

DOCUMENT RESUME

ED 213 037

CS 206 753

AUTHOR Calderonello, Alice Heim; Cullen, Roxanne Mann
TITLE The Syntactic Errors of Basic Writing.
SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
PUB DATE [81]
GRANT NIE-G-80-0146
NOTE 160p.

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS College Freshmen; Comparative Analysis; *Error Analysis (Language); Higher Education; Remedial Instruction; Sentence Combining; *Sentence Structure; Statistical Distributions; *Syntax; *Writing (Composition); *Writing Evaluation; *Writing Research
IDENTIFIERS Bowling Green State University OH; *Writing Difficulties

ABSTRACT

An extensive comparative analysis of dysfunctional sentences found in the writing of prefreshmen at Bowling Green State University (Ohio) was conducted to examine and to describe possible differences in dysfunctional sentences produced by remedial and nonremedial writers. Writing samples consisted of randomly selected freshman placement examinations. Each of the 300 samples was analyzed for a frequency count of selected dysfunctions and for a transformational description of all dysfunctional sentences in order to determine if there were any frequently occurring anomalous structures that were unique to basic writing. Results indicated that particular structural errors did occur with greater frequency in developmental writing. The most significant finding with regard to the data resulting from the frequency count was that each group largely exhibited its own pattern of errors. With regard to the use of combining transformations in dysfunctional sentences, however, no significant differences among the groups were evident. (The major portion of the document consists of appendixes containing information and data related to the study.) (HOD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED0213037

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

+ This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

THE SYNTACTIC ERRORS
OF
BASIC WRITING¹

ALICE HEIM CALDERONELLO
ROXANNE MANN CULLEN

Bowling Green State University

¹PREPARATION OF THIS PAPER WAS SUPPORTED BY A GRANT FROM
THE NATIONAL INSTITUTE OF EDUCATION
Grant # NIE-G-80-0146

CS206733

ACKNOWLEDGEMENTS

We wish to thank a few individuals who worked on this project with us. Ralph St. John and Jim Sullivan, along with Barry Moore and Gary Fenstermaker, provided assistance with the statistical analyses. Bud Lane handled financial matters pertaining to the grant. Suzanne Andrews helped to expedite the project throughout its duration by managing budget transfers, arranging for duplication of materials, and helping with too many other matters to mention. And, lastly, Joan Conrad did a wonderful, painstaking job with the typing, (and retyping) of each of the quarterly reports and of the final report for this project.

Table of Contents

	Page
Introduction.	1
Background of the Study.	1
Purpose of the Investigation	2
Related Work.	3
Method: Sample Collection and Preparation.	5
The Subjects	5
The Placement Exam	5
Sample Preparation	7
Method: Sample Analysis.	8
The Frequency Count Analysis	8
The Transformational Analysis.	10
Results	13
Introduction.	13
The Frequency Count.	13
Group Comparisons	13
Correlations Between Errors	15
The Linguistic Analysis.	19
Group Comparisons	19
Correlations Between Errors	21
Conclusion and Discussion	25
Major Findings	25
Discussion	26
Implications for Further Research.	29
Appendix.	32

INTRODUCTION

BACKGROUND OF THE STUDY

Reported in this volume are the results of an extensive comparative analysis of dysfunctional sentences found in the writing of pre-freshmen at Bowling Green State University, the purpose of which was to examine and to describe possible differences in dysfunctional sentences produced by remedial and nonremedial writers. The writing samples used for the study were randomly selected from freshman placement examinations administered by the Freshman Writing Program at Bowling Green State University during the Summer of 1980.

For the past several years, both the public at large and professional educators have become increasingly concerned about an apparent decline in writing skills. Widely read newspapers such as the Chicago Tribune and national newsmagazines such as Newsweek have featured articles on the severity of this decline. Even local newspapers print stories on "back to basics" as a means of alleviating the writing problem. An article in the Chronicle of Higher Education reports that "...on a national level we have failed--have continued to fail--to meet the challenge of illiteracy among college-level students" (Scully, 1974). Accompanying all of these publications are figures furnished by the College Entrance Examination Board which show that between 1963 and 1977, the average scores on the verbal section of the test dropped 49 points, from 478 (1962-63) to 429 (1976-77), and the National Assessment of Educational Progress found that the writing skill level of the average and above-average students has declined.

The growing need for remediation of writing skills among college freshmen has become a primary concern of educators and administrators in institutions of higher learning throughout the country. Departments of English everywhere are becoming increasingly involved with freshman composition courses because of students' inability to write (Coughlin, 1977). Albert H. Bowker, Chancellor of the University of California at Berkeley, states that colleges and universities are reporting increased costs for remediation. This national pattern of increasing need for remediation is reflected in freshman writing at Bowling Green State University. The percentage of students requiring remediation has grown steadily. In 1975, 4.7% of the freshmen pretested by means of a writing sample required extensive remediation. By 1976, the percentage had more than tripled: 17.7% of all freshmen pretested were producing writing with severe dysfunctions. This percentage has remained stable during the period 1976-1981.

Within the field of composition itself, scholars have begun to document and describe college-level remedial writing populations (Shaughnessy, 1976; Shaughnessy, 1977; Lunsford, 1978; Cayer and Sacks, 1979). Shaughnessy (1976) defines "basic" or "remedial" students in freshman composition courses as those who produce "small numbers of words with large numbers of errors (roughly 15 to 35 errors per 300 words)" and who "seem to be restricted as writers. . .to a very narrow range of

syntactic, semantic, and rhetorical options, which forces them into either a rudimentary style of discourse that belies their real maturity or a dense and tangled prose with which neither they nor their readers can cope." Subsequent studies (Lunsford, 1978; Gebhard, 1978) have supported Shaughnessy's description. Further, contrary to popular assumptions, basic writers at the college level come from the entire spectrum of socio-economic and ethnic backgrounds (Sternglass, 1973; Kirschner and Poteet, 1973; Lunsford, 1978); college remedial writing classes are not providing remediation primarily for the economically disadvantaged and/or ethnic minorities. Nonstandard linguistic patterns seem to appear with approximately the same frequency in the writing of Black, White, and Hispanic remedial English students (Sternglass, 1973; Kirschner and Poteet, 1973).

Of the necessity for careful studies of the features of basic writing, Shaughnessy says, ". . . the territory I am calling basic writing (and that others might call remedial or developmental writing) is still very much of a frontier, unmapped except for a scattering of impressionistic articles and a few blazed trails that individual teachers propose through their texts. . . ." Further argument in support of the need for research studies on the features of remedial writing has been provided by Donald C. Freeman, Professor of English at Temple University. He agrees with E. D. Hirsch, author of The Philosophy of Composition (University of Chicago Press, 1978), in calling for a "massive program of mission-oriented composition research" (Freeman, p. 18). Freeman states that in order "to treat the problems of composition in a systematic way, we must assemble a large body of systematic knowledge of what those problems are." And the approach he has in mind requires "error analysis and classification. . . induced from a mass of evidence from real student papers" (Freeman, p. 18).

PURPOSE OF THE INVESTIGATION

Currently there is a proliferation of methodology and materials related to remedial writing, but these are based upon little concrete data about the nature of the writing dysfunctions produced by the basic writer. Clearly, new teaching materials, new pedagogical methods, and new teacher training programs must be developed to meet the needs of the basic writer. But before educators can develop successful strategies for helping students learn to write, research must be done to identify precisely what the problems of basic writers are. The primary purpose of this study, therefore, has been to gather information about the nature of dysfunctional sentences produced by the developmental or basic writer. To this end, every dysfunctional sentence from three hundred writing samples, produced by both remedial and nonremedial writers, was analyzed. Specifically, the objectives of the project were as follows:

1. to determine whether any frequently occurring syntactic errors are unique to the developmental writer by comparing the syntactic errors found in the writing of beginning freshmen enrolled in introductory writing courses with those errors found in the writing of freshmen enrolled in developmental

writing courses.

2. to discover whether certain types of common structural errors (for example, different kinds of sentence fragments) occur with greater frequency in remedial writing.
3. to provide detailed linguistic information about the nature of the syntactic dysfunctions found in basic writing.

In addition, since a comparative empirical study of syntax can also provide information about the syntactic strategies used by and the errors produced by "average" and "superior" writers, the findings of this study also will provide valuable raw data upon which researchers in language and cognition will be able to draw.

RELATED WORK

A survey of the professional literature reveals a dearth of research devoted specifically to the examination of the kinds of syntactic errors characteristic of basic writing. There are abundant studies, both impressionistic and empirical (Griffin, 1967; Thornton, 1972; Weiner, 1972 and 1974; Chaika, 1974; Farrell, 1974; Hess, 1975; Laurence, 1975; Budz and Graber, 1976; Desy, 1976; Meyers, 1978; Lattin, 1978; Taylor, 1978; Butler, 1980; Vik, 1981), on various methods for remediating the many problems of basic writers. In nearly every issue of professional journals one can find discussions of classroom practices, discussions of writing assignments, evaluations of grading procedures, and comparisons of various modes of instruction. Especially noteworthy are a number of studies which have been done on the effectiveness of sentence combining as a tool for improving syntactic structure (Mellon, 1966; O'Hare, 1971; Stotsky, 1975; Daiker, Kerek and Mohrenberg, 1977; Maimon and Nodine, 1978; Stewart, 1978; Swan 1979; Tomlinson, 1980; Sternglass, 1980; Berlin, 1980). In addition, the development of syntactic fluency in the writing of grade school and high school students has received serious attention (Hunt, 1965; Bateman and Zidonis, 1966; Griffin, 1967; O'Donnell, Griffin and Norris, 1967; Miller and Ney, 1968; Mellon, 1969; O'Hare, 1973; Loban, 1976), and in recent studies Murray F. Stewart has compared the syntactic maturity of high school and university students (1978) and has examined the relationship between syntactic maturity and skill in the mechanics of writing (Stewart and Grobe, 1979).

More closely related to the proposed project are the systematic comparisons which have been conducted to determine what differences in syntax and usage, if any, characterize the writing of nonstandard dialect speakers (Collins, 1971; Kirschner and Poteet, 1973; Sternglass, 1974; Gray, 1975; Lay, 1975; Rizzo and Villafare, 1975; Garcia, 1975). However, as several of these studies have shown, dialect interference is not the primary factor in syntactic problems in the writing of college freshmen. In fact, the same patterns of syntactic errors as those found in the writing of nonstandard dialect speakers seem to be prevalent in the writing of students from standard English speaking backgrounds (Kirschner and Poteet, 1973; Sternglass, 1973; Lunsford, 1978).

Despite these excellent studies, there remains the central task of objectively identifying and cataloging the syntactic features of basic writing. A few impressionistic studies (Higgins, 1973; Chaika, 1974; Krishna, 1975; Carkeet, 1977; House and House, 1980) have reported on syntactic oddities which seem to occur frequently in the writing of remedial students, but none of these studies indicates whether any of these syntactic errors is unique to basic writing. In a study of the effectiveness of sentence-combining exercises for college composition students, Maimon and Nodine (1978) related the frequency of embedding errors to previous data on length of T-unit, but their focus was on the development of syntactic maturity as measured by T-unit length, and they did not analyze student essays for various types of errors which might have occurred only in basic writing. Gebhard (1978) compared the writing of two quality-rated freshman groups with each other and with that of professional writers, but the emphasis was on examining syntactic structures rather than on isolating specific syntactic errors of basic writers. Cayer and Sacks (1979) investigated some of the "communication strategies" used by basic writers; however, since the purpose of the study was to describe similarities and differences between oral and written discourse, only limited syntactic analyses were employed (T-unit counts; frequency counts of adjective and adverb phrases; single-word modifiers; subject or predicate location of "complex structures"). Kagan (1980) looked for patterns in the surface structure of sentence fragments and run-on sentences in student writing that might have been mistaken for boundaries of complete written sentences and attempted to infer--on the basis of her findings--general rules that the students might have used in determining what a complete sentence was. Her subjects, however, were community college students enrolled in remedial sections of freshmen English. Hence, both the type of sentence dysfunctions examined and the student population were limited.

Only one researcher, Mina Shaughnessy, has really begun to classify and describe all of the features which characterize basic writing (Shaughnessy, 1976; Shaughnessy, 1977). However, her descriptions of grammatical/syntactic features are not precise. All syntactic errors are organized under the following "very general headings": Accidental Errors, Blurred Patterns, Consolidation Errors (Coordinate Consolidations, Subordinate Consolidations, and Juxtaposition Consolidations), Inversions (Shaughnessy, 1977, p. 47). Furthermore, these syntactic dysfunctions were derived from examining the placement essays of Basic Writers, and no systematic attempt was made to compare these features with those found in the writing of other beginning college freshmen.

Thus, while this study is related to the work of other research studies, it is unique in attempting objectively and systematically to analyze and describe the types of syntactic errors and the frequency of those errors in basic writing as opposed to the types and frequency of syntactic errors found in all levels of beginning freshman writing.

METHOD: SAMPLE COLLECTION AND PREPARATION

THE SUBJECTS

Prior to the beginning of the analysis of dysfunctional sentences, it was necessary to determine if the freshman writing population at Bowling Green State University was typical of other freshman populations, so that results could be generalized to other, "similar," groups of students. The institution itself seemed representative: it is one of twelve regional universities in the state-supported system of higher education in Ohio, located 20 miles south of Toledo, Ohio. Fully accredited, Bowling Green offers four-year undergraduate programs in a variety of areas and a number of graduate programs, several of which lead to the doctoral degree. The undergraduate population is drawn from both urban and rural areas, in-state and nationwide. Undergraduate enrollment has been stable, with an approximate total of 14,000 students, 3,400 of whom are freshmen.

In order to determine if the skill-level of entering freshmen at Bowling Green was similar to that of other entering freshmen, nationwide, composite and verbal ACT scores were compared. It can be seen that composite and verbal scores for entering freshmen at Bowling Green are very close to national averages, as shown by the following figures:

	ACT Composite		ACT English	
	National	BGSU	National	BGSU
1975-76	18.7	20.6	17.6	19.4
1976-77	18.5	20.4	17.6	19.4
1977-78	18.7	20.2	17.7	19.2
1978-79	18.7	20.1	18.0	19.4
1979-80	18.9	20.3	18.2	19.4

THE PLACEMENT EXAM

Once it was established that entering Bowling Green freshmen were a representative body, it was determined that essays written in response to the BGSU English Placement exam (pre-test), could be used as a data base.

Entering freshmen are pre-tested by means of a standardized, hour-long essay exam (the BGSU English Placement Test) for placement in one of three freshman-level composition courses, English 110 (Developmental Writing), English 111 (Introductory Writing), or English 112 (Varieties of Writing). English 112 is the writing course required by the University for graduation, and students whose writing is not proficient enough to place them into English 112 must first take English 111 or both English 110 and English 111 before taking English 112. The majority of students (60-62%) are placed in English 111; 17-18% in English 110; 21-25% in English 112.

The BGSU English Placement Test, which is administered to incoming students in groups of 30 or more during Summer Pre-Orientation (July 15-

August 15) or during Fall Freshman Orientation Week (mid-September), assesses student writing skills as demonstrated in an expository essay. An essay test (writing sample) is used for placement because research has shown it to be a far more valid measure of writing ability than computerized aptitude tests such as the American College Test (ACT) or the Scholastic Aptitude Test (SAT), if administered and evaluated properly (Godshalk, Swineford and Coffman, 1966; Diederich, 1974; Cooper and Odell, 1977): "Although widely used, standardized tests measure only editorial skills--choosing the best sentence, recognizing correct usage, punctuation and capitalization. At least for this reason. . . [these tests] are not valid measures of writing performance. . . even their use for placement is not as valid as a single writing sample quickly scored by trained raters. . ." (Cooper and Odell, 1977, p. viii).

The test itself consists of a set of written instructions and two topics, from which students must choose one. Both topics are within a student's experience and require no previous preparation (see Appendix A for sample test). Students are given bluebooks in which to write their essays and are allotted one full hour to complete the exam. The format of the test and the administration of the test follow guidelines established by Cooper and Odell (1977), Diederich (1974), Cohen (1973) and Braddock (1963): more than one topic to choose from, specific written instructions which are read aloud, specified time limit, uniform writing context.

A group of eight specially trained graduate students in the Department of English evaluate the tests according to specified criteria which determine the placement of the incoming students into English 110, English 111, or English 112. These eight raters are selected on a competitive basis from among a group of applicants who have taught in the freshman writing program for at least one year. Applicants for the eight temporary positions are asked to evaluate independently five sample pre-tests. The applicants are then ranked according to their accuracy of evaluation and placement, with the positions being awarded to those ranked highest.

After the raters are selected, they attend two two-hour long training sessions on evaluation and placement of pre-tests so that their judgments will be consistent and reliable. Studies of rater reliability have shown conclusively that "reliability can be improved. . . when raters from similar backgrounds are carefully trained" (Cooper and Odell, 1977, p. 18). This was first demonstrated by Stalnaker in 1934 and has been verified by a number of subsequent studies (Follman and Anderson, 1967; Coffman, 1971).

The evaluation instrument used by the trained raters is a dichotomous instrument call the "rubric" which measures writing proficiency according to five basic categories: I. Awareness of Audience; II. Organization and Development; III. Mechanics (spelling, punctuation, capitalization) and Standard English Usage; IV. Sentence Structure; and V. Word Choice (see Appendix B). This particular type of instrument is used for evaluating essays because research (Cohen, 1973) has shown it to be an efficient and accurate evaluative tool for making "disting-

tions between the quality of batches of essay. . ." (Cooper and Odell, 1977, p. 9). The rubric is used in the evaluation process by the raters, who assign students to either English 110, 111, or 112 on the basis of their performance on the pre-test. The writing of students who are placed in English 110 is generally characterized by major difficulties in mechanics and usage (more than 15 errors per 300-400 words) and/or major difficulties in syntax. This is to be expected since mechanics/usage and syntax are key areas in differentiating remedial writers from average and superior writers (Chaika, 1974; Shaughnessy, 1976; Shaughnessy, 1977; Carkeet, 1977; Lunsford, 1978; Gebhard, 1978).

SAMPLE PREPARATION

Following the completion of the Summer 1980 pre-testing of Bowling Green freshman, three hundred and seventy-five randomly selected samples were drawn from the pre-tests: 125 each from the three placement groups (110, 111, 112). All 375 samples were prepared so that it was impossible to determine how they had been placed. The samples were then re-evaluated as to whether they were 110, 111, or 112 samples. The majority were reverified. Any samples not reverified in this manner were rejected. A total of 300 reverified samples (100 from 110, 100 from 111, and 100 from 112) were randomly selected for analysis. Each sample was assigned a number for identification purposes.

METHOD: SAMPLE ANALYSIS

Each of the 300 reverified samples was analyzed twice by both the principal investigator and the graduate research associate. One analysis consisted of a frequency count of selected dysfunctions. The other analysis involved a transformational description of all dysfunctional sentences, including both those sentences recorded in the frequency count and those dysfunctional sentences not recorded in the frequency count.

THE FREQUENCY COUNT ANALYSIS

The first major analysis of the 300 writing samples involved a frequency count.

Frequency counts have long been an important type of evaluation instrument. They are especially useful for researchers because they seem to objectify the evaluation of writing. Since one of the problems with the frequency count is classifying the "errors," an experimenter must clearly specify the features that are counted. Most experimenters choose to employ some sort of grid or checklist on which specified items such as "subject-verb agreement" or "plural-s deletion" are recorded. Each time an evaluator finds a particular item, it is marked on the grid. This sort of procedure provides information about the number and the type of features or errors found in the writing samples. Data gathered in a frequency count is usually expressed, for purposes of standardization, as total number of items of a particular type per hundred or thousand words (Braddock, et al., 1963, p. 20) although this is not the only means of expressing the data. Other researchers have employed other means such as the total number of errors involving a particular item divided by the total number of sentences in a writing sample. Thus, a score of 100% for a given item means an error involving that item appeared in every sentence (Kirschner and Poteet, 1973). The frequency counts used in this study were standardized according to the number of T-units¹ in each essay.

To develop a frequency count tally sheet for this study, thirty randomly selected samples were taken from the original group of English 110 pretests. These thirty pretests were analyzed for syntactic errors by the graduate research associate, who described and recorded every dysfunctional sentence. Then the samples were reintegrated with the rest of the pretests so that the randomly selected 375 samples could be drawn from all of the pre-tests. On the basis of this preliminary analysis, a number of easily-identifiable, high-frequency syntactic errors was isolated. These items were used to design a preliminary frequency-count grid. On the grid each item was used in a sentence or

¹ The T-Unit is defined as a main clause and any structure, clausal or nonclausal, that is attached to or embedded within it (Hunt, 1965). This method of standardization is similar to dividing frequency count items by a particular number (100, for example) of words.

example so that possible confusion about whether to count a particular item could be avoided. Thus, under "fragment, noun--appositive" a rater could find: "I bought a new dress. A dress that I could wear to the prom." This preliminary grid was used by the principal researcher and the research associate to analyze another thirty randomly-selected samples. Following this "trial" use of the preliminary grid, it was modified and the resulting grid (see Appendix C) was used to analyze all 300 reverified samples. Every occurrence of each item specified on the grid was recorded on the grid; numbers of occurrences were tallied for each item, and the tallies were double checked. Every essay was analyzed twice in this manner by two different readers.

Upon completion of this analysis it was necessary to slightly modify the frequency count grid in order to accurately record sentence structure dysfunctions encountered during the frequency count analyses. The first modification was made in regard to category V--Parallel Structure. It was found that the distinction between VA (Non-Parallel Sentence Parts) and VB (Non-Parallel Items in a Series) was barely discernible. In nearly each example it was possible to record the sentence in either category and to justify either placement. In order to alleviate the difficulty, the two categories were combined under a single heading--Parallel Structure Difficulties. Furthermore, parallel structure difficulties were disregarded when they resulted from the deletion of one-word-functors as in the example "She never bothered with asking any questions of the boy or of his parents." These structures were easy to overlook and caused frequent disagreement as to whether the sentences were or were not dysfunctional.

A problem also arose concerning category IVD--Inappropriate Use of Relative Clause. In several cases (in each instance involving the relative pronoun "which") it was difficult to determine if the use of particular structures resembling relative clauses was actually inappropriate, as in the example: "It's right off the highway and is located between two major cities: [which is good to know if you don't know where you're going.]" In ambiguous cases such as this one, the following test was applied. If the phrase the fact that plus the clause(s) preceeding the relative pronoun could be logically substituted for the word "which" in the sample sentence, then the sentence was not included on the frequency grid. (In the case of the example sentence such a substitution is possible: "The fact that it's right off the highway and is located between two major cities is good to know. . ."). If the substitution of the test phrase resulted in an illogical construction the sample sentence was included on the grid.

It was also decided that comma-splice "errors" when they appeared in a series (I like to eat ice cream, I like to eat cake, and I love to eat cream puffs) should be deleted from the frequency count.

Occurrences of the following dysfunctions, not originally specified on the grid, were also recorded since their frequency of occurrence merited this:

Adverb Modifier (Fragment)

(It is located in the center of 3 major cities. Near Toledo, with Cincinnati to the south and Columbus to the west.)

Adjective Modifier (Fragment)

(I like the town of North Baltimore. With a population of 46 people give or take a few.)

Awkwardness as Result of Relative Pronoun

(Ali is the person in which I look up to most.)

Awkwardness as a Result of Passive

(Well, it was finally narrowed down to a woman who has been greatly admired by me for the past 5 year.)

Data resulting from the frequency count tallies was expressed--standardized--on a per T-unit x 10 basis, since essay length varied:

$$\frac{\# \text{ dysfunctions}}{\# \text{ T-units} \times 10}$$

Following standardization, the data was examined to determine if the standardized frequencies for each dysfunction were similar across the three groups (110, 111, 112). In addition, these standardized frequencies were examined in order to determine if correlations between particular dysfunctional items existed--if particular errors occurred in patterns with other errors. These correlations were examined for all three hundred writing samples as one unit and for each group (110, 111, 112) as three separate units.

THE TRANSFORMATIONAL ANALYSIS

The second major analysis of the 300 writing samples involved the use of a linguistic analysis worksheet. This method of analysis was appropriate because frequency counts measure only selected items, generally items which occur frequently and which are easy to describe and exemplify. It was, of course, imperative to systematically describe, categorize, and quantify dysfunctional structures which would not necessarily be recorded with the frequency count analysis. The nature of some of the sentences found in remedial writing (e.g. "He was raised from a very modest background, in his home state of Ohio, to now where he lives as a very well known personality," and "If I summed up why I like my town I guess it would be the country I love it, the open space between houses unlike the cities, the closeness of every one knowing everyone else") makes them extraordinarily difficult to describe, however. Merely labeling such sentences as awkward is clearly unsatisfactory, and Shaughnessy's (1977) labels--Accidental Errors, Blurred Patterns, Consolidation Errors (Coordinate Consolidations, Subordinate Consolidations, and Juxtaposition Consolidations), Inversions--are also too vague since they do little to describe

the syntactic rules that are being used or misused.

In a recent study Ahn O. Gebhard (1978) adapted an analysis sheet originally devised by O'Donnell, Griffin, and Norris (1967) for a transformational analysis of the syntax of kindergarten and elementary school children. O'Donnell et al's analysis sheet, devised to identify specific kinds of transformations--especially those involving conjoining within T-units and embedding--was based upon the early transformational model expressed in Lees' (1968) The Grammar of English Nominalizations and by Jacobs and Rosenbaum's (1968) An English Transformational Grammar. Gebhard's modification, indicated by the research of Christensen (1967), included provisions for a tabulation of initial sentence constructions and for analysis of final free modification,² and the resultant detailed instrument was used in a comparative analysis of writing samples representative of two quality-rated freshman groups. The instrument calls for a separate analysis of each T-unit--which is defined as a main clause and any structure, clausal or nonclausal, that is attached to or embedded within it (Hunt, 1965)--in terms of T-unit pattern, and types of specific sentence combining transformations employed. In addition, the type of sentence opener employed and the position of loose modification can be recorded using this method of analysis. Since every dysfunctional sentence in each of the 300 writing samples was to be analyzed with the O'Donnell-Gebhard worksheet, dysfunctional sentences in all 300 samples had to be identified. Therefore, each sample was examined separately and independently by two different evaluators, each of whom recorded every sentence considered to be dysfunctional. In the event that the two opinions differed, a third person determined whether or not the sentence would be regarded as dysfunctional and therefore included in the sample. Each sentence identified in this manner was recorded on a separate sheet for analysis, and although sentences were identified as to writing sample number, no information was provided as to whether a particular sentence had come from an English 110, 111, or 112 essay.

Before the full analysis of these sentences commenced, the O'Donnell/Gebhard Linguistic Analysis Worksheet was tested with some randomly-selected samples and modified slightly. This modification was necessary because some categories on the analysis sheet did not adequately reflect the dysfunctional structures found in the samples. The section Coordinate Structure was adapted for this reason; other minor adaptations to the Worksheet included the addition of a Passive T-unit pattern in Section I and the addition of a separate category to accommodate sentence modifiers which resemble relative clauses, as in "I teach others, which makes me feel good." The category "contrast" was also added to the

² A free modifier is a construction which may appear in initial, medial, or final sentence position, consisting of a movable adverbial, an absolute, or a nonrestrictive adjectivalization--either in full relative clause form or reduced to an appositive, participle, etc.

Adverbial Clauses category. Once these adaptations were completed, the project director and the graduate research associate used the revised worksheet (see Appendix D) to analyze forty randomly selected samples, which were then integrated with the other remaining 260 samples. Independent evaluations were consistent with one exception: a few structures within the dysfunctional sentences could be reorded in more than one way; therefore, decisions as to categorization were discussed and, if necessary, particular structures were researched so that analyses could be performed as consistently and as accurately as possible. Following these preparations, another forty randomly-selected samples were examined separately by both researchers; the analyses were consistent and the examination of every dysfunctional sentence in all 300 samples was completed.

All data resulting from the analysis was standardized by dividing by the number of dysfunctional T-units per essay. This standardized data was examined in order to determine if the dysfunctional sentences in the three groups differed with regard to specific T-unit patterns and transformations. Also, the data was examined to determine if various structures found in dysfunctional sentences were highly correlated with--occurred in patterns with--other structures found within these sentences, both for the entire sample (all 300 essays) and by group (110 essays, 111 essays, 112 essays).

RESULTS

INTRODUCTION

The major purpose of the study was to determine whether any frequently occurring syntactic dysfunctions are unique to the developmental writer and to discover whether certain types of common structural errors occur with greater frequency in remedial writing. To this end, dysfunctional sentences within the 300 writing samples were examined by two different methods: a frequency count and a linguistic analysis. The frequency count data is with reference to selected dysfunctions; data resulting from the linguistic analysis is, however, generally descriptive of every dysfunctional sentence in all 300 writing samples.

THE FREQUENCY COUNT

Data resulting from the frequency count tallies was standardized and the standardized frequencies for each dysfunction were examined to determine if the error frequencies were similar in the writing samples for each of the three groups: English 110, English 111, and English 112. These standardized frequencies were also examined to determine if correlations between particular dysfunctions existed, both for all 300 samples and by group (110, 111, 112). Certain items on the original frequency count grid (Appendix C) were deleted from the analysis because of extremely low frequency of occurrence: item IB (Sliding Run-On) and item IVF (Substitution of Infinitive for Pronoun and Verb); in addition, all occurrences of item IIF (different forms of For Example/For Instance Fragments) were counted as one kind of fragment. For ease of reference, a new revised frequency grid (see Appendix E) was constructed to represent these changes as well as the added dysfunctions discussed on page 10: Adverb Modifier Fragment (IIJ), Adjective Modifier Fragment (IIK), Awkwardness as a Result of Misused Relative Pronoun (IVF), and Awkwardness as a Result of Passive (IX).

Group Comparisons

An analysis of variance test (ANOVA) was performed on each of the standardized frequency count tallies in order to determine if there was a significant difference between 110, 111, and 112 with regard to the average value of each variable (a variable = the standardized number of occurrences for each dysfunction listed on the frequency count grid). For example, with regard to the variable, Adverb Clause Fragment (IIA), was there a significant difference in average standardized rate of occurrence for this variable among the three groups of writing samples (110, 111, 112)? Then, for any variable where there was a significant difference among groups, Duncan's Multiple Range Test was used in order to examine the standardized means so that it could be determined which individual group or groups, 110 or 111 or 112, was significantly different from the others with regard to that particular variable. Of the thirty-two standardized means which were compared--the thirty-one dysfunctional items on the revised frequency

grid (Appendix E) and the number of T-units in each essay, thirteen were found to be significantly different among the three groups: ten were significantly different at the 0.01 level of significance, and three were significantly different at the 0.05 level. (See Tables 1-32 in Appendix F).

The three variables for which the means were found to be significant at the 0.05 level were T-unit length, -ING group fragments, and Infinitive group fragments. With regard to -ING group and Infinitive group fragments, the Duncan tests (see Tables 6 and 7 in Appendix F) revealed that although there was not a significant difference between standardized means for 110 and 111 or for 111 and 112, there was a significant difference between standardized means for 110 and 112: the number of occurrences of both infinitive group fragments and -ING group fragments was not significantly different in English 110 and 111 essays; nor was it significantly different in English 111 and 112 essays. However, the number of occurrences for these dysfunctions was significantly different in English 110 and 112 essays. The data reveal an incremental increase with regard to these types of sentence fragments, the least occurrence in the 112 essays; and the most occurrence in the 110 essays.

Overall differences between groups with regard to mean number of T-units per essay were interesting. There was no significant difference between standardized means for English 110 and 112 essays, nor for English 110 and 111 essays; mean number of T-units was significantly different between English 111 and 112 essays, however (see Table 32 in Appendix F).

The ten variables for which the means were found to be significant at the 0.01 level are: Run-On Sentences (IA), Relative Clause Fragments (IIB), For Example/For Instance Fragments (IIF), Predicates with Subject Deleted Fragments (IIH), Adverb Modifier Fragments (IIJ), Adjective Modifier Fragments (IIK), -ING Word Misplaced Modifiers (IVAl), Awkwardness as a Result of a Misused Relative Pronoun (IVF), Parallel Structure Difficulty (V), and Comma Splices as a Result of 2 Main Clauses Joined by a Comma (VIA). Duncan tests revealed that for all of these variables, the average of the standardized number of occurrences was not significantly different between English 111 and 112 but was significantly different between English 110 and both English 111 and 112. Thus, the data reveal a sharper stratification between remedial (110) and nonremedial (111 and 112) writers with regard to these dysfunctions.

To summarize, a comparison of data resulting from the standardized frequency count tallies suggests that there are differences between remedial and nonremedial writers; remedial and nonremedial writers do not exhibit similar error frequencies with regard to particular errors. Remedial writers produce significantly more sentence fragments of particular varieties than nonremedial writers: relative clause fragments, for example/for instance fragments, nonspecific adverb and adjective modifier fragments, and fragments caused by the deletion of a subject are especially evident in developmental writing. Also evident

in remedial writing, but not sharply gradient, are fragments caused by the misapprehension of an infinitive word group or an -ing word group as a sentence: these fragments appeared with the most frequency in the 110 samples and with the least frequency in the 112 samples, causing a significant difference in the averages of the standardized number of occurrences between those two groups, but not between 110 and 111/112 writers. Regarding the comparisons of the average number of T-units per essay among the groups, a different pattern emerged. English 112 essays had the most T-units per essay, on the average; English 111 essays had the least. Since word counts for each essay were not tallied, it is impossible to determine to what extent the number of T-units is correlated with essay length or with mean T-unit length.

Correlations Between Errors

To determine if correlations existed between particular error types specified in the Frequency Count Grid, correlation coefficients were generated. These analyses were performed to determine error correlations within the entire group of three hundred essays and for each subgroup: 110 essays, 111 essays and 112 essays.

In general, the greatest number of correlations between error types for the entire group were accounted for by correlations between error types within 110 essays. The least number of correlations between error types for the entire group were accounted for by correlations between error types within 112 essays. Furthermore, although some overlap of error correlation between groups was evidenced by the data, by and large, each group (110, 111, 112) exhibited its own pattern of error correlations. (See Appendix G, Tables 1-4 for the correlation coefficients.) The following table summarizes these findings:

TABLE 1--Correlations Between Revised Frequency Count Grid (Appendix E) Variables

Variable	Overall (N=300)	110 (N=100)	111 (N=100)	112 (N=100)
1A	1B* 2A* 2H** 2I** 2K** 4A1** 5** 6** 7**	2K** 4A1** 6** 7**	2C** 4E**	2B**
1B	1A* 2A** 5*	2A** 2J**		

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0,1,2 means also significant for 110(0), 111(1), or 112(2)

TABLE 1-Correlations Between Revised Frequency Count Grid (Appendix E) Variables

Variable	Overall (N=300)	110 (N=100)	111 (N=100)	112 (N=100)
2A	1A* 1B** -0 4A1** -0 5** -0	1B** 4A1* 5*		
2B	2C** -0 2D** -0, 1 2G* -0 2H** -0 3* -0 4E** -0 4G** -0	2C* 2D** 2G* 2H** 3* 4E* 4G*	2D** 2K** 2L**	1A**
2C	2B** -0 2G* -0 4E* -0	2B* 2G** 4E**		
2D	2B** -0, 1 3** -0 4A3** -0	2B** 3* 4A3*	2B** 2K*	
2E	2F** -0 2G** -0 2L** -1 4A3** -1 7*	2F* 2G**	2L** 4A3**	4A1** 6**
2F	2E** -0	2E*		
2G	2B* -0 2C* -0 2E** -0 2K** -0	2B* 2C** 2E** 2K*	1A** 6B**	
2H	1A** 2B** -0 2K** -0 4G** -0	2B** 2K* 4G**		
2I	1A** 2K** -0 4A1** -0 7** -0 9** -2	2K** 4A1* 7**		9**
2J	2K** 2L** -0	2L* 6B**		

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0,1,2 means also significant for 110(0), 111(1), or 112(2)

TABLE 1-Correlations Between Revised Frequency Count Grid (Appendix E) Variables

Variable	Overall (N=300)	110 (N=100)	111 (N=100)	112 (N=100)
2K	1A**-0 2G**-0 2H**-0 2I**-0 2J** 2L**-1 4A1** 7**-0	1A** 2G* 2H* 2I* 7*	2B** 2D* 2L** 4F**	
2L	2E**-1 2J**-0 2K**-1 4A3**-1	2J*	2B** 2E** 2K** 4A3**	
3	2B**-0 2D**-0	2B* 2D*		4F**
4A1	1A**-0 2A**-0 2I**-0 2K** 6**-2 7**-0	1A** 2A* 2I* 7**	5*	2E** 6**
4A2	4D**-0 9**-0	4D** 9**		
4A3	2D**-0 2E**-1 2L**-1 4D* -0	2D* 4D**	2F** 2L**	
4B	4C**-0	4C**		
4C	4B**-0 9**-1	4B**	9**	
4D	4A2**-0 4A3* -0	4A2** 4A3**		6C**
4E	2B* -0 2C* -0 6B**-0,1 8* -1,2	2B* 2C** 6B**	1A** 6B* 8**	8**
4F			8**	3**
4G	2B**-0 2H**-0	2B* 2H**		

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0,1,2 means also significant for 110(0), 111(1), or 112(2).

TABLE 1-Correlations Between Revised Frequency Count Grid (Appendix E) Variables

Variable	Overall (N=300)	110 (N=100)	111 (N=100)	112 (N=100)
5	1A** 1B** 2A**	1B** 2A*	4A1*	9**
6	1A** 4A1**	1A**		2E** 4A1**
6B	4E** 0,1	2J** 4E**	2G* 4E* 6C**	
6C			6B**	4D**
7	1A** 2E* 2I** 2K** 4A1**	1A** 2I** 2K* 4A1**		
8	4E* -1,2		4E** 4F**	4E**
9	2I** 4A2** 4C**	4A2**	4C**	2I** 5**

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0,1,2 means also significant for 110(0), 111(1), or 112(2).

Some remarks can be made about error patterns for the entire group. Those students who tended to write run-on sentences (especially run-on sentences without conjunctive adverbs), also tended to write sentence fragments. Those students who wrote comma splices, however, did not necessarily write fragments; comma splice faults correlated with a variety of dysfunctions: run-on sentences, fragments, and awkward constructions. Among those fragments that seemed to occur most often in the presence of other fragments, relative clause fragments, fragments resulting from the separation of part of a compound predicate from the rest of the sentence, and infinitive group fragments ranked the highest. The sentence fragments most often occurring with different kinds of awkward sentences were relative clause fragments and fragments caused as a result of a deleted predicate, although these overall correlations may be due largely to the effect of 110 students. Among the awkward sentences examined, awkward sentences as a result of a misplaced modifier (with the exception of misplaced relative clauses) seemed to be correlated most highly with various types of sentence fragments.

Regarding error patterns for 110 (remedial) students, the group of dysfunctions most highly correlated with all other dysfunctions was

the group of sentence fragments, especially relative clause fragments. The type of awkward sentence that occurred most often with sentence fragments was the dysfunction that is caused when a subject is turned into a modifier: "By handling his money problems was difficult for George." Awkward sentence types frequently correlated with the general group of dysfunctional sentences were sentences with -ing word dangling modifiers and sentences in which two adjectivals meant to modify the same noun were poorly placed.

Although much less frequent, error correlations for 111 students were similar to those of 110 students, with some exceptions. Sentence fragments occurred most frequently in the presence of other sentence fragments and did not often appear to be correlated with awkwardly constructed dysfunctional sentences. No one awkward sentence appeared to be highly correlated with many others, but--in general--sentences involving "modification problems" (items IVA-G, Appendix E) seemed to occur most often with dysfunctional sentences, other than fragments or run-on sentences.

The occurrence of errors in the 112 samples was infrequent; hence, the fewest number of significant correlations was generated regarding this group. In addition, no particular structure appeared to be most often correlated with other dysfunctions found in the writing of this group. However, misused passive and "modification problems" (items IVA-G, Appendix E) seemed to be correlated with other errors slightly more often than were the rest of the thirty-one frequency count dysfunctions.

THE LINGUISTIC ANALYSIS

Data generated from the linguistic analysis was standardized by dividing it by the number of dysfunctional T-units. In addition, before any analyses were performed on the data, histograms and two-way frequency tables were generated for each of the variables (a variable = the standardized number of occurrences for each of the categories listed on the O'Donnell-Gebhard Linguistic Analysis Worksheet; see Appendix D) in order to determine if the distribution of each standardized variable was similar across groups (110, 111, 112). Since there were no major differences, no additional means of standardization were necessary, and the two major analyses of the data--an analysis of variance to determine if the dysfunctional sentences in the three groups differed with regard to specific T-unit patterns and transformations and a Pearson's Correlation coefficients test to determine if selected transformations grouped together (correlated with one another)--were performed. Data generated regarding any category labeled "other" was not included in the report since "other" was a catch-all category and the structures represented could not be specified.

Group Comparisons

F tests comparing frequency of occurrence of standardized means for selected variables from the O'Donnell-Gebhard linguistic analysis work-

sheet were performed. Two sets of variables were compared in this manner: frequencies regarding all Sentence Combining Transformations except those involving coordinate structures (Part II, variables 1-41) as well as methods of Loose Modification (Part IV, variables 44-51). T-unit patterns were examined with a chi-square analysis since only one pattern was recorded per worksheet. (See Appendix D).

The analysis of variance (F tests) revealed that there was no significant difference between the three groups (110, 111, 112) with regard to the sentence combining transformations or methods of loose modification found in the dysfunctional sentences from the 300 writing samples: no significant differences in standardized means for any of the variables were found (see Tables 1-43 in Appendix H). There was one exception: regarding the use of sentence combining transformations in the embedding of direct objects (Table 18), a difference in groups was detected at the .05 level of significance. A Duncan test revealed that English 110 sentences did not differ from those of 111 or 112 with regard to the use of these transformations; however, English 111 sentences did differ from those of 112.

The chi-square test, used to examine T-unit pattern frequencies, revealed that there was significant difference between the three groups regarding T-unit patterns within the dysfunctional sentences from the 300 writing samples. This test did, however, produce a warning regarding the level of significance; therefore, it was rerun and T-unit patterns which had cells with small expected values were omitted from the analysis. Again, the results of the test revealed significant difference between the three groups. Although a few cells with small expected values still remained, the analysis was not done a third time since elimination of these cells would not change significance--their contribution to the chi-square statistic was small. The overall significance value generated by the first chi-square test was 50.797 with 28 degrees of freedom. The probability that there was a significant relationship between group and T-unit pattern use was 0.0053, which is significant at the 0.01 level. The overall significance value generated by the second chi-square test was 30.557 with 14 degrees of freedom. The probability suggested by this figure (that there was a significant relationship between group and T-unit pattern use) was 0.0064, which is significant at the 0.01 level.

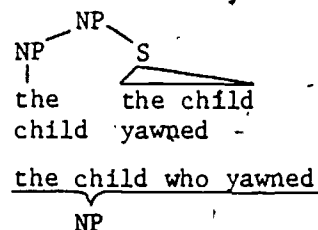
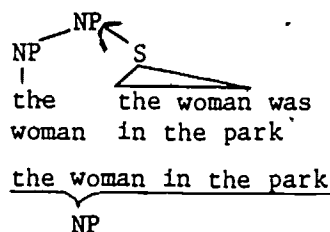
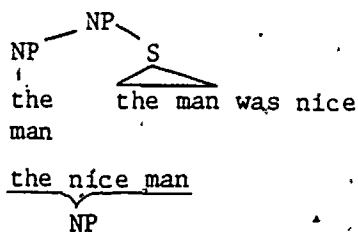
Regarding differing use of each of the patterns by each of the groups (110, 111, 112), an examination of frequencies and column percentages (see Appendix I) generated by the chi-square analysis suggests divergence between groups in the case of some of the T-unit patterns: SVO (Subject/Transitive Verb/Direct Object), SVC_a (Subject/Linking Verb/Adjective Complement), There VS (There/Verb/Subject), It VS (It/Verb/Subject), Requests/Commands, and Partial or Incomplete sentences. The only instance in which the use of a T-unit pattern associated with dysfunctional sentences seemed far greater for 112 sentences than for either 110 or 111 sentences was regarding the pattern SVO; of those who were in 112, 37.31% used this pattern in dysfunctional sentences as opposed to 23.63% for 110 and 28.69% for 111. Several

patterns evidenced little use by 112 students compared to use of these patterns by 110 and 111 students: T-unit pattern SVC_a and those T-units that were incomplete (partial) were used more often by 110 and 111 students in their dysfunctional sentences. As a group, those T-unit patterns involving inversions of normal patterns seemed to be more associated with dysfunctional sentences from 110 and/or 111 samples than from 112 samples. In particular, imperative T-unit patterns (Request, Command) were found in virtually none of the dysfunctional sentences for 111 and 112 students; the T-unit pattern involving the insertion of It and the inversion of subject and verb (ItVS) was not used much by 111 and 112 students in their dysfunctional sentences (use of this pattern increased: 112 writers used it the least, 110 writers used it the most); the T-unit pattern involving the insertion of There and the inversion of subject and verb (ThereVS) was used the least by 112 writers and the most by 111 writers.

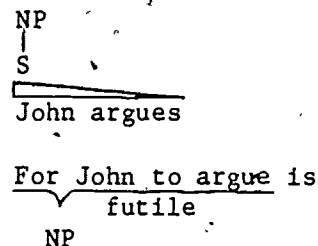
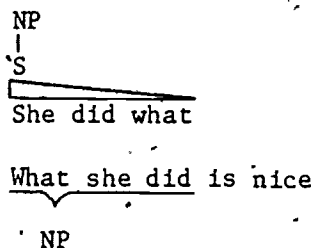
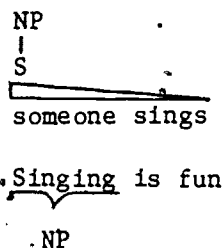
In general, T-unit patterns in dysfunctional sentences seemed more similar between developmental (110) and introductory college level writers (111), than between introductory college writers and advanced writers (112)--if, indeed, any such generalization can be drawn.

Correlations Between Errors

Pearson Correlation Coefficients were used in order to determine if there were significant correlations between selected variables from the O'Donnell-Gebhard Linguistic Analysis Worksheet (see Tables 1-4 in Appendix J). Transformations used in the production of headed and non-headed nominal structures were examined in conjunction with transformations related to the function of these structures, to test for correlations. As designated on the worksheet, headed nominals in sentences consist of a "head" noun + a noun-modifier:



Non-headed nominal structures in sentences consist of a group of words that functions as a noun:



Headed and non-headed nominals can function in a variety of ways: as subjects, objects, indirect objects, subject complements, object complements, appositions within sentences, etc.; relationships between nominal structure and function were examined to determine if correlations existed. In addition, placement of loose modificational structures (see page 11) was examined in conjunction with some of the combining transformations which produce these structures—adverbial structures such as adverbial clauses and sentence adverbials and selected movable headed nominal structures (N* + N apposition, N + relative clauses, N + relative clauses with pronoun deleted, and N + participial phrase)—to test for correlations. Possible correlations between these variables were sought in order to determine if the variables occurred in patterns in dysfunctional sentences and to determine if these patterns were the same or different between the groups (110, 111, 112).

The test for correlation revealed little patterning among the selected variables. In general, more positive correlations between combining transformations used in the production of nominal structures and combining transformations related to the function of these structures occurred when headed noun phrases were used as subjects, objects, and subject complements within sentences; this was true for all three groups. Although no generalizations about the data can be formulated, individual positive correlations are of interest: for example, variable 22 (nominal structure which functions as subject complement) correlates highly with variable 5 (N + relative clause) in both 110 and 112 dysfunctional sentences, but not in 111 dysfunctional sentences; that is, in the dysfunctional sentences examined, nominals modified by relative clauses which were then used as subject complements in sentences appeared in dysfunctional sentences of 110 and 112 writers, but this combination was not significant in the dysfunctional sentences of 111 writers. The following tables summarize these findings:

TABLE 1—Correlations Between O'Donnell-Gabhard Variables 19-26 and 1-18
(Appendix D)

Variable	Overall (N=208)	110 (N=90)	111 (N=69)	112 (N=49)
T19	T1** -2 T3** -0.1, 2 T4** -0.2 T7** -1, 2 T9** T12*	T3* T4** T8**	T3* T7**	T1** T3* T4** T7*
T20	T3* T8* T10* -0 T12** -0 T14** -1	T7* T10** T12**	T14** T16*	
T21				

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0, 1, 2 means also significant from 110(0), 111(1), or 112(2).

TABLE 1-Correlations Between O'Donnell-Gebhard Variables 19-26 and 1-18
(Appendix D)

Variable	Overall (N=208)	110 (N=90)	111 (N=69)	112 (N=49)
T22	T1**-1 T3**-1 T5**-0,2 T7**-1 T9**-1	T5** T12** T16**	T1** T3** T7** T9**	T5**
T23	T1**-0 T8*-0 T12**-0	T1** T8** T12** T14*		
T24	T2**-1,2 T17**		T2**	T2** T14* T16* T17**
T25	T5**-0	T5**		
T26			T12**	

TABLE 2-Correlations Between O'Donnell-Gebhard Variables 44-51 and 28-41
(Appendix D)

Variable	Overall (N=208)	110 (N=90)	111 (N=69)	112 (N=49)
T44	T28**-0 T32**-1	T28** T35*	T32**	
T45	T39**-1,2		T39** T41**	T31** T39**
T46	T34**-2			T34**
T47	T30**-0	T30**		
T48				
T49				
T51				

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0,1,2 means also significant from 110(0), 111(1), or 112(2).

TABLE 3--Correlations Between O'Donnell-Gebhard Variables 44-51 and with 2,5,6,9
(Appendix D)

Variable	Overall (N=208)	110 (N=90)	111 (N=69)	112 (N=49)
T44				
T45				T2**
T46		T2**		T9**
T47	T2**-2			T2**
T48				
T49	T6*			
T51				

* Significant at .05 level

** Significant at .01 level

In the Overall Column 0,1,2 means also significant from 110(0), 111(1), or 112(2).

CONCLUSION AND DISCUSSION

MAJOR FINDINGS

1. Comparisons of the average standardized rate of occurrence for the standardized frequency count variables (dysfunctions) revealed that there were significant differences among the three groups--110, 111, 112--with regard to particular variables.

An analysis of variance test showed that there were significant differences among the three groups for thirteen of the thirty-two standardized frequency count variables examined. In addition, regarding ten of the thirteen variables found to be significant among the three groups, Duncan's Multiple Range test revealed that the average of the standardized number of occurrences for each variable was not significantly different between 111 and 112, but was significantly different between 110 and both 111 and 112. Therefore, certain types of common structural errors do occur with greater frequency in remedial writing.

2. Correlation coefficients, which were generated in order to determine if correlations existed between particular error types specified on the frequency count grid, indicated a number of positive correlations: in general, the greatest number of correlations found for the entire group (all three hundred writing samples from 110, 111, and 112) were accounted for by correlations between error types within 110 essays; the least number of correlations between error types for the entire group were accounted for by correlations between error types within 112 essays. Although some overlap of error correlation between groups (110, 111, 112) was evidenced by the data, by and large, each group exhibited its own pattern of error correlations. That is, error correlations in 110 essays were different than error correlations in 111 essays, and error correlations in 112 essays were different than error correlations in 110 and 111 essays. Regarding error patterns for remedial writers (110), the group of dysfunctions most highly correlated with all other dysfunctions was the group of sentence fragments, especially relative clause fragments (It is the book. Which we read.).

3. A comparison of average standardized rates of occurrence for selected variables from the O'Donnell-Gebhard Linguistic Analysis Worksheet revealed no significant difference between the three groups (110, 111, 112) with regard to the occurrence of these variables. F tests comparing frequency of occurrence of standardized means for these variables showed no differences in means, with one exception. Therefore, dysfunctional sentences from the essays of the three groups (110, 111, 112) did not differ from one another with regard to these combining transformations.

The chi-square test used to examine T-unit pattern frequencies revealed that there was significant difference between the three groups. Hence, dysfunctional sentences in the essays of the three groups of writers did differ from one another with regard to T-unit pattern use.

4. Correlation coefficients which were generated in order to determine if there were significant correlations between variables from the O'Donnell-Cebhard worksheet revealed little patterning among the variables. However, more positive correlations between combining transformations occurred when headed noun phrases were used as subjects, objects, or subject complements within sentences.

DISCUSSION

A comparison of the occurrence of selected dysfunctions in the writing of pre-freshmen clearly indicates that developmental writers differ from nondevelopmental writers with regard to standardized error frequency³: this was to be expected. Of interest, however, is that when selected error occurrence in the writing of developmental writers was compared with selected error occurrence in the writing of nondevelopmental writers with regard to thirty-one "commonly occurring" errors, developmental writers differed sharply from nondevelopmental writers with regard to merely ten of these errors; in the case of two additional errors, a gradual or gradient stratification could be observed: developmental pre-freshman writers did not significantly differ from average (111) pre-freshman writers with regard to the commission of these particular dysfunctions; they did, however, differ from advanced (112) pre-freshman writers. There was no significant difference between groups, then, regarding the frequency of occurrence of the other nineteen dysfunctions. For example, developmental writers did produce significantly more fragments involving the separation of a relative clause modifier from the rest of the sentence than did nondevelopmental writers, but they did not produce significantly more fragments involving the separation of a modified appositive from the rest of the sentence than did nondevelopmental writers. This pattern of difference can also be observed regarding various types of awkward sentences: developmental writers wrote significantly greater numbers of some awkward sentences, but not others.

Since the sample of three hundred essays was not examined with regard to nondysfunctional sentences as well as dysfunctional ones, it is impossible to say whether, or to what extent, these developmental writers successfully produced sentences containing various structures that were dysfunctionally used in sentences analyzed in this study. However, some speculation as to why the developmental writers differed from nondevelopmental writers with regard to only particular error frequencies can be made: Kellogg Hunt (1977) describes what he designates as "early" and "late" blooming syntactic structures. Coordinated T-units and coordinated predicates are, for example, considered early blooming structures (Cooper and Odell, p. 97). The embedding of a predicate adjective as a prenominal adjective (Aluminum is metal. It is abundant. Aluminum is an abundant metal.) produces

³ The statistical analyses were performed on standardized error frequencies; all succeeding discussions using frequency of occurrence should be interpreted accordingly.

a structure which "blooms more and more profusely with age" (Cooper and Odell, p. 99). It is possible that many of the errors which appeared with significantly greater frequency in the essays produced by the developmental writers involved "later blooming" structures. Two of the dysfunctional structures which occurred with high frequency in the developmental writing involved the use of the relative clause: relative clause fragments and awkwardness as a result of a misused relative pronoun. Loban (1976), in his study of language development, kindergarten through grade 12, found that the group of students designated as "Low" used a higher percentage of adjectival clauses than either the "High" or the "Random" group in grades eleven and twelve, although all groups tended to use such constructions in an increasing proportion. Loban goes on to interpret these findings: ". . . At that point the Low group begins to manifest what the High group has exemplified throughout the early grades, and the High group, if one inspects its written compositions, transfers its emphases to adjectival participial phrases and other more sophisticated solutions. (p. 48)." It is possible, therefore, that a sizable proportion of the remedial pre-freshmen had not yet mastered control of this--for them--late blooming structure, the relative clause. Another structure which has been identified as late blooming is the free modifier. Murial Harris convincingly argues (1981) that sentences involving free modifying phrases can give college students trouble; such constructions improperly isolated from the rest of the sentence, become sentence fragments. Many of the sentence fragments which appeared with significantly greater frequency in the essays of the developmental writers may have indeed resulted from the separation of a free modifier from the rest of the sentence: "Toledo is a wonderful city, with a population of one million." becomes "Toledo is a wonderful city. With a population of one million." It is likely that pre-freshmen who are developmental writers would have just begun to experiment with some of these late blooming structures and that these late blooming structures might give them considerable difficulty.

The most significant finding with regard to the data resulting from the frequency count error correlations was that each group largely exhibited its own pattern of errors. And for the group of developmental writers, unlike either group of nondevelopmental writers, sentence fragments--as a group--were most highly correlated with all other dysfunctions, both fragments and nonfragments. This may support the notion that developmental writers, experiencing difficulty with various late-blooming structures, produce a variety of errors--sentence fragments, awkward sentences--having to do with the use of such structures, all of which are highly correlated with one another. More skillful writers, on the other hand, do not consistently produce fragmented sentences when using these structures; therefore fragments, as a group, are not highly correlated with other dysfunctions.

Another implication of the error correlations findings is that it may be possible to use a particular structure or set of structures highly correlated with errors found in the writing of a particular group as an "objective" indicator of that group, for placement purposes.

That is, if it can be shown that relative clause fragments are always highly correlated with particular dysfunctions found in developmental writing, it may be possible to use the presence of such fragments as an objective indicator of developmental-level writing. However, more examinations of and comparisons between errors found in the writing of developmental and nondevelopmental writing will have to be performed to determine the feasibility of this idea.

With the exception of the data having to do with T-unit pattern frequencies, data generated from the linguistic (O'Donnell/Gebhard worksheet) analysis of all of the dysfunctional sentences from each of the three hundred writing samples is inconclusive: no clear tendencies or trends can be established; nor does the data establish any significant difference between groups (110, 111, 112).

T-unit pattern use, however, was significantly different between groups: writers within the three groups differed from one another with respect to use of one or more of the T-unit patterns. Whether this implies that certain T-unit patterns figure more prominently in the dysfunctional sentences of a particular group of writers than in the dysfunctional sentences of another group of writers, for example more in the dysfunctional sentences of developmental writers than in those of nondevelopmental writers, can not be determined on the basis of this data. A comparison of T-unit frequencies for each group (110, 111, 112) from nondysfunctional sentences, from the same 300 essays was not performed; consequently, it is uncertain whether there would be significant difference between the groups regarding T-unit pattern use in nondysfunctional sentences, or--if there were significant difference--if the same pattern of differences would be evident within an equal number of nondysfunctional sentences from the sample. Nevertheless, for 110 and 111 writers, those T-unit patterns involving inversions of normal sentence order seemed to occur with greater frequency in their dysfunctional sentences. From this, it may be surmised that writing sentences with T-units having an inversion of normal word order was a more difficult task for all but the most advanced of the pre-freshmen (112).

Although the test for correlation between data from the linguistic analysis revealed little patterning among the variables, individual positive correlations are of interest, especially since some of these correlations seem to support the interpretation of some dysfunctions in terms of early and late-blooming structures. One of the groups of correlations examined was the relationship between selected combining transformations which can produce adjectival and adverbial free modifiers (variables T2, T5, T6, and T9 and variables T28-T41) and the positions in which these free modifiers can occur (variables T44, T45, and T46).

Interestingly, regarding loose modificational structures in either medial or final position, the vast majority of positive correlations with various combining transformations were for 111 and 112 writers. These positive correlations, appearing in the dysfunctional sentences,

were between transformations that produce particular free modificational structures and the occurrence of these structures in medial and final sentence position. The fact that these positive correlations were observed largely for 111 and 112 writers and not for developmental writers (110) suggests at least two possible conclusions: 110 writers are using these free modifiers, in initial, medial, and final sentence position, and they are using them successfully--because no positive correlations are evident; or 110 writers are not using free modifiers very much in medial and final sentences position so that positive correlations between transformations which produce these modifying structures and these structures being used in medial or final sentence position are not evident within the T-units in their dysfunctional sentences. The first explanation/conclusion does not seem to be justifiable since it is established on the basis of the frequency count data that 110 writers are, very likely, experiencing difficulty in the use of free modifiers--at least in sentence final position--since such use may be the cause of particular sentence fragments found in their writing. Additionally, the latter interpretation merits consideration for a reason other than that it remains by default: In a recent article (1981), Murial Harris summarizes and supplements rather strong evidence which supports the notion that final free modifiers are later blooming structures than initial free modifiers. Regarding positive correlations between final position and various transformations producing free modificational structures in all of the dysfunctional sentences from all three hundred samples, the greatest number of positive correlations were in sentences from 112 essays, and 112 writers are the most "advanced" group of writers.

Other interesting speculations also emerge, along similar lines. In the case of medial free modifiers, it may be that interjected adverbials are later blooming structures. The data seems to suggest this: a positive correlation between variable T39, the combining transformation(s) associated with interjected adverbials, and variable T45, medial loose modification, appears in dysfunctional sentences of 111 and 112 writers, but not in the dysfunctional sentences of 110 writers, who may not be using such a combination sufficiently for a positive correlation to appear in their dysfunctional sentences. It is possible that this data, although it is sparse and by no means conclusive, may be able to provide more specific information about the nature of early and late blooming syntactic structures.

IMPLICATIONS FOR FURTHER RESEARCH

The results of this study indicate that, as expected, developmental writers differ from nondevelopmental writers in that they produce significantly more syntactic errors than do nondevelopmental writers. It is also evident that this is not true for all syntactic dysfunctions, but for selected ones. What is still not clear from this study is whether developmental writers as a group produce dysfunctional sentences that are unique, that are different than dysfunctional sentences produced by nondevelopmental writers. The data seems to suggest that--at least in terms of sentence combining transformations used in the production

7.

of T-units which form the dysfunctional sentences--developmental writers do not differ from other writers in this respect. However, the fact that, in this study, developmental writers did not differ from nondevelopmental writers with respect to combining transformations used in T-units within their dysfunctional sentences may mean that their sentences differed in some other respect not measured by this method. Or it may mean that the instrument used to examine the combining transformations did not adequately reflect which transformations were used, or which transformations were used in combination with other transformations and in what order. It would be of interest to develop an instrument which could be used to give limited, specific information about the structure of dysfunctional sentences--if the development of such an instrument is feasible.

There is a growing body of literature devoted to the examination of error production. Sometimes called error analysis, this approach to error examination shifts the focus of attention, from the error to the process that produced the error. Clearly, although some speculation about the processes that produced sentence dysfunctions can be made after an examination of data generated from a study of this sort, such ruminations must remain in the realm of speculation. Therefore, large-scale studies of error production--which not only examine error products, but which also are designed to effectuate more accurate theorizing about the causes of such errors--should be the goal of future researchers. David Bartholomae (1980) offers some useful suggestions to this end.

Related to the problem of error production is another matter concerning cognition--the perception of error. Joseph Williams (1981) in his provocative essay, "The Phenomenology of Error," raises an interesting issue: "When we read for typos, letters constitute the field of attention; content becomes virtually inaccessible. When we read for content, semantic structures constitute the field of attention; letters--for the most part--recede from our consciousness" (p. 154). The implication is clear: if error is sought, it will be found, regardless of whether or not it might be perceived in a "real-life" context. It is impossible to determine to what extent the dysfunctions looked for and tallied during the frequency count analysis might or might not have been perceived in "real-life" contexts. One may hazard the guess that in a "real" context the errors found in the writing samples produced by the developmental pre-freshmen would appear even more prevalent because fewer errors might have been perceived in the 111 and 112 essays--they are certainly more fluent pieces of writing. (A reader probably notices fewer mistakes if he/she is actively engaged in reading a fluent piece of writing.) And, regarding the notion of context, it is also entirely reasonable to speculate that all three groups of writers (110, 111, 112) might not have performed similarly under different circumstances: all of the writing samples were college placement exams; many of the students might have been exercising their "best" writing behavior. On the other hand, many of the students might have done more poorly than usual because of stress or because of the artificiality of the circumstances.

Certainly, any future research studies concerning error, which attempt to address the problem of context--whether on the part of the reader or on the part of the writer--could provide valuable insights about many aspects of the writing process.

The English Placement Test that you will be taking today isn't the normal kind of test; that is, you can't pass or fail it. Instead, the purpose of this test is to discover your strengths and weaknesses in writing so that you can be placed in the English composition course which will be most effective in developing your proficiency in expository writing.

After you have completed your essay, a trained staff will evaluate it in the following areas: awareness of audience, organization, development of ideas, mechanics (spelling, punctuation, capitalization), standard English usage, sentence structure, and word choice. You will then be placed in English 110, 111, or 112, depending on the type and intensity of instruction that you need to succeed in writing tasks which you may encounter throughout your college education and beyond. A few of you whose writing skills are extremely strong may be recommended for exemption from all freshman writing courses; you will be required to satisfy the research paper requirement before your exemption is complete.

DIRECTIONS FOR PRETEST

1. Print your name (last name first), your social security number, your home address, your college (Arts & Sciences, Business Administration, Education, Health and Community Services, Music), and the date on the front of your bluebook.
2. Indicate the form of your pretest (A,B,C,D) in the upper right hand corner of your bluebook.
3. Indicate which topic you have chosen by writing the number of the topic on the first page of your bluebook.
4. Write a coherent and organized composition on one of the assigned topics that you find at the bottom of this sheet.
5. Write on every other line; you may write on both sides of each page.
6. Some helpful hints in planning and organizing your composition.
 - a. You should take a few minutes to think about your topic carefully.
 - b. Your introductory paragraph should include your central (main) idea or thesis.
 - c. You should include at least three points about your topic in following paragraphs and develop each point with specific details and/or examples.
 - d. You should conclude your composition by restating or summarizing your central idea in terms of the information you have developed.

APPENDIX A (Continued)

PRETEST TOPICS

1. Choose one of the following elements -- race, religion, family background, home environment, community environment -- and explain in a well-developed comprehensive composition how this element has influenced your way of thinking, feeling, understanding or misunderstanding. How has this element helped shaped your identity? Be sure to give specific, detailed examples from your experience as you discuss the aspect that you have chosen as important in shaping your identity. Write in a semiformal to formal style, directing your essay to a group of educated adults (e.g., a group of your peers).

2. Most of us have a favorite television character. This character may be appearing currently (Rhoda, Baretta, one of Charlie's Angels, Archie Bunker, Steve Austin, Olivia Walton); or he/she may be from a program that is no longer on the air (Ted Baxter, Marcus Welby, Joe Gannon, Ralph Cramden, Felix Unger)... Describe this character through incidents from actual episodes and explain why he/she is your favorite. Or, compare/contrast two characters. Or, try to define a particular type of character, supporting your definition with appropriate characters. Write your essay to an audience of educated adults (e.g., your peers) in a semiformal to formal style.

PRETEST RESULTS

When you see your adviser, he/she will tell you your English placement. Please read through the descriptions of each placement level so that you will understand your placement and the options available to you.

- 110 - means your writing shows that you need intensive instruction in mechanics (spelling, punctuation, capitalization), standard English usage, and sentence structure.
- 111 - means that your writing shows that you need instruction in organizing and developing your ideas and some continued practice in mechanics, standard English usage, and sentence structure as you write for an audience of your peers.
- 112 - means that your writing shows that you have basic control of your organization and development, your mechanics, standard English usage, and sentence structure and that you need to work in furthering your skills particularly in expression, organization and development, sentence structure and word choice as you write for a variety of audiences.

EXEMPT. In order to be exempted from English 112, the composition requirement, you must write a proficient pretest (sophisticated in all respects) and satisfy the research paper requirement. If you satisfy the first requirement (a proficient pretest), you must see Kathy Hart to find out how to complete the research paper requirement in order to be exempted from English 112. After being exempted, you are eligible to take credit-by-examination for English 112.

If you have any questions, please contact Kathy Hart, 310 Moselcy Hall, 372-0019 or 372-0133.

APPENDIX B

Instructional Rubric Grid

I. Awareness of Audience			
A.	Your tone is appropriate for the audience that you are addressing.	YES	NO
B.	Your tone is consistent throughout the essay and helps to emphasize and support the development of your thesis. (27c,d)	YES	NO
C.	You have kept the point of view consistent--shifting pronouns and/or verb tenses only where such a shift is logical and necessary. (27a,b,e; 7d)	SCORE	YES NO
II. Organization and Development			
A. Organization			
1.	Your essay has a clear thesis (controlling idea or centralized purpose) which is either stated or implied. (32a)	YES	NO
2.	Your thesis is appropriately limited with respect to the topic. (32a)	YES	NO
3.	Your method of organization is appropriate to the purpose of your paper. (32b-e,g)	YES	NO
4.	There are adequate transitions between the paragraphs. (31b)	YES	NO
5.	The main idea within each paragraph progresses in a coherent fashion. (31b)	YES	NO
6.	Ideas presented in the essay progress in a coherent fashion. (32d,e)	YES	NO
7.	Your thesis is adequately introduced. (32g)	YES	NO
8.	Your essay is concluded adequately. (32g)	YES	NO
B. Development			
1.	The ideas in support of the thesis are adequately explained. (31c,d)	YES	NO
2.	The ideas in support of the thesis are adequately illustrated and/or argued through the use of specific examples. (31c,d)	YES	NO
3.	Arguments in support of the thesis are logically presented. (31c,d; 23a-d)	SCORE	YES NO
III. Mechanics, Standard English Usage, Manuscript Form			
A. Mechanics			
1.	There are errors in punctuation (commas, periods, semicolons, colons, apostrophes, quotation conventions, hyphens, dashes, capitalization.) (9,12,13,14,15b,16,17,18f)	YES	NO
2.	There are spelling errors (homonyms, others). (18)	YES	NO
B. Standard English Usage			
1.	There are errors in verb and auxiliary forms. (7a-c; 1a)	YES	NO
2.	There are errors in noun and/or pronoun forms. (1b,c; 5)	YES	NO
3.	There are errors in adjective and adverb forms. (1c; 4)	YES	NO
4.	There are errors in subject-verb agreement. (8a)	YES	NO
5.	There are errors in pronoun-antecedent agreement and/or unclear referents. (6b; 28)	YES	NO
C. Manuscript form			
1.	There are errors in manuscript form. (8)	YES	NO
2.	There are errors in footnote form. (33e)	YES	NO
3.	There are errors in bibliography form. (33b)	SCORE	YES NO
IV. Sentence Structure			
A. Major sentence errors			
1.	Your essay contains sentences that do not conform to conventional English structures.	YES	NO
2.	Your essay contains inappropriate, ineffective sentence fragments. (2)	YES	NO
3.	Your essay contains run-on sentences. (3)	YES	NO
B. Serious sentence errors			
1.	Your essay contains comma splices. (3)	YES	NO
2.	Your essay contains vague, unclear, and/or awkward sentences. (1; 22a-c; 23b,c; 25a,b; 26a-d)	YES	NO
3.	Your essay contains sentences in which compound and complex structures are not adequately and logically controlled. (23a,b; 24a-c)	YES	NO
C. Style			
1.	Your sentences are adequately varied. (24a,b; 30a-e)	YES	NO
2.	Your sentence structure helps to emphasize and support the development of your thesis. (29a-h)	SCORE	YES NO
V. Word Choice			
A.	Your word choice is generally appropriate for the audience that you are addressing. (19b-h)	YES	NO
B.	Your word choice is generally precise.		
1.	Vagueness is avoided. (20a)	YES	NO
2.	Overused expressions are avoided. (20c)	YES	NO
3.	Wordiness and/or repetitious word choice is avoided. (21a-c)	YES	NO
C.	You have used words appropriately with respect to denotation and connotation (no more than three words are used incorrectly). (19a,1; 20a,b)	YES	NO
D.	Your word choice and imagery are clear and effective and contribute to the development of your thesis. (20a)	SCORE	YES NO

APPENDIX B (Continued)

Instructional Rubric Guidelines for Instructors

Please read these guidelines before you try to explain the rubric to your students. The guidelines have been designed as a kind of handbook for the rubric and, wherever possible, examples have been provided to clarify points that could be confusing to your students.

You will notice that Category I is now called "Awareness of Audience" not "Expression." It was the feeling of the GSW committee that expression or originality should not be a separate category but that, instead, it should be accounted for in each of the five categories, that expression of originality depended upon the effectiveness of tone, the effectiveness of the mechanics, usage, the effectiveness of sentence structure, and the effectiveness of word choice. In this rubric you will be able to assure students of the overall effectiveness of each area while still being able to point out weaknesses and areas that need improvement.

You will also notice that the grid is keyed to the Harbrace Handbook which should save you time in marking the papers and referring students to the handbook. Such a saving should allow you more time for helpful comments throughout and at the end of each essay.

I. Awareness of Audience

Once a student has learned to analyze and, most importantly, to care about the audience that he/she is writing to and the subject that he/she is writing about, problems in consistency of tone (humorous, serious, ironic, etc.) and point of view (pronoun and tense consistency) should disappear. Nevertheless, students should be made aware of what tone and point of view are.

As you evaluate in this area, note that shifting point of view is a problem only when such a shift is illogical, unnecessary, or where it indicates a confusion in the student's mind over who he/she is talking to or about.

PRONOUN SHIFTS

ACCEPTABLE: In a personal experience essay, when a student is relating an incident that he/she has experienced, it is appropriate to use the "I" point of view. However, when the student wishes to generalize from that experience, it is appropriate to switch to third person. For example, the student might write "I learned from this experience that a person. . . ."

ACCEPTABLE: In a process essay, for example, a student may be trying to explain to someone else how to do something. Here the "you" is appropriate. In this same essay, the student may wish to refer to an experience that he/she, himself/herself has had with a particular step in the process; a shift to "I" in such an instance is appropriate.

UNACCEPTABLE: When a student is relating an incident that he/she has experienced, he/she should use the "I" point of view but should not switch to "you" when he/she obviously still means "I".

TENSE SHIFTS

Tense shifts usually occur when a student loses track of what he/she means to say. These shifts show confusion and lack of control on the part of the student. The logic of the shift is the most important thing to look for; if switching tenses makes no sense, then the student has a problem here.

II. Organization and Development

Students in 110 and 111 are generally expected to formulate a thesis which contains the plan (main points to be discussed) for the essay. This thesis can probably be as crude as the following and still be acceptable:

"The purpose of my paper is to show that Magdalena von Octopus is despicable for three main reasons: she is a cheat, a liar, and a thief."

A student in 110 or 111 should also learn to put his/her thesis in some sort of context which engages the reader and gives him/her a reason for reading on.

In 112, students should learn more sophisticated methods of presenting the thesis. They should learn a variety of types of introductory paragraphs. Students in 112 should avoid such blatant thesis markers as "The purpose of my paper is," "In this paper I am going to show that. . .," etc. and they may learn to leave the plan out of the first paragraph so that they can introduce each main point as it comes in the body of the paper. Students in 112 should also learn to use a variety of appropriate transitional devices, while students in 110 and 111 may rely on the more simple ones such as "first, second, and third." Students in 110 and 111 can conclude their essays by restating the thesis and plan, but students in 112 should learn more sophisticated and less mechanical methods of concluding. Development of main points in 112 should be considerably more extensive, specific, and mature than what is expected in 110 and 111, although students in 110 and 111 are to develop fully.

Although students often write "five-paragraph themes," they are not expected to do so. They are expected to formulate a thesis (controlling idea or centralized purpose) which they must introduce and develop, and they must be able to conclude in a way that suits the thesis of the paper. The number of paragraphs depends entirely on full development of the thesis.

A. Organization

Point 1: The thesis must be clear. The reader must understand what the main idea of the essay is. The thesis does not have to be one sentence; instead, it may be a series of sentences or an implication, either of which must leave the reader with a clear idea of the purpose of the essay. The thesis does not have to contain the plan or outline of what is to come, although beginning writers often find it helpful to include the plan

so that they can refer to it as they are writing the essay.

Point 2: The thesis must be limited enough to scope to be handled in an essay of about 100 words.

UNACCEPTABLE: If our civilization is to survive, we must solve the interrelated problems of overpopulation, pollution, and war,

UNACCEPTABLE: There are serious objections to college systems of grading.

Point 3: Students are often unaware that there is a variety of ways to organize and present their material and that the particular methods that they choose can have an effect on the overall impact of their papers. If a student chooses to include a plan with his/her thesis, he/she should be aware that he/she has indicated an order to the reader and that the reader will expect him/her to follow each aspect of the plan in the order in which the aspects were presented. If a student chooses not to include a plan, he/she should still be conscious of and have reasons for the way in which he/she has ordered the main points and/or the details of the essay.

Point 4: Many students have problems with transitions especially if they have given no thought to the order in which they are presenting the main points in the essay, so it is likely that if you answer no to point 3, you will also have to answer no to point 4.

Point 5: If a student is clear about what he/she wants to say in each individual paragraph, he/she will probably not have trouble with coherence. If, on the other hand the student does not think of each paragraph as a unified and logically ordered whole in which one sentence flows into the next, he/she will have trouble with coherence within paragraphs. McCrimmon in Writing with a Purpose has a good explanation of this concept.

Point 6: Coherence among paragraphs depends upon the student's ability to produce a unified composition. Such devices as repetition of key words, use of pronouns, transitional connectives, references to events and/or ideas in preceding paragraphs all help to produce coherence among paragraphs. It is probably safe to say that if a student receives a no in point 6, he/she will most likely also receive a no in point 5. However, if he/she receives a no in point 5, he/she may not necessarily receive a no in point 6 because, while an individual paragraph or paragraphs might lack coherence; the composition as a whole may seem coherent.

Point 7 and 8: See the introduction to this section of Organization and Development.

B. Development

Point 1: Whether ideas in support of the thesis are adequately explained depends on how much explanation the reader needs to be able to understand the ideas or concepts that are being presented. Depending on the audience, some ideas need extensive explanation, while others need little.

Point 2: Whenever possible, students should be encouraged to use specific examples from their own experience, the experience of others, and/or their reading to support their main ideas. The more complete these illustrations and/or examples are, the more interesting and complete the paper usually becomes. Students should be encouraged to present their examples in as vivid and detailed a way as they can.

Point 3: The ideas and the arguments in support of these ideas must make sense logically.

UNACCEPTABLE: Premarital sex is wrong because a person can get pregnant and her boyfriend will not want anything to do with her or her baby when he finds out.

ACCEPTABLE: Engaging in premarital sex can present the sex partners with several possible problems.

III. Mechanics, Standard English Usage, Manuscript Form

To be effective in writing, students need to pay attention to mechanics, standard English usage, and manuscript form. The handbook should be helpful to them in checking capitalization, punctuation, and manuscript form, while a good dictionary should take care of spelling and verb forms. Students should be encouraged to refer to the handbook and dictionary whenever they have any doubts about the appropriateness of their mechanics.

Usage is the study of the way a language is used. This study is based on attitudes that most people have toward aspects of language, for example, certain pronunciations, words, or grammatical forms that most people have learned. Again, the principle here is to get your students to choose the forms that are most appropriate to their audience and purpose. If they are writing to an audience that expects conformity to standard English conventions, they should be aware that if they do not use "Standard" forms, there will probably be negative reactions from their readers. Again the handbook and dictionary should help in this area.

A. Mechanics

Point 1: Punctuation--The Harbrace should be helpful to you and your students with most punctuation problems; however, here are a few points that need to be emphasized.

a. Commas

1. A comma nearly always precedes coordinating conjunctions (and, but, or, nor, for, so, yet) when they link main clauses.

EXAMPLE: Reginald McVee wrote his mother a letter, but he forgot to mail it.

2. A comma is almost never used to separate compound subjects or predicates.

EXAMPLE: Hildegard Revulsion has accepted our token of esteem

--no comma--a compound predicate
and will continue to distinguish herself in the field of analytic geometry.

A professor from the Economics Department and a professor from the

--no comma--a compound subject
English Department will duel at sunrise on Thursday.

3. Commas usually follow introductory words, introductory phrases, and dependent (subordinate) clauses. Count the comma omission as an error only when the meaning of the sentence is confused if the comma is not present.

EXAMPLES:

In the spring, time is precious. (Comma is needed.)

In the spring Atilla will buy a new car. (Comma is unnecessary.)

After we ate supper, we went to the movies. (Comma is optional.)

After we had eaten, pork chops sounded disgusting. (Comma is necessary.)

- b. Apostrophes--Apostrophes are a matter of punctuation only when they are used in contractions to indicate missing letters.

EXAMPLES:

do not

don't

does not

doesn't

it is

it's (not its)

there is

there's

must have

must've (not must of)

could have

could've (not could of)

would have

would've (not would of)

Contractions are appropriate in a semiformal style.

Point 2: Spelling

- a. Homonyms--Homonyms seem to be a problem for many students. Section 191 in Harbrace is helpful on many common homonym problems.
- b. Other spelling problems can be solved for most students by acquainting them with the spelling section of Harbrace and the dictionary. Students who have severe spelling problems should be advised to go to the Writing Lab and/or to purchase such supplementary spelling texts as AEIOU or Better Spelling.

B. Standard English Usage

Point 1: Verb and auxiliary forms

If a student uses the wrong form of a verb or auxiliary, the error is in this area.

EXAMPLES:

I have went to church every Sunday for years.

They use to eat spinach on Fridays.

Jerry hitted the ball a hundred yards.

Mark seen a pornographic movie on TV.

He ask me to go to the circus.

The fish be swimming in the pond.

Point 2: Noun and pronoun forms

If a student writes an incorrect plural or possessive form of a noun or pronoun, the error is in this area.

EXAMPLES:

The step's are steep.

Mr. Grays' goat ate tin canes.

There are four partys this weekend.

Our dog is cuter than your's.

The Junior Womens' Club is planning several events this year.

In a years time I'll go crazy.

Point 3: Adjective and adverb forms

If a student uses the incorrect form of an adjective or adverb, the error is in this area. Problems with function words (prepositions,

conjunctions, etc.) can be included under this point.

EXAMPLES:

Audrey is more prettier than Hermione.

Ethel was the fattest of the two.

Bartholomew was the shorter of the three.

This is the worse day of my life.

Thor hits the ball good.

Carl broke the window but Mr. Davis spanked him.

Mary went at the movies.

Point 4: Subject-verb agreement

If a student does not make his/her subjects and verbs agree, the error is in this area.

EXAMPLES:

There, is several incorrect answers on your test.

One of the teachers in our city schools have been locked up for strangling his wife.

Arthur, as well as the other men, need a haircut.

My pencil and book is missing.

Either Herbert or Zelda are missing from the list.

Neither my mother nor my sisters has new wardrobes.

Measles are a common childhood disease.

Point 5: Pronoun-antecedent agreement and/or unclear references

If a student does not make his/her pronouns agree with their antecedents or if the student uses pronouns whose antecedents are unclear, the error is in this area.

EXAMPLES:

agreement: Everyone needs their mother at some time.

Each of the Heartburns wants their turn.

unclear referents: Mark broke Jim's glasses when he was at the softball game last week.

See Harbrace 28 for further examples.

C. Manuscript Form

Point 1: Manuscript form, in the general sense, refers to the appearance of the paper, for example, title, margins, paragraph conventions, etc.

Points 2 and 3: Footnote and bibliography form applies primarily to papers written by 112 students. See Lester, Writing Research Papers.

As you assign scores in Category III, do not count the same error more than once unless it becomes so repetitive that it constantly detracts from the essay.

EXAMPLES:

1. If a student misspells the same word several times, count only the first misspelling.

2. If a student separates compound elements of a sentence several times, count only the first error (e.g., She sang and danced.).

3. If a student deletes several s's from the 3rd person singular verb form (he walk), count only the first deletion.

4. If a student deletes several ed's from the past form of regular verbs (he walked), count only the first deletion.

IV. Sentence Structure

Another very important aspect of writing is sentence structure. If students write sentences that are snarled, tangled, and twisted, they

will fail to get their messages across. Inappropriate, unintentional sentence fragments and run-on sentences also detract from the writing. Students should work to achieve sentence variety. They should be encouraged to experiment with their sentences, joining them together, varying their length.

A. Major sentence errors

Point 1: Sentences that do not conform to conventional English structures are rare, but they do occasionally occur, especially in 110. Such sentences indicate severe problems with constructing sentences.

EXAMPLES: I alot to store my school.

Would to buy later cars the boys.

Point 2: Inappropriate sentence fragments

The key word here is inappropriate. If a student writes a fragment that is effective within the context of the essay, do not consider it an error.

EXAMPLES OF COMMON FRAGMENTS:

-ing word fragments: Going over to Archibold Rake's house last week.

Infinitive phrase fragments: To produce a high yield of carrots, lettuce, and peas.

Subordinate clause fragments: Since I never do the dishes immediately after I eat. Which leads me to think that raccoons should be protected from trappers.

Appositive fragment: The award went to Mr. Water. A fine friend and parent.

Example fragment: For instance, a butcher, a baker, and a candlestick maker.

Point 3: Run-on sentences--two or more independent clauses joined without any punctuation--are also major sentence errors.

EXAMPLE: Several ideas occurred to me at that moment they all frightened me.

B. Serious sentence errors

Point 1: Comma splices--a kind of run-on sentence in which two independent clauses are joined by a comma.

EXAMPLES OF COMMA SPLICES:

William Wagon wrote several essays this quarter, he never passed one. The bell rang, however, no one was at the door.

THE FOLLOWING ARE NOT COMMA SPLICES:

Rachel Restaurant gave money to charity, and she was also kind to her neighbors and friends.

The old man sang, and danced (Here the comma before and is incorrect, but it is a punctuation error, not a comma splice.)

Point 2: Vague, unclear and/or awkward sentences

EXAMPLES

Faulty parallelism: Mary is an excellent teacher, a fine person, and wants to become an actress.

Dangling modifier: Walking over to the library, the book was finally found.

Tangled and/or unclear sentences: At my job, I know there would be different processes to decorate a room. This, to me, is a true, living example that only with a positive attitude, will a positive action ever arrive.

Point 3: Faulty coordination and/or subordination

EXAMPLES: COORDINATION--Sam went to the ball game but went home

and washed his clothes so went to bed and yet he still didn't think he'd accomplished anything.

SUBORDINATION--I have never known anybody like Sheryl my room-mate who never washes her clothes in which she leaves lying around the room who always refuses to clean. My brother fixed the pipe who is a plumber.

C. Style

Point 1: Sentence variety

Notice that even if a student has no sentence errors, he/she must have adequate sentence variety to receive a 5 in sentence structure.

Point 2: Perhaps this is the summary aspect of the sentence structure category. If a student's sentences are working for him/her to present his/her ideas, he/she will probably score high in this category and others as well. On the other hand, if students have sentence errors or if they write sentences that "don't say anything," they will probably score low in this category and others as well.

V. Word Choice

A. Appropriateness to the audience--In a semiformal style students should avoid slang and/or colloquialism. They should choose words that they are fairly certain that the audience will understand. If they wish to use slang, colloquialism, and/or a word that may be unfamiliar to the audience, they should put that word or phrase in quotes and explain it.

B. Your word choice is generally precise.

Point 1: Vagueness--word choice is vague when it does not convey a precise meaning.

EXAMPLES: That kind of publicity is always bad business for an organization, and the men in our house felt pretty bad about it.

The awful thing about it was that Bill was sort of ruined by the situation.

Point 2: Overused expressions--an expression becomes overused (trite, cliched) when it has lost its freshness or forcefulness.

EXAMPLES: Bill and Harvey have become thick as thieves.

Ms. Hobbenock who is actually blind as a bat is always making mountains out of molehills.

Point 3: Wordiness and/or repetitious word choice

EXAMPLES: It is interesting to observe that students are generally better prepared for college than they were twenty years ago.

The people who stand around outside in the street had a better view than those who stayed inside.

She looked as though she was not feeling well. (Sick)

C. Denotation and connotation

EXAMPLES: I am contraceptive to the fact that you understand the rules. She makes all of her own clothes; she is quite adapt at tailoring.

People in Cuba spend a lot of time procrastinating their work.

D. Again, this is the summary aspect of the word choice category.

Section _____

47

APPENDIX D

Linguistic Analysis Worksheet (Revised)
[O'Donnell et al (1967) and Gebhard (1978)]

I. T-Unit Patterns:

- ___ SV
- ___ SVO
- ___ SVC_n
- ___ SVC_a
- ___ SVIO
- ___ SVOC_n
- ___ SVOC_a
- ___ AdvVS
- ___ There VS
- ___ It VS
- ___ Question
- ___ Request, command
- ___ Partial
- ___ Passive

II. Sentence Combining Transformations

Nominal structures: headed

- 1 ___ N+M (adjunct)
- 2 ___ N+M (apposition)
- 3 ___ N+adj.
- 4 ___ N+poss.
- 5 ___ N+relative clause
- 6 ___ N+relative clause
- 7 ___ N+prep. Phrase
- 8 ___ N+inf. phrase
- 9 ___ N+partic. Phrase
- 10 ___ N+adverbial
- 11 ___ Other

Nominal structures: non-headed

- 12 ___ noun clause
- 13 ___ prep. phrase
- 14 ___ inf. phrase
- 15 ___ inf. with subject
- 16 ___ gerund phrase
- 17 ___ partial
- 18 ___ Other

Nominal structures: function

- 19 ___ subject
- 20 ___ object
- 21 ___ indirect object
- 22 ___ subject complement
- 23 ___ object complement
- 24 ___ apposition
- 25 ___ adverbial noun
- 26 ___ partial
- 27 ___ Other

Adverbial Structures: Adverbial

- ___ Clause
- 28 ___ time
- 29 ___ place
- 30 ___ manner
- 31 ___ cause
- 32 ___ condition
- 33 ___ comparison
- 34 ___ reduced comparison
- 35 ___ adjective complement
- 36 ___ Other
- 37 ___ contrast

Sentence Adverbial

- 38 ___ absolute
- 39 ___ interjected
- 40 ___ Other
- 41 ___ adverbial infinitive

Coordinate Structures:

Location

- ___ NP (subject)
- ___ VP (predicate)

Nominal

- ___ subject
- ___ object
- ___ indirect object
- ___ subj. complement
- ___ object of prep.
- ___ appositive
- ___ Other nominal

Verb

- ___ verb (or aux or aux & verb)
- ___ predicate (any comped v + constituent)

Modifier

- ___ adj. or adjectival
- ___ adv. or adverbial

Function word

- ___ prep.

III. Sentence Openers

- ___ subject noun ___ partial
- ___ subject pronoun
- ___ adv. dep. clause
- ___ prep. phrase
- ___ adverb
- ___ coord. conj.
- ___ verb
- ___ verbals
- ___ conj. adv.
- ___ sentence modifier

IV. Loose Modification

- ___ none
- 44 ___ initial
- 45 ___ medial
- 46 ___ final
- ___ initial and medial
- ___ medial and final
- ___ initial and final
- ___ all
- 47 ___ non-standard structure
- 48 ___ non-standard and loose
- ___ modification
- 49 ___ partial
- 50 ___ Other
- 51 ___ tag question

V. Sentence Modifier

Section _____

49

APPENDIX F

ANOVA and Duncan Tables 1-32
for Frequency Count Data

DEPENDENT VARIABLE--RUNCON

Two Main Clauses Joined

ANOVA TABLE 1

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	4.33102355	2.16551178	32.75	0.0001**
Error	297	19.63891981	0.06612431		
Corrected Total	299	23.96994337			

DUNCAN TABLE 1

Grouping	Mean	N	Group
A	0.269054	100	0
B	0.022968	100	1
B	0.006202	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--RUN-ON

Conjunctive Adverb Used Without Punctuation

ANOVA TABLE 2

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00975845	0.00487922	2.00	0.1366
Error	297	0.72317524	0.00243493		
Corrected Total	299	0.73293369			

DUNCAN TABLE 2

Grouping	Mean	N	Group
A	0.012099	100	0
A	0.000000	100	1
A	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ADVERB CLAUSE FRAGMENT

ANOVA TABLE 3

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00404040	0.00202020	1.00	0.3691
Error	297	0.60000000	0.00202020		
Corrected Total	299	0.60404040			

DUNCAN TABLE 3

Grouping	Mean	N	Group
A	0.007785	100	0
A			
A	0.000000	100	1
A			
A	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--RELATIVE CLAUSE FRAGMENT

ANOVA TABLE 4

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.29510457	0.14755228	5.88	0.0031**
Error	297	7.45642753	0.02510582		
Corrected Total	299	7.75153210			

DUNCAN TABLE 4

Grouping	Mean	N	Group
A	0.082532	100	0
B	0.016265	100	1
B	0.015736	100	2

Means with the same letter are not significantly different.

* Significant at .05 level.
 ** Significant at .01 level

DEPENDENT VARIABLE--APPOSITIVE FRAGMENT

ANOVA TABLE 5

Source	DF	Sum of Squares	Mean Square	F Value	PR. > F
Group	2	0.01070517	0.00535259	1.63	0.1977
Error	297	0.97522556	0.00328359		
Corrected Total	299	0.98593074			

DUNCAN TABLE 5

Grouping	Mean	N	Group
A	0.014481	100	0
A	0.005423	100	1
A	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ING GROUP FRAGMENT

ANOVA TABLE 6

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.21562179	0.10781089	3.83	0.0227*
Error	297	8.34957282	0.02811304		
Corrected Total	299	8.56519461			

DUNCAN TABLE 6

Grouping	Mean	N	Group
A	0.076180	100	0
A			
B	0.048508	100	1
B			
B	0.010768	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--INFINITIVE GROUP FRAGMENT

ANOVA TABLE 7

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.15344807	0.07672404	3.35	0.0366*
Error	297	6.81193756	0.02293582		
Corrected Total	299	6.96538563			

DUNCAN TABLE 7

Grouping	Mean	N	Group
A	0.060611	100	0
A			
B A	0.036290	100	1
B			
B	0.005345	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FOR INSTANCE/FOR EXAMPLE FRAGMENT

ANOVA TABLE 8

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.12288980	0.06144490	4.96	0.0076**
Error	297	3.68149767	0.01239562		
Corrected Total	299	3.80438747			

DUNCAN TABLE 8

Grouping	Mean	N	Group
A	0.042934	100	0
B	0.000000	100	1
B	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--COORDINATE STRUCTURE FRAGMENT

ANOVA TABLE 9

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00939581	0.00469791	0.98	0.3748
Error	297	1.41703649	0.00477117		
Corrected Total	299	1.42643230			

DUNCAN TABLE 9

Grouping	Mean	N	Group
A	0.012168	100	0
A	0.011552	100	1
A	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--PREDICATE WITH SUBJECT DELETED FRAGMENT

ANOVA TABLE 10

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.09652942	0.04826471	4.88	0.0082**
Error	297	2.93957588	0.00989756		
Corrected Total	299	3.03610529			

DUNCAN TABLE 10

Group	Mean	N	Group
A	0.038052	100	0
B	0.000000	100	1
B	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--SUBJECT WITH PREDICATE DELETED FRAGMENT

ANOVA TABLE 11

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.04475258	0.02237629	2.50	0.0834
Error	297	2.65327643	0.00893359		
Corrected Total	299	2.69802902			

DUNCAN TABLE 11

Grouping	Mean	N	Group
A	0.029844	100	0
B A	0.016739	100	2
B	0.000000	100	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERB MODIFIER FRAGMENT

ANOVA TABLE 12

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.29292917	0.14646458	7.04	0.0010**
Error	297	.6.17948502	0.02080635		
Corrected Total	299	6.47241419			

DUNCAN TABLE 12

Grouping	Mean	N	Group
A	0.072307	100	0
B	.0.014412	100	1
B	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADJECTIVE MODIFIER FRAGMENT

ANOVA TABLE 13

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.30719142	0.15359571	7.61	0.0006**
Error	297	5.99692240	0.02019166		
Corrected Total	299	6.30411383			

DUNCAN TABLE 13

Grouping	Mean	N	Group
A	0.072855	100	0
B	0.011388	100	1
B	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--APPROPRIATE FRAGMENT

ANOVA TABLE 14

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.04968420	0.02484210	2.45	0.0884
Error	297	3.01624224	0.01015570		
Corrected Total	299	3.06592645			

DUNCAN TABLE 14

Grouping	Mean	N	Group
A	0.031503	100	0
B A	0.014776	100	1
B	0.000000	100	2

Means with the same letter are not significantly different.

*Significant at .05 level
 **Significant at .01 level

DEPENDENT VARIABLE--EXCESSIVE COORDINATION

ANOVA TABLE 15

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00959376	0.00479688	0.31	0.7321
Error	297	4.56343608	0.01536510		
Corrected Total	299	4.57302984			

DUNCAN TABLE 15

Grouping	Mean	N	Group
A	0.026483	100	0
A	0.022557	100	2
A	0.013016	100	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ING-WORD MISPLACED MODIFIER

ANOVA TABLE 16

Source	DF	Sum of Squares	Mean Square	F Value	OPR > F
Group	2	0.17955227	0.08977614	5.67	0.0038**
Error	297	4.69978391	0.01582419		
Corrected Total	299	4.87933618			

DUNCAN TABLE 16

Grouping	Mean	N	Group
A	0.059857	100	0
B	0.009609	100	2
B			
B	0.006455	100	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--RELATIVE CLAUSE MISPLACED MODIFIER

ANOVA TABLE 17

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.04940231	0.02470116	1.61	0.2015
Error	297	4.55514903	0.01533720		
Corrected Total	299	4.60455134			

DUNCAN TABLE 17

Grouping	Mean	N	Group
A	0.037669	100	0
A			
A	0.019949	100	2
A			
A	0.006325	100	1

Means with the same letter are not significantly different.

*Significant at .05 level

**Significant at .01 level

DEPENDENT VARIABLE--OTHER (MISCELLANEOUS) MISPLACED MODIFIER

ANOVA TABLE 18

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00952925	0.00476462	0.86	0.4245
Error	297	1.64676415	0.00554466		
Corrected Total	299	1.65629339			

DUNCAN TABLE 18

Grouping	Mean	N	Group
A	0.013679	100	0
A	0.008452	100	1
A	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--DANGLING ING WORD MODIFIER

ANOVA TABLE 19

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.03572865	0.01786433	1.78	0.1710
Error	297	2.98599737	0.01005386		
Corrected Total	299	3.02172602			

DUNCAN TABLE 19

Grouping	Mean	N	Group
A	0.032505	100	0
A	0.016394	100	1
A	0.005976	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--DANGLING SUBORDINATE CLAUSE MODIFIER

ANOVA TABLE 20

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.01097453	0.00548726	0.54	0.5816
Error	297	3.00197808	0.01010767		
Corrected Total	299	3.01295261			

DUNCAN TABLE 20.

Grouping	Mean	N	Group
A	0.025683	100	0
A	0.018759	100	1
A	0.010878	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--RELATIVE CLAUSE USED INAPPROPRIATELY.

ANOVA TABLE 21

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.04791164	0.02395582	2.41	0.0918
Error	297	2.95540135	0.00995085		
Corrected	299	3.00331299			

DUNCAN TABLE 21

Grouping	Mean	N	Group
A	0.031691	100	0
A			
A	0.005000	100	2
A			
A	0.004767	100	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--TWO MODIFIERS SAME SLOT

ANOVA TABLE 22

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.05511768	0.02755884	2.60	0.0760
Error	297	3.14946629	0.01060426		
Corrected Total	299	3.20458397			

DUNCAN TABLE 22

Grouping	Mean	N	Group
A	0.037243	100	0
A			
B A	0.014263	100	1
B			
B	0.005000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE---AWKWARD AS A RESULT OF INCORRECT RELATIVE PRONOUN USE

ANOVA TABLE 23

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.15507550	0.07753775	5.76	0.0035**
Error	297	3.99505552	0.01345137		
Corrected Total	299	4.15013101			

DUNCAN TABLE 23

Grouping	Mean	N	Group
A	0.053472	100	0
B	0.005423	100	2
B	0.005064	100	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--AWKWARD: SUBJECT
TURNED INTO MODIFIER

ANOVA TABLE 24

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00289855	0.00144928	1.00	0.3691
Error	297	0.43043478	0.00144928		
Corrected Total	299	0.43333333			

DUNCAN TABLE 24

Grouping	Mean	N	Group
A	0.006594	100	0
A	0.000000	100	1
A	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level
** Significant at .01 level

DEPENDENT VARIABLE--PARALLEL STRUCTURE DIFFICULTY

ANOVA TABLE 25

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.89909789	0.44954895	7.06	0.0010**
Error	297	18.90647718	0.06365817		
Corrected Total	299	19.80557508			

DUNCAN TABLE 25

Grouping	Mean	N	Group
A	0.184347	100	0
B	0.098711	100	1
B	0.052162	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--COMMA SPLICE: TWO

MAIN CLAUSES JOINED WITH COMMA

ANOVA TABLE 26

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	4.94205552	2.47102776	19.99	0.0001**
Error	297	36.71982533	0.12363578		
Corrected Total	299	41.66188085			

DUNCAN TABLE 26

Grouping	Mean	N	Group
A	0.393309	100	0
B	0.174804	100	1
B	0.088295	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--COMMA SPLICE

CONJUNCTIVE ADVERB PLUS COMMA

ANOVA TABLE 27

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.06611180	0.03305590	2.01	0.1357
Error	297	4.88190714	0.01643740		
Corrected Total	299	4.94801893			

DUNCAN TABLE 27

Grouping	Mean	N	Group
A	0.043209	100	1
A	0.026770	100	2
A	0.006901	100	0

Means with the same letter are not significantly different.

* Significant at .05 level.

** Significant at .01 level

DEPENDENT VARIABLE--COMMA SPLICE

WITH THEN PLUS COMMA

ANOVA TABLE 28

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00190009	0.00095005	0.27	0.7603
Error	297	1.02890179	0.00346432		
Corrected Total	299	1.03080188			

DUNCAN TABLE 28

Grouping	Mean	N	Group
A	0.010277	100	0
A			
A	0.005000	100	2
A			
A	0.004880	100	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--CONJUNCTION DELETED WITH COMPOUND VERB

ANOVA TABLE 29

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.02012333	0.01006167	2.98	0.0522
Error	297	1.00202789	0.00337383		
Corrected Total	299	1.02215122			

DUNCAN TABLE 29

Grouping	Mean	N	Group
A	0.017374	100	0
B	0.000000	100	1
B	0.000000	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ILLOGICAL SUBJECTIVE COMPLEMENT

ANOVA TABLE 30

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.10753798	0.05376899	2.30	0.1016
Error	297	6.92859240	0.02332859		
Corrected Total	299	7.03613038			

DUNCAN TABLE 30

Grouping	Mean	N	Group
A	0.057234	100	0
B A	0.035065	100	1
B	0.010872	100	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level.

DEPENDENT VARIABLE--AWKWARD: BECAUSE OF PASSIVE

ANOVA TABLE 31

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00126168	0.00063084	0.08	0.9222
Error	297	2.31185887	0.00778404		
Corrected Total	299	2.31312055			

DUNCAN TABLE 31

Grouping	Mean	N	Group
A	0.016384	100	1
A	0.012135	100	2
A	0.011939	100	1

Means with the same letter are not significantly different.

- * Significant at .05 level
- ** Significant at .01 level

DEPENDENT VARIABLE--TUNIT

ANOVA TABLE 32

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	865.44666667	432.72333333	4.23	0.0154*
Error	297	30366.22000000	102.24316498		
Corrected Total	299	31231.66666667			

DUNCAN TABLE 32

Grouping	Mean	N	Group
A	31.030000	100	2
B A	29.000000	100	0
B	26.870000	100	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

APPENDIX G

Correlation Coefficient Tables 1-4
for Frequency Count Data

TABLE 1
OVERALL CORRELATION COEFFICIENTS

1A RUN-ONS 2 Main Clauses Joined	1B 0.12065 0.0367*	2A 0.13133 0.0229*	2H 0.26164 0.0001**	2I 0.21625 0.0002**	2K 0.48314 0.0001**	4A1 0.37026 0.0001**	5 0.23195 0.0001**	6 0.19623 0.0006**	7 0.41203 0.0001**
1B RUN-ONS Conjunctive Adverb	1A 0.12065 0.0367*	2A 0.56994 0.0001**	5 0.21809 0.0001**						
2A FRAGMENTS Adverb Clause	1A 0.13133 0.0229*	2B 0.56994 0.0001**	4A1 0.17739 0.0020**	5 0.23574 0.0001**					
2B FRAGMENTS Relative Clause	2C 0.19975 0.0005**	2D 0.14988 0.0093**	2G 0.12567 0.0295*	2H 0.19931 0.0005**	3 0.16414 0.0044**	4E 0.12055 0.0369*	4G 0.18733 0.0011**		
2C FRAGMENTS Noun	2B 0.19975 0.0005**	2G 0.11657 0.0436*	4E 0.13259 0.0216*						
2D FRAGMENTS Ing Group	2B 0.14988 0.0093**	3 0.16227 0.0048**	4A1 0.15694 0.0065**						
2E FRAGMENTS Infinitive Group	2F 0.18899 0.0010**	2G 0.37663 0.0001**	2I 0.24124 0.0001**	4A3 0.22984 0.0001**	7 0.11612 0.0445*				
2F FRAGMENTS For Example/For Instance	2E 0.18899 0.0010**								
2G FRAGMENTS Coordinate Structure	2B 0.12567 0.0295*	2C 0.11657 0.0436*	2E 0.32663 0.0001**	2K 0.16104 0.0052**					
2H FRAGMENTS Predicate with Subject Deleted	1A 0.26164 0.0001**	2B 0.19931 0.0005**	2K 0.46045 0.0001**	4G 0.56445 0.0001**					
2I FRAGMENTS Subject with Predicate Deleted	1A 0.21625 0.0002**	2K 0.28432 0.0001**	4A1 0.27965 0.0001	7 0.38410 0.0001**	9 0.16701 0.0037**				
2J FRAGMENTS Adverb Modifier	2K 0.21021 0.0002**	2I 0.34081 0.0001**							

* Significant at .05 level
** Significant at .01 level

TABLE 1
OVERALL CORRELATION COEFFICIENTS (cont'd)

2K	FRAGMENTS Adjective Modifier	1A 0.48314 0.0001**	2C 0.16104 0.0052**	2H 0.46045 0.0001**	2I 0.28432 0.0001**	2J 0.21021 0.0002**	2L 0.15625 0.0067**	4A1 0.24236 0.0001**	7 0.33678 0.0001**
2L	FRAGMENTS Appropriate	2E 0.24124 0.0001**	2J 0.34081 0.0001**	2K 0.15625 0.0067**	4A3 0.39907 0.0001**				
3	EXCESSIVE COORDINATION	2B 0.16414 0.0044**	2D 0.16227 0.0048**						
4A1	MODIFYING PROBLEMS Ing-word Misplaced Modifiers	1A 0.37026 0.0001**	2A 0.17739 0.0020**	2I 0.27965 0.0001**	2K 0.24236 0.0001**	6 0.22701 0.0001**	7 0.47846 0.0001**		
4A2	MODIFYING PROBLEMS Relative Clause Misplaced Modifiers	4D 0.26261 0.0001**	9 0.18300 0.0015**						
4A3	MODIFYING PROBLEMS Other Misplaced Modifiers	2D 0.15694 0.0065**	2E 0.22984 0.0001**	2L 0.39907 0.0001**	4D 0.14669 0.0110*				
79 4B	MODIFYING PROBLEMS Dangling Modifier	4C 0.18316 0.0014**							
4C	MODIFYING PROBLEMS Dangling Subordinate Clause Modifier	4B 0.18316 0.0014	9 0.18113 0.0016**						
4D	MODIFYING PROBLEMS Relative Clause Used Inappropriately	4A2 0.26261 0.0001**	4A3 0.14669 0.0110*						
4E	MODIFYING PROBLEMS Two Modifiers Same Slot	2B 0.12055 0.0369*	2C 0.13259 0.0216*	6B 0.20326 0.0004**	8 0.14645 0.0111*				
4F	MODIFYING PROBLEMS Awkward as a Result of Incorrect Relative Pro- noun Use								

* Significant at .05 level
** Significant at .01 level

TABLE 1
OVERALL CORRELATION COEFFICIENTS (cont'd)

4G	MODIFYING PROBLEMS Subject Turned into Modifier	2E ^{0.18733} 0.0011**	2H ^{0.56445} 0.0001**		
5	PARALLEL STRUCTURE DIFFICULTY	1A ^{0.23195} 0.0001**	1B ^{0.21809} 0.0001**	2A ^{0.23574} 0.0001**	
6A	COMMA SPLICE 2 Main Clauses Joined with Comma	1A ^{0.19623} 0.0006**	4A1 ^{0.22701} 0.0001**		
6B	COMMA SPLICE Conjunctive Adverb Plus Comma	4E ^{0.20326} 0.0004**			
6C	COMMA SPLICE Then Plus Comma				
7	CONJUNCTION DELETED WITH COMPOUND VERB	1A ^{0.41203} 0.0001**	2E ^{0.11612} 0.0445*	2I ^{0.38410} 0.0001**	2K ^{0.33878} 0.0001**
8	ILLOGICAL SUBJECTIVE COMPLEMENT	4E ^{0.14645} 0.0111*			4A1 ^{0.47846} 0.0001**
9	AWKWARD AS A RESULT OF PASSIVE	2I ^{0.16701} 0.0037**	4A2 ^{0.18300} 0.0015**	4C ^{0.18113} 0.0016**	

* Significant at .05 level

** Significant at .01 level

TABLE 2
110 CORRELATION COEFFICIENTS

1A	RUN-ONS 2 Main Clauses Joined	2K0.26016 0.0089**	4A10.31894 0.0012**	60.27916 0.0049**	70.32707 0.0009**		
1B	RUN-ONS Conjunctive Adverb	2A0.63629 0.0001**	2J0.26526 0.0076**				
2A	FRAGMENTS Adverb Clause	1B0.63629 0.0001**	4A10.25199 0.0114*	50.23672 0.0177*			
2B	FRAGMENTS Relative Clause	2C0.19791 0.0484*	2D0.26429 0.0079**	2G0.19687 0.0496*	2H0.29312 0.0031**	30.20666 0.0391*	4E0.21543 0.0314*
2C	FRAGMENTS Noun	2B0.19791 0.0484*	2G0.28321 0.0043**	4E0.31318 0.0015**			4G0.25146 0.0116*
2D	FRAGMENTS Ing Group	2B0.26429 0.0079**	30.23162 0.0204*	4A30.25532 0.0104*			
2E	FRAGMENTS Infinitive Group	2F0.24380 0.0145*	2G0.41025 0.0001**				
2F	FRAGMENTS For Example/For Instance	2E0.24380 0.0145*					
2G	FRAGMENTS Coordinate Structure	2B0.19687 0.0496*	2C0.28321 0.0043**	2E0.41025 0.0001**	2K0.23102 0.0207*		
2H	FRAGMENTS Predicate with Subject Deleted	2B0.29312 0.0031**	2K0.25510 0.0104*	4G0.52432 0.0001**			
2I	FRAGMENTS Subject with Predicate Deleted	2K0.31232 0.0016**	4A10.20633 0.394*	70.34203 0.0005**			
2J	FRAGMENTS Adverb Modifier	2L0.25114 0.0117*	6B0.27339 0.0059**				

* Significant at .05 level
** Significant at .01 level

TABLE 2
110 CORRELATION COEFFICIENTS (cont'd)

2K	FRAGMENTS Adjective Modifier	1A 0.26016 0.0089**	2G 0.23102 0.0207*	2H 0.25510 0.0104*	2I 0.31232 0.0016**	7 0.25065 0.0119*
2L	FRAGMENTS Appropriate	2J 0.25114 0.0117*				
3	EXCESSIVE COORDINATION	2B 0.20666 0.0391*	2D 0.23162 0.0204*			
4A1	MODIFYING PROBLEMS Ing-word Misplaced Modifiers	1A 0.31894 0.0012**	2A 0.25199 0.0114*	2I 0.20633 0.0394*	7 0.30790 0.0018**	
4A2	MODIFYING PROBLEMS Relative Clause Misplaced Modifiers	4D 0.37617 0.0001**	9 0.31685 0.0013**			
4A3	MODIFYING PROBLEMS Other Misplaced Modifiers	2D 0.25532 0.0104*	4D 0.28025 0.0047**			
4B	MODIFYING PROBLEMS Dangling Modifier	4C 0.35593 0.0003**				
4C	MODIFYING PROBLEMS Dangling Subordinate Clause Modifier	4B 0.35593 0.0003**				
4D	MODIFYING PROBLEMS Relative Clause Used Inappropriately	4A2 0.37617 0.0001**	4A3 0.28025 0.0047**			
4E	MODIFYING PROBLEMS Two Modifiers Same Slot	2B 0.21543 0.0314*	2C 0.31318 0.0015**	6B 0.47608 0.0001**		
4F	MODIFYING PROBLEMS Awkward as a Result of Incorrect Relative Pro- noun Use					

* Significant at .05 level
** Significant at .01 level

TABLE 2
110 CORRELATION COEFFICIENTS (cont'd)

4G MODIFYING PROBLEMS Subject Turned into Modifier	2B 0.25146 0.0116*	2H 0.52432 0.0001**		
5 PARALLEL STRUCTURE DIFFICULTY	1B 0.26526 0.0076**	2A 0.23672 0.0177*		
6A COMMA SPLICE 2 Main Clauses Joined with Comma	1A 0.27916 0.0049**			
6B COMMA SPLICE Conjunctive Adverb Plus Comma	2J 0.27339 0.0059**	4E 0.47608 0.0001**		
6C COMMA SPLICE Then Plus Comma				
7 CONJUNCTION DELETED WITH COMPOUND VERB	1A 0.32707 0.0009**	2I 0.34203 0.0005**	2K 0.25065 0.0119*	4A1 0.30790 0.0018**
8 ILLOGICAL SUBJECTIVE COMPLEMENT				
9 AWKWARD AS A RESULT OF PASSIVE	4A2 0.31685 0.0013**			

* Significant at .05 level

** Significant at .01 level

TABLE 3
111 CORRELATION COEFFICIENTS

1A	RUN-ONS 2 Main Clauses Joined	2G0.34760 0.0004**	4E0.35459 0.0003**
1B	RUN-ONS Conjunctive Adverb		
2A	FRAGMENTS Adverb Clause		
2B	FRAGMENTS Relative Clause	2D0.30717 0.0019**	2K0.50935 0.0001**
2C	FRAGMENTS Noun		2L0.38526 0.0001**
2D	FRAGMENTS Ing Group	2B0.30717 0.0019**	2K0.23470 0.0188*
2E	FRAGMENTS Infinitive Group	2L0.39337 0.0001**	4A30.50591 0.0001**
2F	FRAGMENTS For Example/For Instance		
2G	FRAGMENTS Coordinate Structure	1A0.34760 0.0004**	6B0.20732 0.0385*
2H	FRAGMENTS Predicate with Subject Deleted		
2I	FRAGMENTS Subject with Predicate Deleted		
2J	FRAGMENTS Adverb Modifier		

* Significant at .05 level
** Significant at .01 level

TABLE 3
111 CORRELATION COEFFICIENTS (cont'd)

2K FRAGMENTS Adjective Modifier	2B0.50935 0.0001**	2D0.23470 0.0188*	2L0.45702 0.0001**	4F0.62018 0.0001**
2L FRAGMENTS Appropriate	2B0.38526 0.0001**	2E0.39337 0.0001**	2K0.45702 0.0001**	4A30.79847 0.0001**
3 EXCESSIVE COORDINATION				
4A1 MODIFYING PROBLEMS Ing-word Misplaced Modifiers	50.23691 0.0176*			
4A2 MODIFYING PROBLEMS Relative Clause Misplaced Modifiers				
4A3 MODIFYING PROBLEMS Other Misplaced Modifiers	2E0.50591 0.0001**	2L0.79847 0.0001**		
4B MODIFYING PROBLEMS Dangling Modifier				
4C MODIFYING PROBLEMS Dangling Subordinate Clause Modifier	90.45794 0.0001**			
4D MODIFYING PROBLEMS Relative Clause Used Inappropriately				
4E MODIFYING PROBLEMS Two Modifiers Same Slot	1A0.35459 0.0003**	6B0.22916 0.0218*	80.34631 0.0004**	
4F MODIFYING PROBLEMS Awkward as a Result of Incorrect Relative Pro- noun Use	80.30519 0.0020**			

* Significant at .05 level

** Significant at .01 level

TABLE 3
111 CORRELATION COEFFICIENTS (cont'd)

4C	MODIFYING PROBLEMS Subject Turned into Modifier				
5	PARALLEL STRUCTURE DIFFICULTY	4A1	0.23691 0.0176*		
6A	COMMA SPLICE 2 Main Clauses Joined with Comma				
6B	COMMA SPLICE Conjunctive Adverb Plus Comma	2G	0.20732 0.0385*	4E	0.22916 0.0218*
				6C	0.27486 0.0056**
6C	COMMA SPLICE Then Plus Comma	6B	0.27486 0.0056**		
7	CONJUNCTION DELETED WITH COMPOUND VERB				
8	ILLOGICAL SUBJECTIVE COMPLEMENT	4E	0.34631 0.0004**	4F	0.30519 0.0020**
9	AWKWARD AS A RESULT OF PASSIVE	4C	0.45794 0.0001**		

* Significant at .05 level
** Significant at .01 level

TABLE 4
112 CORRELATION COEFFICIENTS

1A	RUN-ONS 2 Main Clauses Joined	2B	0.53928 0.0001**	
1B	RUN-ONS Conjunctive Adverb			
2A	FRAGMENTS Adverb Clause			
2B	FRAGMENTS Relative Clause	1A	0.53928 0.0001**	
2C	FRAGMENTS Noun			
2D	FRAGMENTS Ing Group			
2E	FRAGMENTS Infinitive Group	4A1	0.77928 0.0001**	6 0.54400 0.0001**
2F	FRAGMENTS For Example/For Instance			
2G	FRAGMENTS Coordinate Structure			
2H	FRAGMENTS Predicate with Subject Deleted			
2I	FRAGMENTS Subject with Predicate Deleted	9	0.48030 0.0001**	
2J	FRAGMENTS Adverb Modifier			

* Significant at .05 level

** Significant at .01 level

TABLE 4
112 CORRELATION COEFFICIENTS (cont'd)

2K	FRAGMENTS Adjective Modifier		
2L	FRAGMENTS Appropriate		
3	EXCESSIVE COORDINATION	4F 0.46067 0.0001**	
4A1	MODIFYING PROBLEMS Ing-word Misplaced Modifiers	2E 0.77928 0.0001**	6A 0.51431 0.0001**
4A2	MODIFYING PROBLEMS Relative Clause Misplaced Modifiers		
4A3	MODIFYING PROBLEMS Other Misplaced Modifiers		
88 4B	MODIFYING PROBLEMS Dangling Modifier		
4C	MODIFYING PROBLEMS Dangling Subordinate Clause Modifier		
4D	MODIFYING PROBLEMS Relative Clause Used Inappropriately	6C 1.00000 0.0001**	
4E	MODIFYING PROBLEMS Two Modifiers Same	8 0.64382 0.0001**	
4F	MODIFYING PROBLEMS Awkward as a Result of Incorrect Relative Pro- noun Use	3 0.46067 0.0001**	

* Significant at .05 level
** Significant at .01 level

TABLE 4
112 CORRELATION COEFFICIENTS (cont'd)

4G	MODIFYING PROBLEMS Subject Turned into Modifier		
5	PARALLEL STRUCTURE DIFFICULTY	0.27282 0.0060**	
6A	COMMA SPLICE 2 Main Clauses Joined with Comma	2E 0.54400 0.0001**	4A1 0.51431 0.0001**
6B	COMMA SPLICE Conjunctive Adverb Plus Comma		
6C	COMMA SPLICE Then Plus Comma	4D 1.00000 0.0001**	
7	CONJUNCTION DELETED WITH COMPOUND VERB		
8	ILLOGICAL SUBJECTIVE COMPLEMENT	4E 0.64382 0.0001**	
9	AWKWARD AS A RESULT OF PASSIVE	2I 0.48030 0.0001**	5 0.27282 0.0060**

* Significant at .05 level
** Significant at .01 level

APPENDIX H

Anova and Duncan Tables 1-43
for O'Donnell-Gebhard Data

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+N (Adjunct)

ANOVA TABLE 1

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00934265	0.00467132	0.03	0.9728
Error	205	34.73079142	0.16941849		
Corrected Total	207	34.74013407			

DUNCAN TABLE 1

Grouping	Mean	N	Group
A	0.202721	49	2
A	0.188917	69	1
A	0.185929	90	0

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE—HEADED NOMINAL STRUCTURES

N+N (apposition)

ANOVA TABLE 2

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.07605132	0.03802566	0.63	0.5349
Error	205	12.42033456	0.06058700		
Corrected Total	207	12.49638588			

DUNCAN TABLE 2

Grouping	Mean	N	Group
A	0.088822	90	0
A	0.061732	69	1
A	0.041497	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--~~HEADED~~ NOMINAL STRUCTURES

N+adjective

ANOVA TABLE 3

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	2.08381158	1.04190579	2.89	0.0581
Error	205	74.01984993	0.36107244		
Corrected Total	207	76.10366151			

DUNCAN TABLE 3

Grouping	Mean	N	Group
A	0.670408	49	2
A			
B A	0.520173	69	1
B			
B	0.414789	90	0

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+possessive

ANOVA TABLE 4

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.24080021	0.12040460	0.51	0.6015
Error	205	48.43475681	0.23626711		
Corrected Total	207	48.67556202			

DUNCAN TABLE 4

Grouping	Mean	N	Group
A	0.478375	69	1
A			
A	0.422109	49	2
A			
A	0.400790	90	0

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+relative clause

ANOVA TABLE 5

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.28387654	0.14193827	1.03	0.3587
Error	205	28.24232343	0.13776743		
Corrected Total	207	28.52619998			

DUNCAN TABLE 5

Grouping	Mean	N	Group
A	0.229980	69	1
A			
A	0.181323	90	0
A			
A	0.130952	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+0 Relative Clause

ANOVA TABLE 6

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.29200846	0.14600423	2.67	0.0716
Error	205	11.20907221	0.05467840		
Corrected Total	207	11.50108067			

DUNCAN TABLE 6

Grouping	Mean	N	Group
A	0.139744	90	0
A			
B A	0.102721	49	2
B			
B	0.053278	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+prepositional Phrase

ANOVA TABLE 7

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	1.56986021	0.78493010	2.20	0.1138
Error	205	73.26728465	0.35740139		
Corrected Total	207	74.83714486			

DUNCAN TABLE 7

Grouping	Mean	N	Group
A	0.611905	49	2
A	0.579100	69	1
A	0.419105	90	0

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+infinitive Phrase

ANOVA TABLE 8

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.08676670	0.04338335	0.22	0.8037
Error	205	40.64847756	0.19828526		
Corrected Total	207	40.73524426			

DUNCAN TABLE 8

Grouping	Mean	N	Group
A	0.168627	69	1
A			
A	0.133333	49	2
A			
A	0.122343	90	0

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+participial Phrase

ANOVA TABLE 9

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.62365158	0.31182579	2.23	0.1099
Error	205	28.63485968	0.13968224		
Corrected Total	207	29.25851126			

DUNCAN TABLE 9

Grouping	Mean	N	Group
A	0.271674	69	1
A	0.261905	49	2
A	0.157340	90	0

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--HEADED NOMINAL STRUCTURES

N+adverbial

ANQVA TABLE 10

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00361471	0.00180735	1.74	0.1785
Error	205	0.21322453	0.00104012		
Corrected Total	207	0.21683924			

DUNCAN TABLE 10

Grouping	Mean	N	Group
A	0.009630	90	0
A	0.002415	69	1
A	0.000000	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--NON-HEADED NOMINAL STRUCTURES

Noun Clause

ANOVA TABLE 11

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.17395330	0.08697665	1.20	0.3033
Error	205	14.85782982	0.07247722		
Corrected Total	207	15.03178312			

DUNCAN TABLE 11

Grouping	Mean	N	Group
A	0.174084	90	0
A	0.161905	49	2
A	0.109207	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--NON-HEADED NOMINAL STRUCTURES

Prepositional Phrase

ANOVA TABLE 12

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00007782	0.00003891	0.65	0.5214
Error	205	0.01220850	0.00005955		
Corrected Total	207	0.01228632			

DUNCAN TABLE 12

Grouping	Mean	N	Group
A	0.001235	90	0
A	0.000000	69	1
A	0.000000	49	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--NON-HEADED NOMINAL STRUCTURES

Infinitive Phrase

ANOVA TABLE 13

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.04765541	0.02382771	0.90	0.4064
Error	205	5.40048785	0.02634384		
Corrected Total	207	5.44814326			

DUNCAN TABLE 13

Grouping	Mean	N	Group
A	0.077026	90	0
A	0.069048	49	2
A	0.042754	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--NON-HEADED NOMINAL STRUCTURES

Infinitive with Subject

ANOVA TABLE 14

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00413544	0.00206772	0.12	0.8849
Error	205	3.46378450	0.01689651		
Corrected Total	207	3.46791994			

DUNCAN TABLE 14

Grouping	Mean	N	Group
A	0.038776	49	2
A			
A	0.028831	90	0
A			
A	0.027685	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--NON-HEADED NOMINAL STRUCTURES

Gerund Phrase

ANOVA TABLE 15

Source	DF	Sum of Squares	Mean Square	F Value	PR $\geq F$
Group	2	0.02312072	0.01156036	0.12	0.8906
Error	205	20.44055134	0.09971001		
Corrected Total	207	20.46367206			

DUNCAN TABLE 15

Grouping	Mean	N	Group
A	0.178487	69	1
A	0.169048	49	2
A	0.154497	90	0

Means with the same letter are not significantly different.

* Significant at .05 level.

** Significant at .01 level

DEPENDENT VARIABLE--NON-HEADED-NOMINAL STRUCTURES

Partial

ANOVA TABLE 16

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00695272	0.00347636	0.92	0.3990
Error	205	0.77207891	0.00376624		
Corrected Total	207	0.77903163			

DUNCAN TABLE 16

Grouping	Mean	N	Group
A	0.020408	49	2
A	0.011356	90	0
A	0.004831	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Subject

ANOVA TABLE 17

Source	DF	Sum of Squares	Mean Squares	F Value	PR > F
Group	2	0.13488381	0.06744191	0.89	0.4119
Error	205	15.51789518	0.07569705		
Corrected Total	207	15.65277899			

DUNCAN TABLE 17

Grouping	Mean	N	Group
A	0.225440	69	1
A			
A	0.188641	90	0
A			
A	0.157823	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Object

ANOVA TABLE 18

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.56583145	0.28291572	3.41	0.0350*
Error	205	17.02241026	0.08303615		
Corrected Total	207	17.58824171			

DUNCAN TABLE 18

Grouping	Mean	N	Group
A	0.303401	49	2
A			
B	0.286898	90	0
B			
B	0.164278	69	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Indirect Object

ANOVA TABLE 19

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00140415	0.00070208	1.12	0.3297
Error	205	0.12902494	00.00062939		
Corrected Total	207	0.13042909			

DUNCAN TABLE 19

Grouping	Mean	N	Group
A	0.006803	49	2
A	0.001587	90	0
A	0.000000	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Subject Complement

ANOVA TABLE 20

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group ✓	2	0.12877061	0.06438530	0.75	0.4727
Error	205	17.54898070	0.08560478		
Corrected Total	207	17.67775131			

DUNCAN TABLE 20

Grouping	Mean	N	Group
A	0.242995	69	1
A	0.194632	90	0
A	0.184014	49	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Object Complement

ANOVA TABLE 21

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00294891	0.00147446	0.54	0.5837
Error	205	0.55997799	0.00273160		
Corrected Total	207	0.56292690			

DUNCAN TABLE 21

Grouping	Mean	N	Group
A	0.010519	90	0
A			
A	0.010204	49	2
A			
A	0.002415	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION--NOMINAL STRUCTURES

Apposition

ANOVA TABLE 22

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.1235476	0.00617738	0.89	0.4141
Error	205	1.14558	0.00697632		
Corrected Total	207	1.44250035			

DUNCAN TABLE 22

Grouping	Mean	N	Group
A	0.023085	69	1
A	0.014286	49	2
A	0.005341	90	0

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Adverbial Noun

ANOVA TABLE 23

Source	DF.	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00083649	0.00041824	1.27	0.2842
Error	205	0.06773753	0.00033043		
Corrected Total	207	0.06857402			

DUNCAN TABLE 23

Grouping	Mean	N	Group
A	0.004048	90	0
A			
A	0.000000	69	1
A			
A	0.000000	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--FUNCTION-NOMINAL STRUCTURES

Partial

ANOVA TABLE 24

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.02751169	0.01375584	0.15	0.8642
Error	205	19.30910882	0.09419077		
Corrected Total	207	19.33662050			

DUNCAN TABLE 24

Grouping	Mean	N	Group
A	0.196273	69	1
A	0.191747	90	0
A	0.167007	49	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Time

ANOVA TABLE 25

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.03371095	0.01685548	0.70	0.4955
Error	205	4.90406761	0.02392228		
Corrected Total	207	4.93777857			

DUNCAN TABLE 25

Grouping	Mean	N	Group
A	0.070298	90	0
A	0.069082	69	1
A	0.039796	49	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Place

ANOVA TABLE 26

Source	DF	Sum of Squares	Mean Square	F Value	PR → F
Group	2	0.00042226	0.00021113	1.01	0.3648
Error	205	0.04271588	0.00020837		
Corrected Total	207	0.04313814			

DUNCAN TABLE 26

Grouping	Mean	N	Group
A	0.002876	90	0
A			
A	0.000000	69	1
A			
A	0.000000	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Manner

ANOVA TABLE 27

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00098397	0.00049198	0.55	0.5806
Error	205	0.18500377	0.00090246		
Corrected Total	207	0.18598774			

DUNCAN TABLE 27

Grouping	Mean	N	Group
A	0.008402	90	0
A	0.004762	49	2
A	0.003623	69	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Cause

ANOVA TABLE 28

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.01053384	0.00526692	0.45%	0.6400
Error	205	2.41367278	0.01177401		
Corrected Total.	207	2.42420663			

DUNCAN TABLE 28

Grouping	Mean	N	Group
A	0.034997	90	0
A	0.031056	69	1
A	0.017007	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Condition

ANOVA TABLE 29

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.02505445	0.01252722	1.04	0.3556
Error	205	2.47109524	0.01205412		
Corrected Total	207	2.49614969			

DUNCAN TABLE 29

Grouping	Mean	N	Group
A	0.041553	90	0
A	0.037578	69	1
A	0.014286	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

U

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Comparison

ANOVA TABLE 30

Source	DF	Sum of Squares	Mean Squares	F Value	PR > F
Group.	2	0.00268960	0.00134480	0.73	0.4811
Error	205	0.37539011	0.00183117		
Corrected Total	207	0.37807971			

DUNCAN TABLE 30

Grouping	Mean	N	Group
A	0.013591	90	0
A			
A	0.006803	49	2
A			
A	0.006039	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES .

Adverbial Clause: Reduced Comparison

ANOVA TABLE 31

Source	DF	Sum of Squares	Mean Squares	F Value	PR > F
Group	2	0.19617230	0.09808615	1.49	0.2273
Error	205	13.47385577	0.06572613		
Corrected Total	207	13.67002808			

DUNCAN TABLE 31

Grouping	Mean	N	Group
A,	0.163466	69	1
A			
A	0.122077	90	0
A			
A	0.081293	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Adjective Complement

ANOVA TABLE 32

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00811087	0.00405544	0.07	0.9363
Error	205	12.63460174	0.06163220		
Corrected Total	207	12.64271261			

DUNCAN TABLE 32

Grouping	Mean	N	Group
A	0.167991	69	1
A			
A	0.164379	90	0
A			
A	0.151701	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Adverbial Clause: Contrast

ANOVA TABLE 33

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00017351	0.00008675	0.08	0.9212
Error	205	0.21665441	0.00105685		
Corrected Total	207	0.21682792			

DUNCAN TABLE 33

Grouping	Mean	N	Group
A	0.008163	49	2
A	0.006273	90	0
A	0.005797	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Sentence Adverbial: Absolute

ANOVA TABLE 34

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00052383	0.00026191	1.23	0.2938
Error	205	0.04357874	0.00021258		
Corrected Total	207	0.04410256			

DUNCAN TABLE 34

Grouping	Mean	N	Group
A	0.004082	49	2
A	0.000741	90	0
A	0.000000	69	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Sentence Adverbial: Interjected

ANOVA TABLE 35

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00252296	0.00126148	0.71	0.4905
Error	205	0.36176402	0.00176470		
Corrected Total	207	0.36428699			

DUNCAN TABLE 35

Grouping	Mean	N	Group
A	0.010204	49	2
A	0.004831	69	1
A	0.001299	90	0

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--ADVERBIAL STRUCTURES

Sentence Adverbial: Adverbial Infinitive

ANOVA TABLE 36

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.23937838	0.11968919	2.80	0.0633
Error	205	8.77086513	0.04278471		
Corrected Total	207	9.01024351			

DUNCAN TABLE 36

Grouping	Mean	N	Group
A	0.115017	90	0
B	0.046998	69	1
B	0.045918	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE---LOOSE MODIFICATION

Initial

ANOVA TABLE 37

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.12741239	0.06370820	0.89	0.4125
Error	205	14.68437553	0.07163110		
Corrected Total	207	14.81179193			

DUNCAN TABLE 37

Grouping	Mean	N	Group
A	0.221429	49	2
A	0.190653	69	1
A	0.159115	90	0

Means with the same letter are not significantly different.

*Significant at .05 level
 ** Significant at .01 level

135

DEPENDENT VARIABLE--LOOSE MODIFICATION

Final

ANOVA TABLE 39

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.20892557	0.10446279	1.05	0.3506
Error	205	20.12575497	0.09915002		
Corrected Total	207	20.53468055			

DUNCAN TABLE 39

Grouping	Mean	N	Group
A	0.261224	49	2
A			
A	0.247319	90	0
A			
A	0.185904	69	1

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE---LOOSE MODIFICATION

Non-standard Structure

ANOVA TABLE 40

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.00484948	0.00242474	1.14	0.3233
Error	205	0.43782531	0.00213573		
Corrected Total	207	0.44267479			

DUNCAN TABLE 40

Grouping	Mean	N	Group
A	0.012925	49	2
A			
A	0.006476	90	0
A			
A	0.000000	69	1

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE--LOOSE MODIFICATION

Non-standard and Loose Modification

ANOVA TABLE 41

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0	0	99999.99	0.0000**
Error	205	0	0		
Corrected Total	207	0			

DUNCAN TABLE 41

Grouping	Meap	N	Group
A	0.000000	90	0
B	0.000000	69	1
C	0.000000	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

DEPENDENT VARIABLE--LOOSE MODIFICATION

Partial

ANOVA TABLE 42

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.01454222	0.00727111	0.08	0.9247
Error	205	19.02988862	0.09282872		
Corrected Total	207	19.04443084			

DUNCAN TABLE 42

Grouping	Mean	N	Group
A	0.189521	69	1
A	0.179561	90	0
A	0.167007	49	2

Means with the same letter are not significantly different.

* Significant at .05 level
 ** Significant at .01 level

DEPENDENT VARIABLE---LOOSE MODIFICATION

Tag Question

ANOVA TABLE 43

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Group	2	0.0001945	0.00000973	0.65	0.5214
Error	205	0.00305213	0.00001489		
Corrected Total	207	0.00307158			

DUNCAN TABLE 43

Grouping	Mean	N	Group
A	0.000617	90	0
A	0.000000	69	1
A	0.000000	49	2

Means with the same letter are not significantly different.

* Significant at .05 level

** Significant at .01 level

T-Unit Patterns	110 Frequency	111 Frequency	112 Frequency	110 Column % ¹	111 Column %	112 Column %
SV Subject Verb	115	26	22	15.35	10.97	16.42
SVO Subject Verb, Object	177	68	50	23.63	28.69	37.31
SVC _n Subject Verb Complement- Noun	85	34	18	11.35	14.35	13.43
SVC _a Subject Verb Complement- Adjective	82	35	9	10.95	14.77	6.72
SVIO Subject Verb Indirect Object	15	2	2	2.00	0.84	1.49
SVOC _n Subject Verb Object Complement- Noun	3	1	0	0.40	0.42	0.00
SVOC _a Subject Verb Object Complement- Adjective	2	2	1	0.27	0.84	0.75
Adv VS Adverb Verb Subject	1	1	0	0.13	0.42	0.00
There VS There Verb Subject	21	9	2	2.80	3.80	1.49
It VS It Verb Subject	24	3	0	3.20	1.27	0.00
Question	2	1	2	0.27	0.42	1.49
Request, Command	17	1	0	2.27	0.42	0.00
Partial	116	36	11	15.49	15.19	8.21
Passive	11	5	3	1.47	2.11	2.24

¹Column percentages indicate, of those who are in 110, 111, 112, the % who used this pattern.

APPENDIX J

Correlation Coefficient Tables 1-4
for O'Donnell-Gebhard Data

TABLE 1
OVERALL CORRELATION COEFFICIENTS
(Appendix D)
19-27 with 1-18

T19	T1 ^{0.21658} 0.0017**	T3 ^{0.25100} 0.0003**	T4 ^{0.22961} 0.0008**	T7 ^{0.22992} 0.0008**	T9 ^{0.14861} 0.0322**	T12 ^{0.16413} 0.0178*	
T20	T3 ^{0.16351} 0.0187*	T8 ^{0.17206} 0.0130*	T10 ^{0.14333} 0.0389*	T11 ^{0.14362} 0.0385*	T12 ^{0.26305} 0.0001**	T14 ^{0.16752} 0.0156*	T18 ^{0.17732} 0.0104*
T21							
T22	T1 ^{0.21089} 0.0022**	T3 ^{0.23818} 0.0005**	T5 ^{0.34229} 0.0001**	T7 ^{0.27640} 0.0001**	T9 ^{0.22987} 0.0008**	T11 ^{0.14407} 0.0379*	
T23	T1 ^{0.34233} 0.0001**	T8 ^{0.17673} 0.0107*	T12 ^{0.25636} 0.0002**				
T24	T2 ^{0.39177} 0.0001**	T17 ^{0.20621} 0.0028**					
T25	T5 ^{0.18151} 0.0087**						
T26							
T27	T4 ^{0.30778} 0.0001**	T9 ^{0.17525} 0.0113*	T15 ^{0.22389} 0.0012**				

44-51 with 28-41

T44	T28 ^{0.23982} 0.0005**	T32 ^{0.20017} 0.0037**
T45	T39 ^{0.35433} 0.0001**	

* Significant at .05 level
** Significant at .01 level

TABLE 1 (cont'd)
OVERALL CORRELATION COEFFICIENTS

44-51 with 28-41

T46 T34 0.18149
0.0087**

T47 T30 0.28453
0.0001**

T48

T49

T50

T51

44-51 with 2,5,6,9

T44

T45

T46

T47 T2 0.19646
0.0045**

T48

* Significant at .05 level

** Significant at .01 level

TABLE 1 (cont'd)
OVERALL CORRELATION COEFFICIENTS

44-51 with 2,5,6,9

T49 T6 0.14293
 0.0394*

T50

T51

* Significant at .05 level
** Significant at .01 level

TABLE 2
110 CORRELATION COEFFICIENTS
(Appendix D)
19-27 with 1-18

T19	T3 ^{0.23264} 0.0273*	T4 ^{0.37099} 0.0003**	T8 ^{0.28950} 0.0056**	
T20	T7 ^{0.23433} 0.0262*	T10 ^{0.29973} 0.0041**	T12 ^{0.34255} 0.0007**	T18 ^{0.32415} 0.0018**
T21				
T22	T5 ^{0.47136} 0.0001**	T12 ^{0.41951} 0.0001**	T16 ^{0.31144} 0.0028**	
T23	T1 ^{0.74604} 0.0001**	T8 ^{0.46480} 0.0001**	T12 ^{0.39099} 0.0001**	T14 ^{0.22982} 0.0294*
T24				
T25	T5 ^{0.31980} 0.0021**			
T26				
T27	T1 ^{0.30975} 0.0030**	T8 ^{0.32386} 0.0018**	T15 ^{0.27006} 0.0100**	

44-51 with 28-41

T44	T28 ^{0.38818} 0.0002**	T35 ^{0.21224} 0.0446*
T45		

* Significant at .05 level
** Significant at .01 level

TABLE 2 (cont'd)
110 CORRELATION COEFFICIENTS

44-51 with 28-41

T46

T47 T30 0.58555
0.0001**

T48

T49

T50 T33 0.31287
0.0027**

T51

44-51 with 2,5,6,9

T44

T45

T46 T2 0.22741
0.0311*

T47

T48

* Significant at .05 level

** Significant at .01 level

TABLE 2 (cont'd)
110 CORRELATION COEFFICIENTS

44-51 with 2,5,6,9

T49

T50

T51

* Significant at .05 level
** Significant at .01 level

TABLE 3
111 CORRELATION COEFFICIENTS
(Appendix D)
19-27 with 1-18

T19	T3 ^{0.24651} 0.0412*	T7 ^{0.35027} 0.0032**		
T20	T11 ^{0.33762} 0.0046**	T14 ^{0.51963} 0.0001**	T16 ^{0.23739} 0.0495*	
T21				
T22	T1 ^{0.42234} 0.0003**	T3 ^{0.37659} 0.0014**	T7 ^{0.53115} 0.0001**	T9 ^{0.44657} 0.0001**
T23	T18 ^{0.39511} 0.0008**			
T24	T2 ^{0.46018} 0.0001**			
T25				
T26	T12 ^{0.31682} 0.0080**			
T27	T4 ^{0.51062} 0.0001**			

44-51 with 28-41

T44	T32 ^{0.36916} 0.0018**		
T45	T39 ^{0.59394} 0.0001**	T41 ^{0.59191} 0.0001**	

* Significant at .05 level
** Significant at .01 level

TABLE 3 (cont'd)
111 CORRELATION COEFFICIENTS

44-51 with 28-41

T46

T47

T48

T49

T50

T51

44-51 with 2,5,6,9

T44

T45

T46

T47

T48

151

* Significant at .05 level

Significant at .01 level

TABLE 3 (cont'd)
111 CORRELATION COEFFICIENTS

44-51 with 2,5,6,9

T49

T50

T51

* Significant at .05 level
** Significant at .01 level

TABLE 4
112 CORRELATION COEFFICIENTS
(Appendix D)
19-27 with 1-18

T19 T1 $\begin{matrix} 0.44687 \\ 0.0013** \end{matrix}$ T3 $\begin{matrix} 0.31207 \\ 0.0290* \end{matrix}$ T4 $\begin{matrix} 0.42408 \\ 0.0024** \end{matrix}$ T7 $\begin{matrix} 0.30934 \\ 0.0208* \end{matrix}$

T20

T21

T22 T5 $\begin{matrix} 0.55685 \\ 0.0001** \end{matrix}$

T23

T24 T2 $\begin{matrix} 0.84150 \\ 0.0001** \end{matrix}$ T14 $\begin{matrix} 0.36165 \\ 0.0107* \end{matrix}$ T16 $\begin{matrix} 0.35983 \\ 0.0111* \end{matrix}$ T17 $\begin{matrix} 0.64324 \\ 0.0001** \end{matrix}$

T25

T26

T27 T4 $\begin{matrix} 0.30476 \\ 0.0332* \end{matrix}$ T9 $\begin{matrix} 0.35187 \\ 0.0132* \end{matrix}$ T15 $\begin{matrix} 0.47562 \\ 0.0006** \end{matrix}$

44-51 with 28-41

T44

T45 T31 $\begin{matrix} 0.41930 \\ 0.0027** \end{matrix}$ T39 $\begin{matrix} 0.31362 \\ 0.0282* \end{matrix}$

* Significant at .05 level
** Significant at .01 level

TABLE 4 (cont'd)
112 CORRELATION COEFFICIENTS :

44-51 with 28-41

T46 T34 0.43826
0.0016**

T47

T48

T49

T50

T51

44-51 with 2,5,6,9

T44

T45 T2 0.45839
0.0009**

T46 T9 0.48131
0.0005**

T47 T2 0.81026
0.0001**

T48

* Significant at .05 level
** Significant at .01 level

TABLE 4 (cont'd)
112 CORRELATION COEFFICIENTS

44-51 with 2,5,6,9

T49

T50

T51

* Significant at .05 level
** Significant at .01 level

BIBLIOGRAPHY

- Bartholomae, David. "The Study of Error." College Composition and Communication, 31 (1980), 253-269.
- Bateman, D. R. and F. J. Zidonis. The Effect of a Study of Transformational Grammar upon the Growth of Language Complexity. Research Report No. 6. Urbana, Illinois: National Council of Teachers of English, 1966.
- Bowker, Albert H. "Writing Skills and Institutional Articulation," in James D. Koerner, ed. The Teaching of Expository Writing. New York: Alfred P. Sloan Foundation, 1978.
- Braddock, R., R. Lloyd-Jones, and L. Schoer. Research in Written Composition. Urbana, Illinois: National Council of Teachers of English, 1963.
- Budz, J., and T. Graber. "Tutorial Versus Classroom in Freshman English." College English, 37 (1976), 654-57.
- Butler, John F. "Remedial Writers: The Teacher's Job as Corrector of Papers." College Composition and Communication, 31 (1980), 270-277.
- Carkeet, D. "Understanding Syntactic Errors in Remedial Writing." College English, 38 (1977), 682-686.
- Cayer, Roger L. and Renée K. Sacks. "Oral and Written Discourse of Basic Writers: Similarities and Differences." Research in the Teaching of English, 13 (1979), 121-128.
- Chaika, E. "Who Can Be Taught." College English, 35 (1974), 575-583.
- Coffman, William E. "On the Reliability of Ratings of Essay Examinations in English." Research in the Teaching of English, 5 (1971), 24-36.
- Cohen, Arthur M. "Assessing College Students' Ability to Write Compositions." Research in the Teaching of English, 7 (1973), 356-371.
- Collins, John Joseph. "Deviations from Standard English in Written Compositions of Disadvantaged College Freshmen and Regular Admissions Students at Glassboro State College." Diss. Temple University, 1971.
- Cooper, Charles R. and Lee Odell. Evaluating Writing: Describing, Measuring, Judging. Urbana, Illinois: National Council of Teachers of English, 1977.
- Coughlin, J. The Chronicle of Higher Education, January 31, 1977.
- Daily Sentinel Tribune. Bowling Green, Ohio. September 15, 1978.

- Desy, Jeanne. "Reasoned Writing for Basic Students: A Course Design." Basic Writing, 1:2 (1976), 4-19.
- Diederich, Paul B. Measuring Growth in English. Urbana, Illinois: National Council of Teachers of English, 1974.
- Dillworth, Callett B., Robert W. Reising, and Denny T. Wolfe. "Language Structure and Thought in Written Composition: Certain Relationships." Research in the Teaching of English, 12 (1978), 97-106.
- DiStefano, Philip and Robert Marzano. "Basic Skills in Composition: A New Approach." English Education, 9 (1978), 117-121.
- Farrell, Thomas J. "Open Admissions, Orality, and Literacy." Journal of Youth and Adolescence, 3:3 (1974), 247-260.
- Fisher, John C. Linguistics in Remedial English. The Hague: Mouton & Co., 1966.
- Follman, John C. and James A. Anderson. "An Investigation of the Reliability of Five Procedures for Grading English Themes." Research in the Teaching of English, 1 (1967), 190-200.
- Freeman, D. C. "Toward 'Relative Readability': A Criterion for Good Writing," review of The Philosophy of Composition, E. D. Hirsch, Jr. (Univ. of Chicago Press, 1978). The Chronicle of Higher Education. April 3, 1978.
- Garcia, R. "A Linguistic Frame of References for Critiquing Chicano Compositions." College English, 37 (1975), 184-188.
- Gebhard, Ann O. "Writing Quality and Syntax: A Transformational Analysis of Three Prose Samples." Research in the Teaching of English, 12 (1978), 210-231.
- Godshalk, F., F. Swineford, and W. Coffman. The Measurement of Writing Ability. New York: College Entrance Examination Board, Educational Testing Service. 1966.
- Gray, B. Q. "Dialect Interference in Writing: A Tripartite Analysis." Journal of Basic Writing, 1 (1975), 14-23.
- Greenbaum, Sidney and John Taylor. "The Recognition of Usage Errors by Instructors of Freshman Composition." College Composition and Communication, 32 (1981), 169-174.
- Griffin, W. J. "Developing Syntactic Control in Seventh Grade Writing Through Audio-Lingual Drill on Transformations." Paper read at American Educational Research Association Convention, New York, 1967.
- Harris, Muriel. "Mending the Fragmented Free Modifier." College Composition and Communication, 32 (1981), 175-182.

- Hess, K. "The Role of Objectives in the Teaching of Composition." College Composition and Communication, 26 (1975), 274-78.
- Higgins, J. A. "Remedial Student's Needs versus Emphasis in Text-workbooks." College Composition and Communication, 24 (1973), 188-192.
- Hunt, R. W. Grammatical Structures Written at Three Grade Levels. Research Report No. 3. Urbana, Illinois: National Council of Teachers of English, 1965.
- Kagan, Dona M. "Run-on and Fragment Sentences: An Error Analysis." Research in the Teaching of English, 14 (1980), 127-138.
- Kasden, Lawrence and Daniel Hoebler. Basic Writing: Essays for Teachers, Researchers, Administrators. Urbana, Illinois: National Council of Teachers of English, 1980.
- Kirschner, S. and G. H. Poteet. "Non-Standard English Usage in the Writing of Black, White and Hispanic Remedial English Students in an Urban Community College." Research in the Teaching of English, 7 (1973), 338-350.
- Koerner, James D., ed. The Teaching of Expository Writing: An Exchange of Views. New York: Alfred P. Sloan Foundation, 1978.
- Kirshna, A. "The Syntax of Error." Journal of Basic Writing, 1 (1975), 43-50.
- Kroll, Barry M. and John C. Schafer. "Error-Analysis and the Teaching of Composition." College Composition and Communication, 29 (1978), 242-248.
- Lattin, Vernon. "A Program for Basic Writing." College English, 40 (1978), 312-317.
- Laurence, Patricia. "Error's Engless Train: Why Students Don't Perceive Errors." Basic Writing, 1:1 (1975), 23-42.
- Lay, N., "Chinese Language Interference in Written English." Journal of Basic Writing, 1 (1975), 50-62.
- Loban, Walter. Language Development: Kindergarten through Grade Twelve. Urbana, Illinois: National Council for Teachers of English, 1976.
- Lunsford, Andrea A. "What We Know--and Don't Know--About Remedial Writing." College Composition and Communication, 29 (1978), 47-52.
- Macrae, Norman. "How to Improve Writing Skills," in James D. Koerner, ed. The Teaching of Expository Writing. New York: Alfred P. Sloan Foundation, 1978.

- Maimon, Elaine P. and Barbara F. Nodine. "Measuring Syntactic Growth: Errors and Expectations in Sentence-Combining Practice with College Freshmen." Research in the Teaching of English, 12 (1978), 233-244.
- Mellon, J. C. Transformational Sentence-Combining: A Method of Enhancing the Development of Syntactic Fluency in English Composition. Research Report No. 10. Urbana, Illinois: National Council of Teachers of English, 1969.
- Meyers, Lewis. "Texts and Teaching: Basic Writing." College English, 39 (1978), 918-933.
- Miller, B. D. and J. W. Ney. "The Effect of Systematic Oral Exercises on the Writing of Fourth-grade Students." Research in the Teaching of English, 2 (1968), 44-61.
- Morenberg, Max, Donald Daiker, and Andrew Kerek. "Sentence Combining at the College Level: An Experimental Study." Research in the Teaching of English, 12 (1978), 245-256.
- Newman, Donna. "Writing Wrongs--A National Epidemic." Chicago Tribune, May 24, 1976.
- Newsweek. "Why Johnny Can't Write." December 8, 1975.
- O'Donnell, R. C., W. J. Griffin, and R. C. Norris. Syntax of Kindergarten and Elementary School Children: A Transformational Analysis. Research Report No. 8. Urbana, Illinois: National Council of Teachers of English, 1967.
- O'Hare, F. Sentence Combining: Improving Student Writing without Formal Grammar Instruction. Research Report No. 15. Urbana, Illinois: National Council of Teachers of English, 1973.
- Rizzo, B. and S. Villafare. "Spanish Influence on Written English." Journal of Basic Writing, 1 (1975), 62-72.
- Scully, M. Q. "Crisis in English Writing." The Chronicle of Higher Education, 9 (1974).
- Shaughnessy, M. P. "Basic Writing" in Teaching Composition: 10 Bibliographical Essays, ed. Gary Tate. Fort Worth: Texas Christian University Press, 1976.
- Shaughnessy, M. P. Errors and Expectations. New York: Oxford University Press, 1977.
- Stalnaker, John M. "The Construction and Results of a Twelve-Hour Test in English Composition." School and Society, 39 (1934), 218-224.

- Stewart, Murray F. "Syntactic Maturity from High School to University: A First Look." Research in the Teaching of English, 12 (1978), 37-46.
- Stewart, Murray F. "Freshman Sentence Combining: A Canadian Report." Research in the Teaching of English, 12 (1978), 257-268.
- Stewart, Murray F. and Gary H. Grobe. "Syntactic Maturity, Mechanics of Writing, and Teachers' Quality Ratings." Research in the Teaching of English, 13 (1979), 207-215.
- Sternglass, M. "Dialect Features in the Composition of Black and White College Students: The Same or Different." College Composition and Communication, 25 (1974), 259-263.
- Swan, M. Beverly. "Sentence Combining in College Composition: Interim Measures and Patterns." Research in the Teaching of English, 13 (1979), 217-224.
- Taylor, Karl Kay. "If Not Grammar, What?--Taking Remedial Writing Instruction Seriously." Diss. University of Illinois at Urbana-Champaign, 1978.
- Thornton, Toni. "An Alternative Freshman English Program for Minority Students." College Composition and Communication, 23 (1972), 365-370.
- Toledo Blade. February 20, 1974.
- Vik, Gretchen N. "What We Need to Teach in a Basic Writing Skills Course." ABCH Bulletin; Vol. 44, No. 1 (Mar., 1981): 25-28 (Reprint: UMI)..
- Weiner, Harvey. "Media Compositions: Prelude to Writing." College English. 35 (1974), 566-574.
- Weiner, Harvey. "The Single Narrative Paragraph and College Remediation." College English, 33 (1972), 660-669.
- Williams, Joseph M. "The Phenomenology of Error." College Composition and Communication, 32 (1981), 152-168.
- Zwicky, Arnold M. Mistakes. Reynoldsburg, Ohio: Advocate Publishing Group, 1980.