	very high
.70 to .90	high
.50 to .70	moderate
.30 to .50	low
.00 to .30	little

(Hinkle, Wiersma, & Jurs 1998, 120).

Therefore, for the Onsite essays, there are two Very High relationships: Quality score with Number of words in right-branching free modifiers ( $r = 0.98$ ), and Number of right-branching free modifiers with Number of words in right-branching free modifiers ( $r = 0.91$ ). There are three High relationships: Quality score with Number of right-branching free modifiers ( $r = 0.88$ ), Total errors with Total usage ( $r = 0.76$ ), and Total errors with Total punctuation ( $r = 0.79$ ). There is one Moderate relationship: Total errors with Total syntax ( $r = 0.61$ ). And there are three Low relationships: Grade with Number of right-branching free modifiers ( $r = 0.41$ ), Grade with number of words in right-branching free modifiers, and Total errors with Quality score ( $r = -0.39$ ).

One expects to see the individual error variables – Total usage, Total syntax, and Total punctuation – correlating highly with the Total errors variable, so this is no surprise. One also expects to see the syntax variables – Number of right-branching free modifiers and Number of words in right-branching free modifiers – to correlate highly with each other. There is even only a slight surprise in seeing a low correlation between Grade and two of the individual

style variables, since one would expect that essays performing well in stylistic fluency would make higher grades.

What is the most notable about these relationships is what is *not* seen in Table 4.6 – and that is that there is no very significant correlational relationship of any kind with style variable 1, Number of words per clause. We might have expected, based on so much work in previous decades, that words per clause would form a very significant relationship somewhere within the matrix. But it does not. The reason why not probably has to do with the nature of the right-branching modifier, where the emphasis is less on length and more on fluency and graceful expression. Whatever the reason, number of words per clause clearly does not dominate the syntactic picture in this study.

A discussion of the ES correlations produces a similar result:

Table 4.9—Significant Correlations for ES 1301 Essays after Bonferroni Adjustment

	style 3-- no. of words in rt- br free mod.	style 2-- no. of rt- br free mod.	quality score	error 3-- total usage	error 2-- total syntax	error 1-- total punct.
style 2-- no. of rt- br free mod.	<b>.85</b>					
quality score	<b>.98</b>	<b>.85</b>				
style 4-- no. of words per rt- br free mod.	<b>.56</b>		<b>.53</b>			
total errors			<b>-.36</b>	<b>.68</b>	<b>.72</b>	<b>.80</b>
error 2-- total syntax						<b>.44</b>

The correlations within the ES group produced one Very High relationship: Quality score with Number of words in right-branching free modifiers ( $r = 0.98$ ). There are four High relationships: Number of right-branching free modifiers with Number of words in right-branching free modifiers ( $r = 0.85$ ), Quality score with Number of words in right-branching free modifiers ( $r = 0.85$ ), Total errors with Total syntax ( $r = 0.72$ ), and Total errors with (total punctuation ( $r = 0.80$ )). There are three Moderate relationships: Number of words per right-branching free modifier with Number of words in right-branching free modifiers ( $r = 0.56$ ), Number of words per right-branching free modifier with Quality score ( $r = 0.53$ ), and Total errors with Total usage ( $r = 0.68$ ). Finally, there are two Low relationships: Total syntax with Total punctuation ( $r = 0.44$ ), and Total errors with Quality score ( $r = -0.36$ ).

As with the Onsite group, these relationships present somewhat expected findings. The individual error variables correlate highly with the total error variable, and the total error variable correlates somewhat negatively with quality score. Two of the style variables dealing with right-branching free modifiers correlate very highly or highly with quality score, as they also do with each other. What is different about the ES group's correlations is that style variable 4, Number of words per right-branching free modifier, has two very significant correlations with other variables. This result is not seen in the Onsite group. In the ES group, Style variable 4 correlates moderately with Number of words in

right-branching free modifiers ( $r = 0.56$ ) and also with Quality score ( $r = 0.53$ ).

This effect evidently happened because the ES group, while not using more words per clause than the Onsite group (15.32 to 15.79), have more right-branching free modifiers (9.04 to 8.08) and more words in right-branching free modifiers (49.20 to 45.78).

### **This study's limitations**

This study, like all similar studies, had unavoidable limitations, some of which have already been alluded to. First, the pre-study gathering of demographic information was not handled optimally. This limited the ability of the researcher to compare the two groups and to estimate their homogeneity. The differences in results at the end of the study could have been affected by lack of homogeneity between the experimental groups.

Second, because the study used essays that have been written in the past and are retrieved from archives, the classroom teaching of grammar is not controlled or controllable. This possibly weakened the effect of the claim to direct, in-class teaching of grammar, and may have also affected the quality of instruction received by some students.

Third, limiting the study to one semester may have been too short of a time frame to see meaningful results. Numerous previous studies suggest the possibility that one year or even more is needed to see results in language-based

classroom interventions. The one-semester time limitation may have contributed to the fact that this study did not find statistically significant results.

### **Contributions to existing knowledge**

Despite this study's limitations and its failure to confirm its primary research question, it nevertheless contributes in significant ways to the scholarship of grammar-and-writing studies.

First, it provides a valuable historical survey of and analysis of the grammar and writing issue. Though many other writers have surveyed this history, my study provides an advantage for future students of this issue by citing many studies that are either not mentioned at all by Braddock or Hillocks, or are mentioned but glossed over because they (the studies) show positive results for the teaching of grammar. This study provides citations for and discussion of much previously ignored research that has shown positive value for the place of grammar in the writing classroom.

Second, and in many ways even more importantly, this study has given what is, to my knowledge, the fullest extant critique of the errors and limitations of the 1962 Harris dissertation (upon which the 1963 Braddock report's condemnation of grammar is based), the 1963 Braddock report, and the 1986 Hillocks report. For more than forty-five years the "English establishment" in the United States has accepted as "gospel truth" the conclusions of Braddock and

Hillocks: that teaching grammar is both (1) not helpful to student writing and (2) probably even harmful to students' attempts to learn to write better. The historical survey and analysis in this study shows, among other things, the following major points:

- Harris's conclusions are tainted by his questionable research methods.
- Braddock's 1963 condemnation of grammar is based almost entirely on one study – Harris's 1962 dissertation – and so is founded on both a weak and a questionable research base.
- Hillocks's 1986 condemnation of grammar is based on only three studies, two of which came from a 1963 study of the same population of Boston-area 6<sup>th</sup> graders. Furthermore, Hillocks set the inclusion criteria for his meta-analysis so strictly that, of the twenty studies he dealt with in the grammar section, he eliminated all seventeen of the studies that showed positive results for grammar and retained for his analysis only the three studies that showed negative results for grammar.

Third, this study provides an important alternative way of looking at the results of grammar-and-writing studies, which is to recognize the profound lack of quality evidence on this difficult question, in either direction – that is, either supporting or denying the validity of grammar's value for improvement in

writing. This position is a major departure from previous research interpretations on this issue, especially that of Braddock and Hillocks, which became the basis for policy. In those cases, the lack of stellar research results to support grammar as a means for improving writing led scholars to conclude, almost without exception, that grammar teaching is not effective and therefore does not belong in the curriculum. The weak research base upon which the condemnations of grammar are based shows that other interpretations are possible, and even desirable.

### **Suggestions for further research**

The results of this study exposed several areas that could benefit from additional research and examination.

The first area to be suggested for further research is the issue of *syntactic complexity*. This study defined *syntactic maturity* as a slightly different issue than syntactic complexity, but noted that the two terms, along with *syntactic fluency*, are often used interchangeably and are often confused. Bearman (1984) long ago noted that while “syntactic complexity in language is related to the number, type, and depth of embedding in a text” (p. 45), that “merely evaluating the presence of dependent clauses in a discourse text is insufficient to account for complexity in language. A combined functional and formal classification of subordinate clauses [is necessary]” (p. 79). Bearman’s study, following Halliday’s (1979) earlier work, showed that the issue of syntactic complexity in written

discourse is more complex than simply counting the number of subordinate clauses in a text. Her suggestion regarding the need for functional and formal analysis fits well into an open area within grammar-and-writing studies.

A second area of possible fruitful future research is *grammar teaching methodology/pedagogy*. The frustrating lack of gratifying results in this study and many others over the course of the past 100 years might be traced to a problem not with grammar teaching itself, but with appropriate and effective methodology and pedagogy. The fatalistic attitude of the past, where grammar-and-writing research studies that failed to show positive results in favor of grammar teaching are seen as proof that grammar should not be taught, seemed to dominate the research paradigm for many years. However, if there is an overarching lesson from any study of this kind that fails to find positive results in the hoped-for direction, it perhaps ought to be the opposite of the automatic negative response of the past. Instead of automatically rejecting grammar teaching because studies continue to reach negative conclusions regarding its effectiveness, why would an opposite viewpoint – that negative results simply tell us that we need to find more effective methods, rather than reject grammar outright – not be equally valid?

This discussion of pedagogy and methodology should be continued in the area of *online functional/rhetorical grammar instruction*. Anticipated future

technological innovations make it virtually certain that educational delivery will move more and more toward the hybrid model, if not the totally online model, in every area discipline and area of study. Writing teachers must begin now to ask the questions that will lead to relevant and meaningful instructional methods in the years to come – methods that are matched both to the available technologies and to the students who have grown up using the technologies. A “new paradigm” will be needed to adequately address the changes that technology will mandate.

This study did not find any statistically significant results in favor of grammar teaching, but it nevertheless has contributed to the overall grammar-and-writing knowledge base, and will in many ways be useful to others in the ongoing attempt to teach one of the greatest skills of life: the mastery of written language.

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## APPENDIX

### WRITING REVIEWS

#### Fall 2003

##### WRITING REVIEW F2003-1:

I think that in draft cycle 4, I incorporated many new aspects which are not visible in former drafts. I not only used multiple sources, but also presented good insight behind them. In my first draft, I made many mistakes which are improved on in the next draft. First of all, I do not really support the claim presented in the introduction. I mentioned how downloading should not be illegal, yet I do not give many reasons or examples to back it up. One person who peer critiqued my draft 4.1 said that “a better method for the author to go with would be to better explain some of the things that he/she hit on in the introduction.” This person really helped me out in the next draft by giving me some ideas of how to back up my claim. They also told me that I need to find some more sources which give straight facts on music downloading so that my claim would be more feasible. Another person who read my draft 4.1 made a good point about how “people can download entire records on their computer [and] don't have to go out and buy the CD, which causes the artist to lose revenue.” I took this idea and found some good information about how the record industry and stores are being affected by music downloading. In draft 4.2, I took all of the ideas from others and from my own thoughts and produced a much stronger draft. I not only included the counter-argument concerning the affect of music downloading on sales, but also a rebuttal which backed up my argument. Finally, I included a couple more sources to give the paper a little more factual information, versus opinioned. Finally, in draft 4.3, I made sure that everything in the essay flowed very well and made sense. I added three more sources and placed more importance on my rebuttal, so that my argument is clear and emphasized. Overall, I think that I created a very strong paper and look forward to seeing my grade on the final draft. In the future, though, there are some things I would like to improve on. I need to not only find many sources for my first drafts, but also make sure that my argument and claim are clearly stated for the reader. If I can remember to do these things, then I feel that I can create very strong papers in the future.

##### WRITING REVIEW F2003-2:

To make draft 4.3 the most effective argument, I made several necessary revisions. I elaborated to make the argument clearer to the reader. This would help to allow the reader to better form his or her own opinion of whether or not cloud seeding is beneficial or not. One idea I added is, “As a result, cloud seeding

is not as effective in drought stricken areas because low amounts of moisture exist in the atmosphere preventing the cloud seeding process from being successful." Readers are most likely not familiar with the issue of cloud seeding, therefore, it cannot be assumed that they would fully understand the argument unless I clearly stated the fact. In the paragraph discussing hail damage, I added a rebuttal to the problem of whether or not hail damage is worth the risk to receive needed rain. I also improved draft 4.3 by assuring that there is an argument, rebuttal and evidence to back up each argument and specific problem. When I began with draft 4.1 as the document instructor states, "I am afraid you may not fully understand the requirement of the assignment. For what you write here is like a science report instead of an argumentation with your claim." In draft 4.2 and 4.3 I improved the claim. In one peer critique, it states, "I agree with the writer's claim and he or she do really well researching this topic and stating this claim."

The strengths of my paper include the conclusion and credible resources. I restated the important information in my conclusion. "While cloud seeding is still performed more research must be done to find more solid ways of executing this project in order to improve the positive benefits." Since the conclusion is the last part of the paper it is the most important to make the reader understand your argument. Another important part of an argument is presenting credible information. The sources I have chosen to use are credible organizations that have performed valuable studies for the field of meteorology. They provide facts and unbiased information which helped my argument.

While I feel that my argument is strong I still have weaknesses that I must work on. The one thing I need to focus on for English 1302 is presenting a stronger introduction. While I have improved from the beginning of this year I still have room for improvement.

#### WRITING REVIEW F2003-3:

The revisions I made between my drafts 4.1, 4.2, and 4.3 are simple, but necessary. To begin with, in Draft 4.1, I stated a claim in the opening, that hunting is important. However, I do not clarify in my thesis why hunting is important. My claim is that hunting is important for animal population control, but I confused my audience about the claim that hunting provides food supply. I do not clarify that it provided food supply for humans. The document instructor pointed this out also. For example, "However, the claim could use some clarification. I understood that hunting is important to control the animal population, but I is confused about the food supply. Is hunting important to control the animals' food supply or human's?" Even though I have not received

any feedback from the document instructors for drafts 4.2 and 4.3, I used feedback from the peer critiques and my own opinions. More significant revisions are made between my drafts 4.2 and 4.3. For example, more depth is added to the arguments and information about hunting. It is necessary for me to conduct more research on why hunting is necessary to strengthen the drafts. I added more quotes and overall facts about the benefits of hunting. I feel that these additions improved the effectiveness of the drafts. I also added conclusions to my drafts; I felt that a conclusion would be necessary to give an effective end to my drafts. These are, for the most part, the main revisions that I made between drafts 4.1, 4.2, and 4.3.

I feel that my major strengths of this essay assignment would be providing a strong opposing argument, providing all of the information about hunting in a organized and effective way, and the ability to incorporate the research I have performed and apply it to my topic. A major weakness for this assignment would have to be the topic of hunting itself. This topic have a lot of information and solid reasons for why people should be against hunting, but very few effective reasons why people should hunt.

A specific area that I need to work on for English 1302 would be the overall research done for each of the essays. I tend to wait until the last minute to conduct any research for the assignments. I feel that it would be beneficial for me to start work on the drafts sooner. I also feel that my drafts can benefit by improving my grammar and sentence structure.

## **Spring 2004**

### WRITING REVIEW S2004-1:

I made several revisions between all my drafts in this writing cycle. To begin with, my draft 4.1 have many errors that needed to be changed. The document instructor commented that, "You begin your first paragraph with a definition of 'Physician-assisted suicide.' This definition does not reflect the content of the paragraph and would be typically agreed upon by everyone." Therefore, in my next drafts I began with the topic sentence, "The purpose of a doctor is to heal people, not to give them the tools to kill themselves." The rest of the paragraph all gave support to the topic sentence. In my draft 4.2, I also received the comment, "tell more why it (the claim) is significant." In order to do this, I added, "This is an extremely important issue that unfortunately could effect anyone at any time," to my introduction. One peer stated that, "Instead of writing about religion, he or she can add in supporting opinions of a relative or

friend that is terminally ill." I used his/her suggestion and added a paragraph about the effects of physician-assisted suicide on the families. However, I kept the paragraph about religion. Even though, it is a controversial subject, I felt that it should be included in the paper since it is one aspect of the claim.

I felt that the strengths of this essay are the amount of editing that I do. My draft 4.1 do not have a strong thesis or topic sentences. In both of the following drafts I structured my essay more with topic sentences and then transition sentences at the end of each paragraph. An additional strength of my paper is, as one peer stated, "This draft is truly ridden with expert moves." I felt like I do a good job of adding various moves in order to make my paper flow smoother.

As with any paper, there are some weaknesses that we can always improve. One major weakness in this writing cycle is using a variety of sources. I only used internet sources in this essay. I find that using the computer is the easiest way for me to find information, so I always depend on it. When writing papers in the future, I plan on using more book and articles as references.

In English 1302, I plan on improving my writing by paying more attention to my editing. I make several careless mistakes because I do not proofread enough. The main area that I would like to improve upon is using commas correctly.

#### WRITING REVIEW S2004-2:

English 1301 has really helped me to become a stronger writer. I like the way the drafts are split up into separate parts in order to make the final draft as strong as possible. I feel like I highly improved between draft 4.1 and 4.3. I started out with a very brief topic and opinion such as, "Legalizing Adderall is a very controversial issue in the lives of college students, teachers, and parents of adderall users. The drug is very helpful to students in any learning environment and people feel that it should be legalized." I took the advice of my DI who said, " to make the argument more clear and my sentence for draft 4.3 is, "Legalizing Adderall to be sold over the counter is a very controversial issue in the lives of college students, teachers, and parents. What is adderall? According to recoveryfirst.net, "Adderall is a combination of Dextroamphetamine and Amphetamine." According to whatmeds.com, "Adderall is used to treat Attention Deficit Disorder with Hyperactivity (ADHD)." I figure that giving my audience more information about the topic would help them to believe my opinion on the subject. I feel like I have many strengths in my writing such as good references and believable claims. However, I feel that I need more practice on elaborating on the claims and references. The last research paper I wrote is my senior year and this class would have been very helpful for a successful draft in my high school class. I feel that everything I have learned from this class will

help me to be successful in future English classes. The strategy of reading someone else's paper and then them reading mine, really helped me see other perspectives on the topic I am writing about. I also liked the writing reviews because I feel like they are helpful and help me to see what I need to elaborate on or change in order to have a successful draft. I feel like my overall weakness in English 1301 is elaborating on information found. I would find very good sources but I tend to have a hard time making a STRONG opinion of them. I hope to make this weakness a strength by the end of next English semester. I feel that my strengths definitely outweigh my weaknesses because finding good resources and having a believable claim is the most important part of any draft. Even if it is the first attempt in the essay cycle.

WRITING REVIEW S2004-3:

When I initially started writing my first draft for the 4th essay cycle, I started with a very weak claim and a weak argument. I found strong online sources to back up my claim, but the overall paper is weak in general. When I moved into writing my draft 4.2 I heavily relied upon the feedback given to me by my peers, course instructor, and the remarks left by the graders to revise and improve my paper. The first thing that I have to do is improve my claim. Using feedback from my Course Instructor, I made my claim stronger by specifically stating what my opinion on the matter is. I continued to find more online information that helped support my claim and also helped me make my argument even stronger. But the weakness in my paper is still with my claim and my opposing argument. Finally when it came to my draft 4.3 I have strengthened my claim and improved my opposing argument. I found online sources that would give my opposing argument some stability and with that I am able to devise a rebuttal that would work very well in my argument's defense. I used online sources which provided me with statistics that supported my argument and made the overall effectiveness of my paper much stronger. An example of how I used my research in my paper to support the statements made are those from the opposing argument and the rebuttal; "But many people are very optimistic about the programs that are being put into action. President Bush recently proposed the "Jobs for the 21st Century" program which would allocate \$250 million dollars to community colleges", which gave my opposing argument a solid stance, with the information that I found for my rebuttal I am able to argue back stating, "but where is he getting the money from to create these programs and such. The "Jobs for the 21st Century" program receives its funds from "programs that already support job training at community colleges and other services". The information that I am able to gather greatly improved the overall effectiveness of my writing. With all that I have learned in 1301, I plan to improve in the areas of grammar

and professionalism in my writing when I move to 1302. I want my writing to be that of a professional to effectively bring my point across.

### **Fall 2004**

#### WRITING REVIEW F2004-1:

This course is a great learning experience for me. I learned how to write a lot better. The research logs are what helped me the most. I have never thought to use a research log but it made the papers go by so much faster. I do not have to look up and look down and minimize a screen to look up information and type. The grammar lessons in this course helped me a lot. I have been in yearbook and journalism in high school and we used commas, colons and apostrophes much differently. I learned to use them correctly in this class. This course also helped me to really narrow my thoughts down and write a paper that actually made sense and flowed well. This course not only applied to English but a speech course as well. This semester I have to write speeches. I do very well on the speeches because this English course taught me to organize my thoughts with a clear thesis, body paragraph and a conclusion. Also learning to summarize and evaluate articles is very helpful to me. In another one of my classes we have to take articles and summarize them. It is very easy for me because I have already learned to do it in 1301. This class really helped my writing improve.

#### WRITING REVIEW F2004-2:

Throughout this semester in ENGL 1301, I have studied and taken note of several useful writing elements. Over the course of the four essay cycles, I have begun to understand and implement these strategies in my writing. In the first essay cycle, the ability to recognize your starting place and write a clear and descriptive thesis statement is something I found to be very important in any paper. While I is working on my essays, the placement of my thesis is usually at the very end of the first paragraph. I always made it apparent to point out the main points of my essay as well as give a general idea of what I is writing about. Additionally, addressing the audience is something I included in the first paragraph. My tone and word choice is something I concentrated on early and throughout in most of my essays. In the second cycle where we examined and wrote a textual analysis, I felt that it is always vital to support your ideas with strong quotes or facts. While doing so, I is sure to be careful in documenting my sources. In conducting my textual analysis, I wanted to determine the audience and the purpose first and foremost. Also, finding strong quotes or facts to supports the idea is imperative. During the third essay cycle, we took a look at the form of feasibility essay. The ability to identify a problem or an issue and then establish an argument or competing solution is emphasized. I always made sure and identify the stakeholders in each issue so that the topic influence can be addressed. While

I wrote my papers, I wanted to be direct and descriptive towards the topic or issue. So in the fourth and final essay cycle, I definitely included some of these writing elements that we explored in ENGL 1301. My starting place and thesis statements highlighted as well as introduced the main points that I is portraying to my audience. Weather I is analyzing a text or coming up with an argument on an issue, I made it clear what wanted to accomplish. In reviewing this semester, I felt like I absorbed and will continue to use several of the strategies that we learned about in the future.

WRITING REVIEW F2004-3:

I have to admit, I thought I have learned just about all there is to know about writing papers after coming out of high school. I really don't think there is much more that I could possibly learn, but ENGL 1301 proved me wrong just as it should have. In the beginning I thought you just started a paper by throwing down some facts and some vital information on your topic to get started with, but boy is I wrong. As I attended ENGL 1301 I is taught that you must find your starting place in order to get the effect of what you want to eventually get across to people as they come around to finishing reading your paper. If you don't know what point you're trying to get across to people then you must go back and analyze what your topic is, as well as the criteria that is needed to be filled for the particular draft; when putting those together it should give you a better idea of how to start your paper. Once you've realized what your starting place is it is then time to incorporate who the audience is. Now with identifying who your audience is is something you have to really think about, it couldn't be to broad instead it needed to be who you are trying to get your point across too exactly. One key skill I picked up in ENGL 1301 is identifying and presenting a problem along with possible solutions to the decision maker in your given situation. In this I would look over a certain situation and try to see problems involved with it that could be fixed. After looking back through the problem I'd then try to come up with some practical solutions to solve it that I'd have to back up with terms like time, ethics and money. At last I obtain the skills in order to write a good persuasive/argument paper, that involved identifying my starting place, my audience and purpose, as well as carefully reading and analyzing my sources. While doing this final paper in this given essay cycle I realized why we do all the others and the purpose they served to previous papers assigned as well. In learning each essay cycle I obtained knowledge to later convert many of them together to make different types of papers that may come up in life.

**Spring 2005**

WRITING REVIEW S2005-1:

In the first writing cycle, I learned how to narrow my topic to help wrtie a

concise paper. This is a crucial step in the writing process because it shapes what your topic is going to be. In the second cycle, I learned how to read an article and get the most of it. Knowing the audience and its purpose is key to understanding what a writer is trying to communicate. If we can see who a writer can communicate than it will help me write so my reader knows what I am thinking. In the third writing cycle I addressed a problem and found solutions. This helped me be more open in my writing by letting me present many solutions to one problem. In the last writing cycle, I wrote my argument and learned how to make sure I is using straight forward wording, not passive to where it seemed I is wavering. I is at first very opposed to all the writing that I would have to do for this class. Since I started this class I feel that I enjoy writing more. I have more confidence since I have been writing more. We began in the beginning writing very informal. I admit I usually have trouble with this because I always wanted to include myself in my papers. I learned how to communicate my opinions without using me or I . I mean it is my essay. I Since I learned how to look from the writer's point of view, when it came to looking for sources I immediately knew what I could use, and what is outside or borderline to my topic. I learned that if I can find the criteria in another draft, I is more likely to write my draft correctly. I still need to work on narrowing my topic. It seems I went through thousand of changes during every writing cycle. I do know the more I changed it the more concise and in depth my draft is. In this last cycle I changed my thesis to fit all of my information, because I wrote good reasons to back up my thesis that would not have fit if I don't change it. I think for over all I have become a better editor of my drafts, which in turn will make me a better writer.

#### WRITING REVIEW S2005-2:

The many concepts I have learned through this course have helped my writing skills in many ways. For the first draft we worked on recognizing our starting place. The starting place is what we knew and think about the topic at that point prior to any research. We took a topic and narrowed it down and explored many different sides of it using a research log. The research log contained our ideas and reactions to the information we gathered. This is the most helpful tool out of the section and something which I used for other prompts. It allowed me to keep my data organized and store my thoughts. We then began to write our papers in a formal writing style for draft 1.3. It is a completely new style which to learn, but made the rest of the papers much more professional. For draft two we are to decide the audience and purpose of certain texts. We also looked at the word choice, strategies of organization, and sentence structure. The purpose of this is to learn how other writers composed their writings and for what reasons. This is helpful because in the end it helped me to use some new strategies and helped to dig deeper in my research. It also helped to identify things such as bias opinions

in others articles. For the final draft 2.3 we are to compare and contrast two different authors' works and also learn how to avoid plagiarism. For our third draft we are to examine a problem and identify solutions and the stakeholders. This is my favorite paper to write because it is easy to find information for my solution and I have experience with the subject which I wrote about. It is also interesting to look at who it affects and in what manner. The last concept we are to learn is writing to argue. We needed to choose a side and argue its position. I found this to be more difficult, maybe just because it is near the end of the semester. We learned how to work with a thesis statement to directly state our position and solution about our argument. This is a very important tool in writing papers. We also have to present both sides of the argument in this paper which in the end, made it difficult to choose my actual side. Overall, through this course my writing style changed in many ways. Many of these tools I learned will stick with me and help my writing ability in the future.

WRITING REVIEW S2005-3:

The english 1301 course has developed my writing process in a way that I never could have imagined. After taking this course I will no longer sit at my computer with writer's block wandering about a subject. I have learned to indulge myself into a subject, thinking about the author's views and beliefs or deciphering their word choice. I have been able to find more credible sources with the search engines provided to me in this class. Normally I would narrow my sources to online material and books in the library, but this course has enabled me to use all of the available sources such as periodicals, interviews, books, newspapers, and online material.

I've never really voiced my starting place except during a thesis statement, but learning how to do this is invaluable as it pulls the reader into the paper from the very beginning. In understanding how to write an argumentative paper, I learned the reasoning behind "knowing your audience and purpose." Instead of giving personal opinions about a subject, I could give points that could pertain to the audience I is speaking to, which in turn would help them understand my points in a non-biased manner. When learning how to closely read and analyze a text, it helped me to understand what the author is thinking or what they are "really trying to say", which helped me to be open minded.

When it comes to identifying problems, I found that opinions rule. Some people believe there is a problem and some people don't. Research is very key and credible sources are invaluable. Talking with professionals and using statistics is key when evaluating solutions.

This class has started me on the right track to professional writing and most everything that is taught in the 1302 course I have understood and it has helped me greatly.