

A STUDY TO DETERMINE THE EFFECTIVENESS OF  
LETTER EVALUATION AS A LEARNING DEVICE  
IN BUSINESS CORRESPONDENCE COURSES

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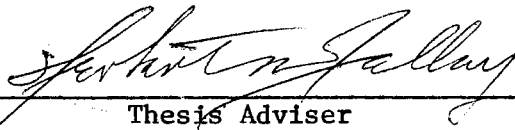
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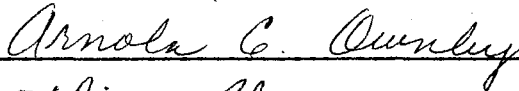
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## CHAPTER I

### THE PROBLEM

#### Introduction

Ever since instruction in business correspondence began in the early 1900's, teachers of the subject have had difficulty teaching large classes because of the enormous paper-grading tasks created by larger groups. Slotnick et al. refers to the paper work in writing classes as "the blizzard of papers" and states that delayed returning of a student's paper causes him to forget "just what it was that he wrote in the first place."<sup>1</sup>

Business communication teachers are flooded by student papers because of their philosophy that students learn to write by writing. If this philosophy is true, it would follow that more frequent writing would produce higher-quality writing. This philosophy causes teachers to try to keep their communication classes relatively small so that the students' several writings can be carefully examined and evaluated.

On the other hand, courses which do not have writing as their primary concern have been increased in size until classes in excess of 100 students are not uncommon. This larger size is particularly prevalent in larger universities. Although most professors would prefer to teach smaller classes, economic pressures have forced the higher student-teacher ratio upon them, especially since studies have shown generally that larger classes have little influence on student

learning.<sup>2</sup> If a way were found to increase the size of writing classes without reducing the instructional effectiveness, similar economic savings could result.

Ward sought to find better ways to evaluate communication students' papers. He conducted research using student peer evaluation to reduce by half the instructor's essay grading time. At the conclusion of the experiment, he found no significant difference in the writing abilities of the students whose papers had been evaluated by their peers and the students whose papers had been evaluated by the instructor.<sup>3</sup> He did not determine, however, whether the students' achievement resulted from their writing, their evaluating, or their receiving feedback on their written work.

Stoner and Anderson also suggested a non-teacher evaluation method as a result of an experiment they conducted. The students involved in that experiment were required to write short paragraphs each day during the experimental period. Stoner and Anderson found positive effects from this method so long as the students' writings were promptly graded and returned. The use of teaching assistants to grade the papers was suggested as a solution for the extensive paper-grading task caused by such a method.<sup>4</sup>

In a research study conducted to determine the most common number of writings required in business communication classes, Keyser found that "more than half (59 percent) of the professors indicated that they included fewer than six in-class letter assignments. One-fifth (20.5 percent) of the professors required from six to ten letter assignments in class."<sup>5</sup> If writing frequency really does correlate positively with writing improvement, the professors involved in

Keyser's study would be well advised to increase the number of writing assignments in their classes. If larger class size prohibits this increase, however, an alternative would be to improve the effectiveness and efficiency with which the paper grading work is handled.

Inman also studied the frequency of writing assignments in business communication classes. The number of writing assignments reported most frequently in Inman's survey were six, ten, fifteen, and twenty-four. After determining the most frequently occurring writing requirements, Inman experimented with four groups of business communication students to determine the effect which reduced numbers of writing assignments would have on student achievement. In his effort to find whether students really need numerous writing experiences to improve their communication skills, Inman found that "the students who wrote six letters exhibited approximately the same amount of improvement in writing skill as students who wrote four times as many letters, . . ."<sup>6</sup> From this research, it appears that one would be justified in reducing the number of correspondence writing assignments at least to six. Inman further concluded that "improvement in writing skill should not be attributed to quantity of writing assigned. Apparently, there are other considerations besides the number of writing assignments that relate to improvement in writing ability."<sup>7</sup> These other considerations need to be determined by additional research.

One might carry Inman's idea one step further and ask: What would happen if no writing assignments were required of students in business communication classes? Is it possible that students can learn to write by completing non-writing assignments? In this study an attempt is made to shed more light on these questions.

## Statement of the Problem

The major purpose of this study is to determine whether a letter-evaluation method is as effective as a letter-writing method when used as a learning device in a college-level business correspondence class. This study is conducted to explore the possibility that students can learn letter-writing skills either by evaluating letters which have been written by someone else or by writing practice letters by themselves. In addition, an attempt is made to determine which of the two approaches is the more effective learning technique for students of high, medium, and low academic abilities.

Specifically, the following null hypotheses are tested by this study:

1. There is no significant difference between the letter-writing abilities of two groups of college students when one group is taught by a letter-evaluation process and the other by a letter-writing process.
2. There is no significant difference in the letter-writing abilities of high-, medium-, and low-ability college students when each group is taught by either the letter-evaluation process or the letter-writing process.

## Delimitations

Only principles of business letter writing included in chapters 1-9 of Himstreet and Baty's Business Communications<sup>8</sup> are included in the study. Since the remaining chapters of Business Communications deal primarily with report writing and oral communication, they are excluded from the study.

In addition, only college level students participated in this study. As a result, any generalizations made from this study can be valid only for other college-level business correspondence instruction.

#### Limitations

The classes used in this study were selected on the basis of convenience rather than by randomization. Therefore, to counteract any contamination which might have otherwise been introduced into the study by the non-random selection process, two instructors conducted the same experiment simultaneously in different classes. Thus, it was possible for the researcher to compare the results from each group for reliability. The random assignment of the classes to the different teaching methods also helped to alleviate any problem caused by the non-random selection process. Writing about experimental research in classroom settings, West commented about the problem of random assignment of students to treatments:

In classroom research, one is nearly always faced with intact groups, classes already formed. Provided school programming processes are not ones that lead to different sorts of students in various class sections, random assignment of treatments to classes will result in random assignment of students to treatments.

In this study the experimental group was not given any actual business letter-writing assignments until the final evaluation. During the same time period, the control group wrote six writing assignments. It was impossible, however, to control totally the writing done by these study participants. During the study some students may have been required to write business letters for themselves or for their employers (in the case of those who were

employed). In addition, they may have been required to write reports for other classes in which they were enrolled. The effect of these outside writings could be neither determined nor controlled by the researcher.

#### Definition of Terms

1. Business Correspondence Course: A course of study at the college level which has as its primary emphasis the students' learning and application of accepted business letter-writing principles. In this report, business correspondence and business communication are used synonymously.

2. Letter-evaluation Method: A learning process whereby students evaluate letters which are already written rather than actually writing letters from a specified problem. In the letter-evaluation process, students are required to assign numeric values to various aspects of each letter and to justify each value given.

3. Letter-writing Method: A learning process whereby students compose business letters from problems assigned by the instructor. In this process, students are not required either to assign a numeric value to any part of their letters or to justify any action they have taken in their letters.

4. Experimental Group: The two business correspondence classes involved in this study that were taught by the letter-evaluation method.

5. Control Group: The two business correspondence classes involved in this study that were taught by the letter-writing method.

6. High-ability Students: Those students in each class who have IQ scores higher than 120 as measured by their Otis Quick-Scoring Mental Ability Test score.

7. Medium-ability Students: Those students in each class who have IQ scores not lower than 111 and not higher than 120 as measured by their Otis Quick-Scoring Mental Ability Test score.

8. Low-ability Students: Those students in each class who have IQ scores lower than 111 as measured by their Otis Quick-Scoring Mental Ability Test score.

9. Otis Quick-Scoring Mental Ability Tests--Gamma Test, Form AM: A mental measurement test which has as its primary purpose the measurement of "mental ability--thinking power or the degree of maturity of the mind."<sup>10</sup> The Gamma Test is only one test in the Otis Quick-Scoring Mental Ability Tests series. It is designed to measure the mental ability of high-school and college-age students; the other test forms are for younger students.

10. Letter-evaluation Jury: A group of three university-level faculty members, each of whom has taught business communication for four or more semesters and has an earned doctorate degree.

#### FOOTNOTES

<sup>1</sup>Henry Slotnick, John Knapp, and Rodney Bussell, "Bits, Nybbles, Bytes: A View of Electronic Grading," The Journal of Business Communication (Winter, 1971), pp. 36-37.

<sup>2</sup>Winslow Hatch, "Research in Class Size in Relationship to Effective Teaching," Junior College Journal, XXXII (1961), p. 21.

<sup>3</sup>Louis Randolph Ward, "A Comparison of Two Methods of Teaching Writing in a Course in Communication Skills" (Unpublished Doctoral dissertation, Purdue University, 1959).

<sup>4</sup>Donovan Stoner and Art Anderson, "A Method for Teaching Subskills in Composition," English Journal, LVIII (1969), pp. 252-256.

<sup>5</sup>Marshall R. Keyser, "Business Communication: What Does it Include?" The Journal of Business Communication (Summer, 1972), p. 33.

<sup>6</sup>Thomas H. Inman, "Business Correspondence: How Much Writing is Necessary?" The ABCA Bulletin (September, 1970), p. 6.

<sup>7</sup>Ibid.

<sup>8</sup>William C. Himstreet and Wayne Murlin Baty, Business Communications: Principles and Methods (4th ed., Belmont, California, 1973).

<sup>9</sup>Leonard J. West, "Experimental and Quasi-Experimental Research," National Business Education Yearbook, No. 9, ed. Calfrey C. Calhoun and Mildred Hillestad (Washington, D.C., 1971), p. 268.

<sup>10</sup>Arthur S. Otis, Manual of Directions for Gamma Test (New York, 1954), p. 1.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### Introduction

Extensive library research was conducted to reveal those articles, research reports, and other writings which showed pertinent relationship to this study. In addition, a computer search of the Educational Research Information Center (ERIC) files was conducted. Other information was also provided by several individuals with whom the researcher communicated directly.

These findings are reported in three general categories:

(1) Relationship of intelligence and academic ability to writing ability, (2) relationship of frequency of writing practice to writing improvement, and (3) letter analysis as a learning method. Since this research dealt with "how to teach" and not "what to teach," no analysis of research pertaining to business correspondence course content or to the justification of business communication as a college-level course was undertaken.

#### Relationship of Intelligence and Academic Ability to Writing Ability

In an experiment to determine the feasibility of using programmed materials in teaching written business communication to college-level students and middle-management-level industrial employees, Gabriel

determined that "no significant relationship was found among student learners in terms of high or low intellectual ability and achievement."<sup>1</sup> Programed instruction seemed to be equally effective for both high and low intellectual ability groups. Gabriel went on to say, however, that "a significant relationship for predicting performance in achievement was found for the low verbal ability learners; no significant relationship was found for high verbal ability learners and achievement."<sup>2</sup> He recommended that more research be completed to determine "those factors in programs which do not elicit the best performance by . . . high and low intellectual learners."<sup>3</sup>

In 1958, an informal experiment was conducted at Lincoln-Sudbury High School in Sudbury, Massachusetts, wherein two eleventh-grade classes were taught composition skills by two different methods. One group wrote the equivalent of a theme a week, while the other wrote practically no assignments during the entire year but increased their in- and out-of-class reading. At the end of the year, both groups had improved in their writing ability, but the reading group which had done very little writing showed greatest improvement.<sup>4</sup>

Two years later a more comprehensive experiment was conducted by teachers of this same school. In the second study, eight groups of students were involved, two each from grades nine through twelve. One group from each grade was designated as a "writing" class, and this class wrote the equivalent of a theme a week which was corrected by the instructor and revised or re-written by the student. The other group, classified as the "reading" group, wrote a theme every third week and, in addition, spent one class period a week reading books of their own selection. Each student was classified as high, middle, or low according to his test score on the STEP Writing Test.

The following generalizations were made by Heys about the different ability groups involved in the experiment:

Frequent writing practice probably yields greater dividends with low groups than with middle or high groups.

Frequent writing practice with low groups probably yields greater dividends within the area of content and organization than within the area of mechanics or of diction and rhetoric.<sup>5</sup>

In a college freshman composition course, Currie compared the writings of a group of students who had superior writing skills with the writings of a group of students who had serious deficiencies in their writing abilities. Currie found that "of the 29 factors investigated, those having the greatest effect on competency in writing are, in the order named, verbal aptitude or reading ability, and mental ability or general learning ability, . . ."<sup>6</sup> In considering the findings of this study, one must remember that only students of extremely high or extremely low writing abilities were examined and that no students of the middle ability range were included.

Clevenger studied several characteristics of a group of students involved in a college-level business report writing class and reached a conclusion similar to one mentioned in the Currie study. "The highest and only marked relationship in the study was the relationship between the score attained on the ACT verbal and grade earned in the course. . . ."<sup>7</sup> Although the validity of a student's course grade may be questioned, it is interesting to note the similarity of the Currie and the Clevenger findings.

In a study conducted by Arnold, tenth grade students' ability levels were studied in four experimental composition classes. Frequency of writing and intensity of evaluation were varied among the different

student groups. Arnold found no significant relationships between ability and the other two independent variables studied in the experiment.<sup>8</sup>

Fee compared tenth grade students' knowledge of "functional" grammar, reading skill, general mental ability, and cultural background with their ability to recognize and correct errors in sentences and to write letters and compositions. Fee found very low correlation between grammar abilities and accuracy of usage in free writing and that the students who used the greatest accuracy in their free writing were those with the highest reading skill, the most general mental ability, and the most favorable cultural background. Fee concluded that the teaching of functional grammar had little positive effect on students' subsequent writing.<sup>9</sup>

Griffin also experimented with students of different mental abilities. The hypothesis studied was that diagraming was an effective method of teaching ninth-grade students certain phases of language, composition, usage, capitalization, grammar information, and sentence structure. After the experiment, the students in the control group and the experimental group were compared to determine the effectiveness of the diagraming exercises. At the .05 level of confidence, no significant differences were found among the low-, medium-, and high-ability groups.<sup>10</sup>

Ivarie studied programmed instruction as a method of teaching grammar, punctuation, and capitalization in college-level business communication courses. Ivarie divided his study participants into just two ability groups, low and high. He found that, according to students' scores on the California Language Test, low-ability students

learned significantly more than their high-ability peers regardless of the method used. According to Ivarie's criterion test, however, no significant difference was found between the low- and high-ability groups.<sup>11</sup>

In a study conducted by White, the effectiveness of structural linguistics was compared with the effectiveness of prescriptive grammar or the absence of grammar instruction. At the beginning of the study, which involved only seventh-grade students, White administered the Otis Mental Maturity Test to all study participants. Comparing the students' intelligence scores and their writing improvement during the study, White found very low correlation. In addition, he found that writing and essay pretests also had very low correlation with the students' terminal achievement.<sup>12</sup>

Several researchers have recommended that additional research be conducted to determine the part which intelligence plays in students' learning writing skills. Arnold recommended further study of the factors which affect students of various ability levels.<sup>13</sup> Inman stated that "there should be research studies conducted concerning the effect of writing practice upon students' performance considering differences in ability."<sup>14</sup> Knapper also felt that "additional study could well be devoted to exploring the relationship between writing and . . . intelligence."<sup>15</sup>

Relationship of Frequency of Writing Practice  
to Writing Improvement

Proponents of Frequent Writing as a  
Writing Improvement Method

Educators who feel that frequent writing practice is necessary in the development of writing skills are numerous. Not only are there articles to support this point of view, but there are also several experiments which seem to point in this same direction. A few quotations from articles supporting this idea as well as a number of studies which add concurrence are presented in this section.

Correll wrote about the problem of transferring knowledge of good writing techniques to the actual writing itself. Concerning this transfer he stated: ". . . there is, I am afraid, no easy way to teach a student to write. He learns to write only by writing and reading."<sup>16</sup>

After examining various methods of teaching writing, Blagdon concluded that "perhaps the best summary I can give of teaching students how to write is to give them poise and then make them write, write, write."<sup>17</sup> Stern also wrestled with the problem of transferring knowledge of grammar to the ability to write. He felt that writing analysis activities were fruitless since writing is a synthetic skill, one that cannot be learned by analysis. In quoting the late Wendell Johnson, Stern stated that "learning to write by analyzing other writing is 'much like trying to learn to bake a cake by eating one.'"<sup>18</sup>

Another advocate of frequent writing is Conant who wrote the widely-read The American High School Today and The Comprehensive High School.

Conant felt that four years of English should be required of all high-school students and that half of the students' time in English should be devoted to composition.

The time devoted to English composition during the four years should occupy about half the total time devoted to the study of English. Each student should be required to write an average of one theme a week. Themes should be corrected by the teacher. In order that teachers of English have adequate time for handling these themes, no English teacher should be responsible for more than one hundred pupils.<sup>19</sup>

In a study conducted at the University of Alberta, Buxton experimented with several factors in addition to the frequency-of-writing concept. His control group performed no writing exercises during the entire study. The two experimental groups, however, wrote an essay each week for sixteen weeks. The students in experimental group "W" received a short critical comment on each of their themes; however, no opportunity for discussion or revision was given. The experimental group "R" received more extensive comments on their papers, and they were given class time for discussion and revision of their essays. At the conclusion of the study, each group completed the following tests: Mechanics of Expression Test, Effectiveness of Expression Test, and a written essay test.

No significant difference was found among the groups' scores on the Mechanics of Expression Test. On the Effectiveness of Expression Test, however, the two experimental groups performed significantly better than the control group which did no writing during the experiment. On the written essay, experimental group "R" performed significantly better than either of the other groups. The researcher concluded that detailed criticism and revision of students' writings can produce more learning than the no-writing and the short-critical-comment methods.<sup>20</sup>

In an experiment with high school students, Maize taught his control group with a grammar workbook-drill method. In addition, this group wrote fourteen themes during the semester. The experimental group used no book, but was required to write forty-two themes during the study. These themes were evaluated by members of the class, and recognition was given for the best themes written.

Maize stated that "the experimental class showed overwhelming evidence of superiority over the control group in language use by the end of the semester," and he claimed that his study proved that "the only way to learn to write is to write."<sup>21</sup> With the numerous independent variables involved in his experimental design, however, it is impossible to attempt any valid generalization of this sort. The effect of the peer evaluations, the content of the writings, the content of the book used by the control group, the different evaluation methods, and all the other variables would have to be studied in more detail before one could determine the factors which caused the greater improvement in the experimental group. In fact, one source gave the following suggestion:

The possibility also is strong . . . that the superiority of the experimental group resulted primarily from the inferiority of the control group, which seems to have been taught a course which many people would now consider outmoded.<sup>22</sup>

A study conducted by Peterson compared the effectiveness of three different methods in teaching writing to seventh- and ninth-grade students. One group studied only literature; one, literature with grammar; and one, literature with composition. At the seventh-grade level, grammar with literature was significantly more effective, while at the ninth-grade level, literature and literature with composition were more effective than literature with grammar. Peterson concluded,



however, that at both grade levels, the teaching of effective composition principles coupled with frequent student writing practice was an effective teaching method.<sup>23</sup>

McQueen et al. studied the relationship between the amount of theme and essay writing required in five high schools and the College English Proficiency of their respective graduates. Although the students did not differ significantly in their college aptitude, one clear relationship did emerge. When the amount of writing required in high school was considered in the analysis, the group with the better English skills was also the group which had the greatest writing requirements in high school. The other schools also tended to produce a positive relationship between amount of writing required and the graduates' writing skills.<sup>24</sup>

Another study was conducted to determine an effective way to teach grammar and mechanics of writing. In this study, Culbert compared frequent theme writing with a combination of limited theme writing, handbook studying, and essay discussion. The experimental group (only 23 students) wrote a theme a day for an entire semester. Although they received no formal instruction on theme writing during this time, they did receive directive feedback on each of their graded themes. The control groups wrote four in-class themes and four out-of-class themes. The remainder of the time they studied and read about writing techniques in addition to receiving formal instruction on writing techniques.

At the end of the semester, Culbert tested the study participants to determine the extent of their writing improvement. He found that the students in the experimental group improved more in their writing skills, but the difference between the groups was not significant

statistically. Culbert concluded that things like "mechanics, levels of usage, diction, and acceptable modes of expression . . . can be taught at least as effectively by having students do nothing but write themes and receive comments on and reactions to those themes."<sup>25</sup>

In a study more closely related to business writing, Gerfen surveyed the current practices in the teaching of college-level business report writing classes in the United States. Following the study, Gerfen recommended that in business report writing courses the students should be given adequate opportunities for writing practice. Seven reports in a semester was the recommended minimum for a course of this type.<sup>26</sup>

Brown was also in favor of frequent writing in report writing classes. In his description of his plan for a course in report writing, he stated that "revision rarely hurts, if the teacher can take it. It is perhaps an inefficient procedure in an inefficient process, but it is what we imply when we accept the truism--one learns to write by writing."<sup>27</sup> Brown went on to say, however, that a teacher is essential in the writing improvement process since "one may write without learning to write; assignments cast upon the waters of otherwise unguided students will return in ninety-nine-fold--all equally skimpy, dull, and inept."<sup>28</sup>

A study completed in 1948 by Lokke and Wykoffe has been reported many times in literature related to writing frequency. In this study, the researchers wanted to determine the effect of double writing in a composition class. The experimental group wrote two themes a week compared with the single theme written each week written by the control group. At the conclusion of the study the authors suggested that double

writing could reduce student failures by 66 percent and that improvement, judged by the final grade, could be improved by 60 percent. Lokke and Wykoffe also found that 40 percent of their students in the experimental group reached their limit of achievement by writing 12 to 15 themes.<sup>29</sup>

Although the Lokke and Wykoffe study is rather well publicized, it does have some severe methodological problems. Only 20 students were included in each group, and the results of the study were computed only by simple percentage calculations. No statistical analysis was made of the data produced by the study. These two limitations of the study would suggest that the reliability and validity of the findings are highly questionable.

#### Opponents of Frequent Writing as a Writing Improvement Method

One of the earlier studies involving writing frequency was conducted by Dressel et al. Entering college freshman students were given a pretest to determine their theme-writing abilities. Then throughout their freshman year in college, their non-English writing assignments were counted to determine whether those students who wrote more assignments during their freshman year improved more than those who wrote less frequently during the same period. At the end of the year of college, the students were again given a theme-writing assignment, and the pretest and post-test scores were compared.

The researchers found that "the average final theme grade for the group with the most writing experience did not differ significantly from the average grade earned by those who were required to do little

writing in their basic courses."<sup>30</sup> From this research the writers concluded that the hypothesis stating that "mere practice in writing without attention to writing quality will improve writing skills was not supported in this study."<sup>31</sup>

Wolf also studied the effects of writing frequency upon students' writing improvement in college. In Wolf's study three different groups were involved: One wrote 20 assignments, one wrote 8 assignments, and one wrote only 4 assignments. The students were tested both on their knowledge of language mechanics and on their ability to write. The statistical analysis of the study data did not support the hypothesis that more frequent writing would result in greater writing improvement. The analysis did show, however, "a significant correlation between mechanical accuracy and the ability to write well."<sup>32</sup>

Christiansen introduced a reading variable into his writing frequency study. His experimental group wrote 24 themes during the semester. The control group, on the other hand, wrote only 8 themes but spent their extra free time reading and analyzing essays in a freshman reader. The results of this study showed that, although both groups did improve, there was no statistically significant difference between the two groups' improvement.<sup>33</sup>

A study conducted on the high-school level by Heys used a method similar to that used by Christiansen. Heys' control group wrote regularly one theme each week throughout the year, revising each paper on the basis of careful evaluation by the instructor. The students in the experimental group wrote only three themes during the entire year. Their extra time was spent in reading.

At the end of the school year both groups were given the STEP Essay Test to determine the amount of improvement experienced during the year. The test showed that both groups did improve although absolute improvement was very small. In addition, the test results showed no significant difference in the improvement of the two groups. The reading and limited-writing method proved to be as effective as the theme-a-week method, although neither was as effective as would be desired.<sup>34</sup>

McColly and Remstad conducted a similar study in an eighth-grade setting. The experimental group in this study wrote four times as many themes during the experiment as did the control group. During the times the experimental students were writing the extra themes, the control students would engage in extra reading. Following the experimental treatment, both groups were tested for actual writing ability, and final examination themes were evaluated. No differences in the terminal abilities of the two groups were found.<sup>35</sup>

Sutton and Allen experimented for ten weeks with five different groups of high school students to determine the effectiveness of different learning methods. All the students involved in the study wrote six pretest themes and six post-test themes, the themes being written on separate days. Group One wrote their six pretest themes and six post-test themes on twelve consecutive days. There was no treatment between pretest and post-test for this group. Group Two devoted all their time between the pretests and post-tests to the study of literature. No writing was required of these students during the experiment. Group Three spent their time reading and rating their peers' writing samples, but no actual writing was required of this group. The students in Group Four wrote a theme a week, had their papers critiqued by their

peers in Group Three, and rewrote the critiqued papers. In Group Five, the students wrote a theme a week, had their papers critiqued by a faculty member, and rewrote their critiqued papers.

During the entire experiment no formal in-class instruction was given to any of the five groups. In other words, what the students learned, they learned without traditional classroom instruction. The findings of the study showed that there was a decline in writing performance in every section. Not only were the methods ineffective, they were actually counter-productive. Many speculations were given to explain the reasons for the decline, but no valid reason could be determined.<sup>36</sup>

Elkin conducted a somewhat similar study with eighth-grade students. The three methods employed in this study, however, were intensive reading, intensive writing, and a combination of reading and writing. No significant differences were noted in the achievement of the three groups, although the intensive reading and intensive writing groups did improve slightly more than the combination of reading and writing group.<sup>37</sup>

Arnold experimented with four groups of tenth-grade students in an attempt to determine the effectiveness of intensity of evaluation and frequency of writing in composition classes. One group wrote infrequently and received only moderate evaluation. The second group wrote frequently, and teachers evaluated moderately. Group Three wrote infrequently as did Group One, but they received intensive evaluation on the writings. Group Four wrote frequently and received intensive evaluation on all writings.

The statistical analysis of the data obtained from this study revealed no significant differences in the writing improvement experienced by any of the four groups. Arnold concluded that neither frequency of writing nor intensity of teacher evaluation as manipulated by this study could be considered as an effective writing improvement device.<sup>38</sup>

A study directly related to business communication was conducted by Inman. In Inman's study four groups of university students were given the same instruction with the exception of one independent variable--the number of writing assignments required. One group wrote 24 letters during the semester, one group wrote 15, another group wrote 10, and the last group wrote only 6 letters during the study.

At the conclusion of the study the students were given two objective tests and a letter-writing test to determine the amount of improvement experienced during the semester. The results of these tests were then analyzed to determine the achievement differences among the four groups. This analysis showed no significant differences in the terminal achievement of any of the four groups. Inman offered the following observations about his research:

Since the students who wrote six letters exhibited approximately the same amount of improvement in writing skill as students who wrote four times as many letters, improvement in writing skill should not be attributed to quantity of writing assigned. Apparently, there are other considerations besides the number of writing assignments that relate to improvement in writing ability. For example, the kind of classroom teaching presented by the instructor as well as the kind and amount of reading may affect improvement in writing skill.

The results of this study emphasize the need for more research in the area of business writing. Teachers and administrators have long assumed that if a student were to practice writing and have his paper carefully corrected,

he would improve in writing skill. Since there is evidence which places the security of this assumption in question, the field of writing invites further exploration. Not until more is actually known concerning the total writing process will there be real progress toward effectiveness in teaching written composition.

#### Letter Analysis as a Learning Method

Several teachers of writing have experimented with letter analysis as a learning device in writing classes. In addition, at least two researchers have suggested the value of studying letter evaluation and its impact on students' writing.

Inman recommended that students "might be required to read business letters of all types, both good and poor examples, with an opportunity to discuss and to analyze letters in class."<sup>40</sup> Rainey found that business executives feel that analysis of letters, reports, and proposals is an important part of business communication courses.<sup>41</sup>

In an experiment conducted at Michigan State University, Ward studied the achievement of two groups of students who were involved in communication skills classes. In the traditional class, the instructor marked and graded each paper, pointed out errors to the students, and returned the papers to the students for revision. In the experimental class, however, the instructor gave the themes only a quick scanning and recorded a grade based on that scanning on a different piece of paper. The themes were then given to groups of four students for a peer evaluation. The written peer evaluations, the instructor's grade, and the theme were then returned to the writer for review and revision.



An analysis of the objective test and written theme test completed by the participants of this study showed no significant difference in the writing improvement of the experimental and control groups.<sup>42</sup>

Graham used peer evaluation in his business communication classes and praised this method for its flexibility and its ability to produce increased student motivation. He stated that the teacher could tell by looking at the rater's evaluation whether the rater understood the principles of letter writing. The students also got to see letter writing from a point of view different from just reading the text or writing a letter for the instructor. Graham stated that he felt his claims were valid although he had no empirical evidence to support his position. "Even though the foregoing claims can be supported by formal classroom surveys and personal observations, pure scientific evidence to support the effectiveness of such a procedure is perhaps as elusive as the proverbial 'greased pig.'"<sup>43</sup>

A rather novel study was conducted by Scannell and Haugh to determine the effectiveness of weekly multiple choice tests as teaching devices in high-school composition classes. In this research study the experimental students were given multiple choice tests in place of the usual writing assignments. After the students had been taught certain concepts, they were given themes representative of what tenth-grade students might write. Along with the themes were multiple-choice questions concerning such things as punctuation, capitalization, usage, and organization. The questions were organized so that the students were taken through a process similar to a typical initial draft revision. The students marked their answers on self-scoring answer sheets; thus, they received immediate feedback to their responses.

The control group in this study completed the usual number of writing assignments but did not engage in the composition evaluation process. At the end of the experiment, both groups were evaluated on a standardized test of composition and an actual written theme. No significant differences were noted in the groups' achievement. Scannell and Haugh offered the following conclusion to their study:

Since the use of the multiple-choice teaching tests requires much less time than theme writing on the part of the instructor and students, the method saves a relatively large amount of time that can be used in more effective ways.<sup>44</sup>

#### Summary

Research concerning intelligence, writing frequency, and writing evaluation as they relate to improvement in writing were examined in this chapter. Considerable disagreement was found among different researchers and writers in these areas.

Concerning intelligence and its effect on a person's ability to write effectively, Heys, Currie, Fee, Gabriel, and Ivarie found some positive correlation. The studies reported by Heys, Gabriel, and Ivarie, however, found correlations only with their low-ability groups. Arnold, Griffin, White, and Clevenger found no correlation between a student's intelligence and his ability to write well. Until more research is completed to show the effect of intelligence and other mental factors on writing ability, no valid conclusions can be made.

The effect of writing frequency on writing improvement produced similar mixed findings. While Buxton, Maize, Peterson, McQueen et al., and Lokke and Wykoffe gave empirical evidence to support the idea that frequent writing does produce greater improvement than does limited or

no writing, Heys, Wolf, Christiansen, McColly and Remstad, Sutton and Allen, Elkin, Arnold, Inman, and Dressel et al. gave evidence to refute the argument. Apparently, variables other than writing frequency have affected at least some of these studies.

Relatively little research has been conducted to determine whether students' evaluation of writing is effective as a learning device in composition and other writing classes. Scannell and Haugh coupled theme evaluation with multiple-choice tests and found this method to be as effective as the traditional theme-writing approach. Ward used peer evaluation in a study to determine a quicker way to grade students' writings. He found no decrease in the achievement experienced by those students evaluated by this method. Graham also used peer evaluation in his classes; however, he offered no statistical proof of the value of this method. Additional experimentation with peer evaluation and other student evaluation methods will undoubtedly offer additional useful information.

## FOOTNOTES

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<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Frank Heys, Jr., "The Theme-a-Week Assumption: A Report of an Experiment," The English Journal, LI (1962), p. 322.

<sup>5</sup>Ibid.

<sup>6</sup>Caroline Currie, "The Relationship of Certain Selected Factors to Achievement in Freshman Composition" (Unpublished doctoral dissertation, Northwestern University, 1957).

<sup>7</sup>Walter Schobal Clevenger, "A Study to Determine the Relationship Between Certain Academic Factors and the Grade Earned in B.E. 347 at Northern Illinois University" (Unpublished master's thesis, Northern Illinois University, 1968).

<sup>8</sup>Lois V. Arnold, "Effects of Frequency of Writing and Intensity of Teacher Evaluation Upon Performance in Written Composition of Tenth Grade Students" (Unpublished doctoral dissertation, The Florida State University, 1963), p. 64.

<sup>9</sup>Mary Fee, "Functional Grammar and its Relation to Correct English Usage" (Unpublished Ph.D. thesis, University of Kansas, 1937).

<sup>10</sup>Marguerite J. Griffin, "The Achievement Value of Diagraming as a Student Experience in Ninth Grade English Grammar in Relation to I.Q. and Anxiety" (Unpublished M.S. thesis, Brigham Young University, 1958).

<sup>11</sup>Theodore William Ivarie, Jr., "An Experiment to Determine the Effectiveness of Teaching Grammar, Punctuation, and Capitalization by Programed Instruction to Collegiate Business Communications Students" (Unpublished Ed.D. dissertation, Arizona State University, 1968).

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- <sup>21</sup> Ray C. Maize, "A Theme A Day," National Education Association Journal, XXXII (1953), pp. 335-36.
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- <sup>23</sup> Erling Winston Peterson, "A Comparison of Three Methods of Teaching Composition to Seventh and Ninth Graders" (Unpublished Ed.D. dissertation, Northern Illinois University, 1969).
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<sup>27</sup> James M. Brown, "My Plan for the Course in Report Writing," The ABWA Bulletin (March, 1963), p. 14.

<sup>28</sup> Ibid.

<sup>29</sup> Virgil L. Lokke and George S. Wykoffe, "Double Writing in Freshman Composition: Experiment," School and Society, LXIII (1948), pp. 437-39.

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<sup>31</sup> Ibid.

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<sup>35</sup> William McColly and Robert Remstad, "Comparative Effectiveness of Composition Skills Learning Activities in the Secondary School" (Cooperative Research Project Number 1528, U.S. Department of Health, Education, and Welfare, 1963).

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<sup>37</sup> Daisybelle Elkin, "An Experimental Investigation of Intensive Reading and Intensive Writing to Improve Composition at the Eighth Grade Level" (Unpublished Ph.D. dissertation, American University, 1968).

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<sup>39</sup> Inman, "Business Correspondence: How Much Writing is Necessary?" The ABCA Bulletin (September, 1970), p. 6.

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<sup>41</sup>Bill G. Rainey, "Professors and Executives Appraise Business Communication Education," The Journal of Business Communication, IX (1972), pp. 19-23.

<sup>42</sup>Louis Randolph Ward, "A Comparison of Two Methods of Teaching Writing in a Course in Communication Skills" (Unpublished doctoral dissertation, Purdue University, 1959).

<sup>43</sup>Gerald H. Graham, "Letter Analysis . . . A Technique to Improve Business Letter Writing," Journal of Business Education, XLIV (1968), pp. 103-104.

<sup>44</sup>Dale P. Scannel and Oscar M. Haugh, "Teaching Composition Skills With Weekly Multiple Choice Tests in Lieu of Theme Writing" (Cooperative Research Project Number 6-8134, U.S. Department of Health, Education, and Welfare, 1968), p. 25.

## CHAPTER III

### METHODOLOGY

#### Environmental Factors

This research study was conducted at Brigham Young University, a private university operated by the Church of Jesus Christ of Latter-day Saints, where approximately 95 percent of the university's 25,000 students were members of that church. Brigham Young University, located in Provo, Utah, draws students from every state in the nation and from approximately 70 foreign countries. The student population, therefore, was very heterogeneous except for the church membership factor which gave most of the students similar life ideals and standards.

#### Selection of Study Participants

Two instructors were involved in this study; one was the researcher, and the other, a cooperating faculty member. Both instructors were experienced in the teaching of business communication, each having taught several semesters of business communication prior to the experiment. During the experiment, each instructor taught one experimental group and one control group.

Three university professors were selected by the researcher to act as the letter-evaluation jury. To be assigned as a jury member, a person must have had at least four semesters of college-level business



communication teaching experience and must have earned a doctorate degree. Two of the jurists were selected from the Business Education Department at Brigham Young University, and one was chosen from the Business Education Department of Northern Illinois University. All three easily met the minimum requirements for membership on the jury. The major responsibility of the letter-evaluation jury was to evaluate the students' final examination writings.

The students who participated in this study were those who enrolled in the four sections of Business Education 220 (Business Communication) offered at Brigham Young University during the fall semester of 1973. Since four separate sections had to be offered at different times to allow for flexibility in scheduling, there was no opportunity for random assignment of students to experimental or control groups. As a result, students were accepted into the different sections of business communication according to the regular registration procedures at Brigham Young University.

By using a table of random numbers, the researcher selected sections one and two as control sections and sections three and four as experimental sections. The researcher taught sections two and four, and the cooperating instructor taught sections one and three. Section one was taught on Mondays and Wednesdays from 8:30-10:00 a.m.; section two, on Tuesdays and Thursdays from 11:00-12:30; section three, on Tuesdays and Thursdays from 1:30-2:30; and section four, on Tuesdays and Thursdays from 2:30-4:00.

The total number enrolled in section one was 36; in section two, 35; in section three, 31; and in section four, 37. Table I presents other characteristics of the classes used in this study.

TABLE I  
 SELECTED DEMOGRAPHIC CHARACTERISTICS OF  
 EXPERIMENTAL AND CONTROL GROUPS

Characteristics	Section			
	1	2	3	4
No. Freshman	6	2	4	12
No. Sophomores	19	19	16	17
No. Juniors	9	12	10	6
No. Seniors	2	2	1	2
No. Business Education Majors	30	33	26	33
No. Non-Business Education Majors	6	2	5	4
Male	4	7	2	2
Female	32	28	29	35

Because of attrition or excessive absence, i.e., more than three absences, four students in section one, one student in section two, four students in section three, and one student in section four were not included in the final analysis of the study.

#### Selection of Ability Groups

To obtain the data necessary for an analysis of the effectiveness of the two teaching methods in relation to participants' mental ability,

students were given the Otis Quick-Scoring Mental Ability Test<sup>1</sup> during the second day of the experiment. In each of the four classes the test was administered by the regular instructor who read and followed the directions outlined in the manual which accompanies the Otis test.

The Otis test was designed to be administered in a group setting such as a classroom. In addition, the time required to administer the test fits well within the limits of a typical class period.

The students' Otis tests were hand scored, and the intelligence quotient for each student was computed. A student's name was placed in the low-ability group if his IQ were equal to or lower than 110. If his IQ were between 111 and 120, his name was listed in the medium-ability group. Students whose scores were equal to or higher than 121 were listed in the high-ability group. These limits were selected because the range for each group was approximately equal and because these boundaries encompassed a sufficient number of scores for the researcher to conduct meaningful analyses of the IQ groups. Table II summarizes the results of the intelligence test.

The ability grouping was used only for statistical comparison; no students were aware of the formation of ability groups. In general, IQ scores were not mentioned to the students. Approximately ten students, however, asked how they had done on the Otis test. Those few students were permitted to see their test scores.

Since the norms of the Otis test show a mean of 100 when administered to a general population, one must remember that the low- and medium-ability groups in this study are not similar in intelligence to low- and medium-ability groups in a general population. The findings of this study relating to the low-, medium-, and high-ability groups can,

however, be applied to other college students whose Otis IQ's fall within the ranges selected for this study.

TABLE II  
RESULTS OF OTIS QUICK-SCORING  
MENTAL ABILITY TEST

IQ Group	Section			
	1	2	3	4
High (121+)*	9	8	9	7
Medium (111-120)	17	18	11	14
Low (110-)	6***	8**	7***	15

\*No scores exceeded 130.

\*\*Two scores fell in the 90-100 range.

\*\*\*Three scores fell in the 90-100 range.

In addition to the comparison of ability group and teaching method, the students' individual IQ scores were compared with their letter-writing abilities to determine the amount of correlation between intelligence and ability to write effective business letters. The individual IQ scores were also used as a covariate in one of the post-experiment analyses.

### Design of Letter-Evaluation Form

The letter-evaluation form used in this experiment was designed by the researcher. First, a list of important letter-writing concepts presented in Himstreet and Baty's Business Communications<sup>2</sup> was made. Since the number of items on this list far exceeded the amount of areas desired on the evaluation form, those items which were closely related were grouped under broader headings. This grouping resulted in the formulation of nine major areas to which was added a tenth item, "overall effectiveness of the letter." The addition of this tenth column gave an opportunity for a rater to give an overall impression rating to any letter being evaluated.

A seven-point scale similar to that used in semantic differential questionnaires was then designed for the letter-evaluation form. A scale with this many alternatives was desired so that maximum discrimination would be possible in each evaluation. This seven-point scale made a total of 70 point possible on any given letter evaluation.

The resulting letter-evaluation form was then used on a trial basis in a basic communication class which was being taught by the researcher. Students in this class engaged in evaluation of their peers' writings and in evaluation of other writings given to them by the researcher. Following this pilot trial of the evaluation form, the students suggested several minor changes which were then incorporated into the final revision of the evaluation form. The form was then submitted to the researcher's graduate committee for final approval. The letter-evaluation form is shown in Appendix A.

During the experiment, the letter-evaluation form was used by the students in the experimental group in their evaluation exercises,

by the instructors as they evaluated the control group's writings, and by the jury members as they evaluated the final writings of all the study participants. In addition, the members of the control group were given a copy of the form as a guide by which they could evaluate their own letters.

#### Treatment of Control and Experimental Groups

During the first four weeks of the experiment, the control and experimental groups were taught as similarly as possible. To maintain rigid controls on teaching and learning methods, the course text was followed very closely throughout the study. In-class lectures, study groups, objective quizzes, and other activities were closely matched between the two instructors so that the impact of different teachers would be minimized.

At the beginning of week five, however, the independent variables were introduced in both groups. Between week five and week eight, the control group was given out-of-class writing assignments--two pleasant letters, two unpleasant letters and two collection letters. Each letter was graded by the regular class instructor who completed the evaluation on one of the letter-evaluation forms designed for this study. The letters were returned to the students who wrote them within one week of their submission to the instructors.

On the days that the control classes were given a letter-writing assignment, the students in the experimental classes were given a letter written by the researcher. These letters given to the experimental classes were written for the same six problems given to the control group. Consequently, during the study the experimental group

received two pleasant letter, two unpleasant letters, and two collection letters. Each letter exhibited writing weaknesses which the students were expected to notice as they evaluated the letter. These six letters had been evaluated previously by the researcher, the cooperating instructor, and the three jury members so that the experimental group could compare their evaluations with the evaluations given by the jury and the instructors. The six letters and evaluations are presented in Appendix B.

As each letter-evaluation assignment was given to the experimental group, the instructor told the students to evaluate the letter according to the letter-evaluation form used in this study. In addition, the students were required to justify the ten ratings they gave each letter.

In the following class period the instructors showed an overhead transparency of the average of the ratings of the jury members and instructors. The transparency also included the justification for each of the ten ratings. The students compared the ratings they gave each letter, and compared their justifications with the justifications of the jury members and instructors. A student's score for each evaluation was then computed by using a rank-differential technique. With this technique, the student was penalized one point for each ordinal unit of disagreement which existed between his evaluation score and the "correct" score; i.e., that value assigned by the researcher, cooperating instructor, and jury. Hence, the greater the disagreement, the higher the penalty points. If, for example, the correct score on one item of the letter-evaluation form was six and the student assigned it a score of four, his penalty was two. If his score agreed with the score of six, however, he received no penalty points.

The scores earned on the control group's writing assignments and the experimental group's letter evaluations were recorded; however, the experimental group's penalty scores were not used for grading purposes because of their lack of validity. The evaluation exercises were used as learning exercises rather than as evaluations of student learning. In addition, since the averages of the ratings given by the instructors and jurors were used as the correct scores, unusually high or low ratings in certain evaluation areas would tend to pull the group average slightly away from the value assigned by the majority of the raters. Consequently, there was only one "7" and no "1's" listed as correct ratings in the six letters.

This averaging process may have adversely affected the students' ability to match accurately the correct scores with their own evaluations. Both instructors noticed considerable anxiety in the experimental classes as some students continually showed wide disagreement with the correct scores. During the experiment both instructors had to give frequent reassurance to the experimental students that even though the correct scores and the students' scores did not always match, the students could still learn effective letter-writing techniques from the evaluation method. Future uses of the letter-evaluation learning method might be improved by finding a better way to determine the correct scores.

During the entire experiment, the only writing engaged in was that done by the control group as they wrote their six out-of-class letter assignments and that performed by the experimental group as they justified their evaluations of the six letter-evaluation assignments. The first actual letter writing completed by the experimental



group was that performed during the final assessment. Because of this experimental design, no writing pretest was administered to the study participants. Such a test would have introduced a compounding variable in the letter-evaluation group, the group which completed no letter-writing assignments during the experiment.

#### Evaluation of Students' Achievement

The researcher next sought to determine the most effective way to evaluate the students' writing abilities at the conclusion of the experiment. Braddock et al. have given the following suggestion for evaluating student writing:

If a teacher is interested in diagnosing the strength and weaknesses in various aspects of the composition of individual students, he will do best to base his diagnosis on an examination of their actual writing . . . .<sup>3</sup>

In another article concerning effective ways of evaluating students' writing, it was suggested that educational research shows objective tests to be "of little help, since they are not measures of writing. Essay tests are the only valid measure, . . ."<sup>4</sup>

Many of the research projects dealing with evaluation of student compositions have used both objective and actual writing tests to determine the abilities of the study participants. Most of these studies have shown that good performance on an objective test does not guarantee equivalent performance on an actual writing examination. In fact, this limited transfer from "knowledge" to "application" has been the basic reason for most of the research conducted in writing classes.

One study conducted at Western Michigan University did show some interesting findings about business communication students' objective writing tests and actual writing tests. Each student in the study was evaluated on nine writing assignments and six objective tests. From this study, Philp made the following conclusion:

Students of Business Communications at Western Michigan University do not score significantly differently when evaluated by objective testing and graded demonstrated business writing ability.

Although objective tests are much easier than writing tests to score, the evidence in composition-related studies showing limited relationship between actual writing tests and objective tests suggested to this researcher the security of evaluating students' actual writing, at least until additional research suggests that objective tests in business communication are completely valid measures of students' writing abilities. Consequently, the students involved in this study were evaluated by actual writing tests.

Since during the experiment the students had either written or evaluated two letters of the pleasant, unpleasant, and collection varieties, the final assessment consisted of writing one pleasant, one unpleasant, and one collection letter. The three problems were chosen by the researcher and the cooperating instructor. These problems are included in Appendix C.

On the first final examination day, the students wrote the collection letter; and on the second final examination day they wrote both the pleasant and the unpleasant letter. Following the three writings, the students' handwritten letters were given to two sections of advanced typewriting students at Brigham Young University for typing.

The typewriting students were told to type the letters as they received them, leaving in all spelling, grammar, and other mechanical errors. The letters were typed in triplicate to provide one copy for each jury member. In order to conceal the identity of the writers of the letters, each letter was assigned a code number rather than having the writer's name typed on it.

The letters were then arranged so that letters from each class were evenly distributed throughout each set of letters. This action was taken to insure that any change of attitude occurring during each juror's reading of the letters would not affect one group more than it would another.

The letters and a similar number of letter-evaluation forms were then sent to the three jury members. In a memo which accompanied the letters and evaluation forms, the jury members were encouraged to evaluate each set of letters in as few sittings as possible to reduce the amount of mental variance between the first and last letters. In addition, since the letters had been typewritten to minimize the effect of students' good or poor handwriting on jury evaluations, the jury members were told to disregard appearance in their evaluations. Consequently, the jury members evaluated the letters only on items 2-10 on the letter-evaluation form.

As the jury members returned the evaluated letters, the score of each letter was recorded. Since each student wrote three different letters, and since each letter was evaluated by three different judges, nine different writing scores were accumulated for each student. The three scores for each letter were then averaged, and the three letter averages were combined to form an overall average.

## Analysis of Data

Throughout the study, detailed records were kept on each participating student so that accurate post-experiment analyses could be made. At the beginning of the study each student was given an Otis intelligence test. The students' intelligence quotients were computed and recorded. Then each student was assigned to the low-, medium-, or high-ability group according to his IQ score. The IQ score and the IQ group thus became two independent variables used for analysis.

The other major variables considered in the analysis were the methods used, i.e., letter evaluation vs. letter writing, and the post-test letter-writing scores which came from the pleasant-, unpleasant-, and collection-letter problems. The students' three post-test writings were evaluated by three different jury members. The resulting scores were then analyzed statistically in various combinations--test one alone, test two alone, test three alone, tests one and two combined, tests one and three combined, tests two and three combined, and tests one, two, and three combined--to determine whether a single post-test writing could be considered a reliable measurement of students' writing.

An additional variable which was used in the analysis of the data was the teacher variable since two teachers participated in the study.

The students' intelligence scores were compared with the overall average to determine whether any correlation existed between intelligence and ability to learn and demonstrate effective business letter-writing techniques.

The other variables in the study were subjected to a 2 x 2 x 3 Crossed Factorial Experiment Design. This statistical model is presented below:

$$Y(IJK) = U + A(I) + B(J) + AB(IJ) + C(K) + AC(IK) + BC(JK) + ABC(IJK) + E$$

Y(IJK) = The Score (Dependent Variable)

U = Overall Mean

A(I) = Method (Experimental vs. Control)

B(J) = Teacher (Teacher A vs. Teacher B)

AB(IJ) = Interaction (Method vs. Teacher)

C(K) = Intelligence Group (Low, Medium, High)

AC(IK) = Interaction (Method vs. Intelligence Group)

BC(JK) = Interaction (Teacher vs. Intelligence Group)

ABC(IJK) = Interaction (Method vs. Teacher vs. Intelligence Group)

E = Error (Subject-to-subject Variability)

The computational analysis was performed on an IBM 360-65 computer located at Brigham Young University. The .05 level of confidence was selected as the point at which null hypotheses would be rejected.

#### Course Evaluation Questionnaire

A paper-and-pencil questionnaire was given to the study participants during the class period following the final assessment. The purpose of this questionnaire was to determine whether the students in the control and experimental groups had significantly different perceptions about the methods by which they had been taught. In addition, the researcher wanted to obtain a general idea about appropriateness of student workload, value of the text, feeling about business communication as a college course, and course grading practices.

Several course evaluations were examined by the researcher in an attempt to determine the most effective way to construct a suitable

questionnaire. Most of the questionnaires examined showed some form of a multiple choice format with some opportunity for additional comment from the student. Consequently, this same general format was used for this study.

A series of multiple choice questions was created to provide the desired information about the students' attitudes and feelings. Following the series of multiple choice questions, a section of the questionnaire was left for open-ended responses from the students. A space for the student's name was omitted from the questionnaire in an added attempt to encourage honest evaluation of the course. This questionnaire is shown in Appendix D.

The questionnaire was administered in class to insure a 100 percent questionnaire return. The students were told that the questionnaire was a midterm course evaluation to indicate to the instructor the students' feelings about the class during the first nine weeks of the course. The completed questionnaires were tallied, and a comparison of the experimental and control groups' responses was made. No statistical analysis was made of the data; a simple percentage calculation was used to determine whether any practical significance existed between the responses of the two groups.

#### Summary

This experimental study was conducted at Brigham Young University during the fall semester of 1973. The two instructors involved in the study each taught an experimental and a control group of business communication students.

During the experiment, the control group wrote six business letters which were evaluated by the class instructor. The experimental group, on the other hand, evaluated six letters which had been written by the researcher. The students' evaluations of these letters were compared with the evaluations given to the same letters by a letter-evaluation jury and the two instructors involved in the study. The differences between the students' evaluations and the evaluations given by the jury and two instructors were computed as "penalty points" for the students. The experimental group did no writing during the entire experiment.

At the conclusion of the experiment, both groups of students wrote three different business letters which were evaluated by the three-member letter-evaluation jury. These scores and the students' IQ's were analyzed to determine the relative effectiveness of the letter-evaluation method and the more traditional letter-writing method. In addition, the students were questioned to determine their feelings about the letter-evaluation method as a learning device.

FOOTNOTES

<sup>1</sup>Arthur S. Otis, Manual of Directions for Gamma Test (New York, 1954).

<sup>2</sup>William C. Himstreet and Wayne Murlin Baty, Business Communications: Principles and Methods (4th ed., Belmont, California, 1973).

<sup>3</sup>Richard Braddock, Richard Lloyd-Jones, and Lowell Schoer, Research in Written Composition (Champaign, Illinois, 1963), p. 15.

<sup>4</sup>"What Does Educational Research Say About the Judging of Writing Ability?" The Journal of Educational Research, LXVI (1970), p. 147.

<sup>5</sup>Susanne Bellaire Philp, "A Study to Determine Methods of Evaluating Achievement of Business Communications Students and Predicting Success of These Students" (Unpublished Sp.A. thesis, Western Michigan University, 1970), pp. 40-41.



## CHAPTER IV

### FINDINGS

#### Introduction

The findings described in this report were derived from an experimental study conducted at Brigham Young University during the fall semester of 1973.

The purpose of the study was to determine whether students could learn to write effective business letters by a letter-evaluation method as well as they could by the more traditional letter-writing method. The students' intelligence quotients were also considered in the study in an effort to determine whether students of different intellectual abilities achieved differently in the two teaching methods that were studied. The two major hypotheses tested by this study were:

1. There is no significant difference between the letter-writing abilities of two groups of college students after one group is taught by a letter-evaluation method and the other by a letter-writing method.

2. There is no significant difference in the letter-writing abilities of high-, medium-, and low-ability college students after each group has been taught by either the letter-evaluation method or the letter-writing method.

Four classes of business communication students were divided into two experimental and two control classes. Two classes were taught in

the traditional manner and two were taught according to the experimental method designed for this study. Each of two instructors involved in the study taught one experimental and one control group.

During the experiment, the control group was required to write six business letters which were later evaluated and graded by the class instructors. The students in the experimental group, on the other hand, wrote no letters during the experiment. Instead, they evaluated and rated six letters which the researcher had written especially for those assignments. The students' ratings were then compared with the ratings given to those same letters by the instructors and a three-member letter-evaluation jury called especially for this study. The students in the experimental group were given penalty points whenever their ratings differed from the ratings given by the instructors and the jury. Except for these different writing and evaluation assignments, the control and experimental groups received the same instruction during the experiment.

Following the instructional period of the experiment, both student group were required to write three different kinds of business letters; i.e., pleasant-news, unpleasant-news, and collection letters. These post-tests were subsequently evaluated by the letter-evaluation jury. The jury's evaluations were analyzed by variance and covariance statistics to determine whether any statistically significant differences could be found between the groups involved in the experiment. The post-test scores were also analyzed in different combinations--post-test one alone, post-test two alone, post-test three alone, post-tests one and two together, post-tests one and three together, post-tests two and three together, and post-tests one, two, and three together--to determine

whether a single post-test writing could be considered a reliable measurement of students' writing. Differences in the data were considered significant if they reached the .05 level of confidence.

Following the experiment, the students completed a course-evaluation questionnaire. The responses to this questionnaire were analyzed by the researcher to determine the students' feelings about the teaching methods by which they had been taught.

### Statistical Analysis of Test Results

#### Post-test One

The first post-test administered to the study participants was a problem requiring the students to write a pleasant-news letter. The analysis of variance statistic used to analyze the jury's evaluations of the students' letters produces an F ratio, which, if large enough, indicates that a significant, or real, difference probably exists between the groups being tested. To be statistically significant at the 5 percent level of confidence, an F ratio of 3.92 was necessary for those variables having one degree of freedom. For the variables having two degrees of freedom, an F ratio of 3.07 was necessary to achieve significance at the 5 percent level of confidence. At the 1 percent level of confidence, F ratios of 6.85 and 4.79 were necessary for the variables with one and two degrees of freedom respectively.

The level of confidence indicates the degree to which the differences between the groups can be attributed to chance or accidental factors. The 5 percent level of confidence indicates that one can be 95 percent confident that the difference between the groups is a real

difference. The 1 percent level suggests that one can be 99 percent confident that the difference is real.

The analysis of post-test one indicated a significant difference in only the IQ group. The F ratio for this variable was 3.1828, a number large enough to be significant at the 5 percent level of confidence but not at the 1 percent level. Detailed results of the analysis of post-test one are shown in Table III.

TABLE III  
ANALYSIS OF VARIANCE: JURORS'  
EVALUATION OF POST-TEST ONE

	SS	df	MS	F Ratio
Between Groups	288713.39	12		
Mean	288166.00	1		
Method	10.53	1	10.53	.2629
Teacher	42.74	1	42.74	1.0671
Method x Teacher	4.68	1	4.68	.1169
IQ Group	254.94	2	127.47	3.1828*
Method x IQ Group	19.31	2	9.65	.2410
Teacher x IQ Group	41.81	2	20.90	.5219
Method x Teacher x IQ Group	173.38	2	86.69	2.1646
Within Groups	4685.9	117	40.50	
TOTAL	293399.29	129		

\*Significant at the .05 level of confidence

The analysis of variance results of the IQ group variable were further analyzed by the use of the Newman-Keuls Sequential Range Test,

a multiple comparison procedure which identifies statistical differences among the different divisions within a given variable. To be significant at the .05 level of confidence, a range equal to or greater than 3.3513 was required between the averages of the high and low IQ groups. Between the high and medium IQ groups and the medium and low IQ groups, a value equal to or greater than 2.7961 was required to reach significance at the .05 level of confidence.

As shown in Table IV, the high-ability group performed better than the medium-ability group but not significantly so. A significant difference at the 5 percent level of confidence was found between the high and low IQ groups, however. There was also a difference between the medium and low IQ groups, but the difference was not significant.

TABLE IV

NEWMAN-KEULS SEQUENTIAL RANGE TEST: ANALYSIS  
OF IQ GROUPS' POST-TEST ONE

Groups	n	Means	Groups		
			Low	Medium	High
High	33	49.21	3.88*	2.29	
Medium	60	46.92	1.59		
Low	36	45.33			

\*Significant at the .05 level of confidence

Post-test Two

Following the analysis of the post-test one results, the researcher analyzed the results of post-test two, the unpleasant-news letter, to determine whether the same results would be obtained from both analyses. The results of this analysis were different from those produced by the post-test one analysis. The results of post-test two showed a significant difference occurring in the teacher x IQ group variable but no significant difference occurring in the IQ group area. The fact that these differences occurred indicates that the different kinds of writing problems--in this case, the pleasant-news and unpleasant-news letter problems--brought about different levels of writing quality. Table V gives further information about this analysis.

TABLE V  
ANALYSIS OF VARIANCE: JURORS' EVALUATION  
OF POST-TEST TWO

	SS	df	MS	F Ratio
Between Groups	244921.26	12		
Mean	244318.00	1		
Method	19.77	1	19.77	.4260
Teacher	2.52	1	2.52	.0543
Method x Teacher	5.41	1	5.41	.1167
IQ Group	158.62	2	79.31	1.7091
Method x IQ Group	16.98	2	8.49	.1829
Teacher x IQ Group	392.64	2	196.32	4.2305*
Method x Teacher x IQ Group	7.32	2	3.66	.0789
Within Groups	5429.60	117	46.41	
TOTAL	250350.86	129		

\*Significant at the .05 level of confidence

The significant difference in the teacher x IQ group variable indicates the presence of an interaction. Statistically speaking, an interaction is present whenever the effect of a given independent variable is inconsistent among the other independent variables which are being considered in the analysis.

The interaction in the teacher x IQ group variable indicates that one IQ group performed better under one instructor than did the same level IQ group under the other instructor. The cause for such an interaction is difficult, if not impossible, to determine since the occurrence of the statistical significance merely indicates that an interaction was present. It does not give any indication of the cause of that interaction. One may assume that some unusual factor occurred during the experiment or testing period and caused the difference to occur in the IQ group of only one of the instructors. As is shown in subsequent analyses, however, the statistical significance of this interaction disappeared whenever post-test two was analyzed with the other post-tests.

### Post-test Three

Post-test three also was analyzed separately to determine whether any differences occurred between it and the two previous post-test analyses. The third post-test, a collection-letter problem, did produce results different from those of the post-test one and post-test two analyses. Statistically significant differences occurred in two areas--the IQ group area and the method x teacher x IQ group interaction area. Table VI gives additional information about the results of the post-test three analysis.

TABLE VI  
 ANALYSIS OF VARIANCE: JURORS'  
 EVALUATION OF POST-TEST THREE

	SS	df	MS	F Ratio
Between Groups	229796.3	12		
Mean	228986.00	1		
Method	29.98	1	27.98	.7556
Teacher	40.41	1	40.41	1.0913
Method x Teacher	6.22	1	6.22	.1680
IQ Group	393.16	2	196.58	5.3084**
Method x IQ Group	33.10	2	16.55	.4470
Teacher x IQ Group	40.50	2	20.25	.5469
Method x Teacher x IQ Group	249.87	2	124.94	3.3738*
Within Groups	4332.7	117	37.03	
TOTAL	234129.00	129		

\*Significant at the .05 level of confidence

\*\*Significant at the .01 level of confidence

Like the interaction reported in the analysis of post-test two, the post-test three interaction presented difficult interpretation problems. Statistical treatments do not reveal the cause of such a happening; they merely indicate that the event did occur. Because the statistical significance of the interaction disappeared when post-test three was analyzed with the other two post-tests, the researcher determined that the cause of the interaction did not effect consistent differences in the students' writing ability.

The significant difference in the IQ group variable was analyzed further to determine which IQ groups showed superior performance. To



reach statistical significance between the high- and low-ability groups, values of 3.222 and 4.033 were necessary for the .05 and .01 levels of confidence. Between the high and medium groups and the medium and low groups, values of 2.688 and 3.555 were required for significance at the .05 and .01 confidence levels.

TABLE VII  
NEWMAN-KEULS SEQUENTIAL RANGE TEST: ANALYSIS  
OF IQ GROUPS' POST-TEST THREE

Groups	n	Means	Groups		
			Low	Medium	High
High	33	44.19	4.90*	2.24	
Medium	60	41.95	2.66		
Low	36	39.29			

\*Significant at the .01 level of confidence

As Table VII indicates, there was a significant difference between the high-ability group and the low-ability group, but no other statistically significant differences were revealed. This finding parallels the results of the post-test one analysis except that in post-test three, the difference between the high- and low-ability groups was significant at a higher level of confidence.

### Post-tests One and Two

Following the analysis of post-test three, the researcher analyzed post-tests one and two together. First, the students' scores for the first two post-tests were averaged into one composite score. These scores were then subjected to an analysis of variance procedure to determine whether any significant differences occurred.

The first two post-tests considered together produced basically the same results as did the first post-test considered alone. Table VIII reveals that a significant difference occurred in the IQ group variable just as it did in the first analysis. The difference was again significant at the .05 level of confidence. The significant difference in the teacher x IQ variable did not appear in the analysis of post-tests one and two as it did in the post-test two analysis, however.

To determine which IQ group exhibited significantly superior writing skills, a Newman-Keuls Sequential Range Test was performed on the IQ group data. For a significant difference to occur between the high- and low-ability groups, a value equal to or greater than 2.471 was necessary at the .05 level of confidence. At the .01 level of confidence, a value equal to or greater than 3.2176 was necessary. Between the high and medium groups and the medium and low groups, a value equal to or greater than 2.1451 was necessary for significance at the .05 level of confidence.

Table IX indicates that the high-ability group exhibited writing abilities significantly superior to those of the low-ability group. This significance reached the .01 level of confidence. Differences between the other groups, however, were not large enough to reach

TABLE VIII

ANALYSIS OF VARIANCE: JURORS' EVALUATION  
OF POST-TESTS ONE AND TWO

	SS	df	MS	F Ratio
Between Groups	268229.73	12		
Mean	267927.00	1		
Method	14.77	1	14.77	.6266
Teacher	8.86	1	8.86	.3757
Method	.00	1	.00	.0000
IQ Group	184.13	2	92.07	3.9055*
Method x IQ Group	16.03	2	8.02	.3400
Teacher x IQ Group	47.27	2	23.64	1.0025
Method x Teacher x IQ Group	31.67	2	15.84	.6718
Within Groups	2758.10	117	23.57	
TOTAL	270987.83	129		

\*Significant at the .05 level of confidence

TABLE IX

NEWMAN-KEULS SEQUENTIAL RANGE TEST: ANALYSIS  
OF IQ GROUPS' POST-TESTS ONE AND TWO

Groups	n	Means	Groups		
			Low	Medium	High
High	33	47.03	3.45*	1.55	
Medium	60	45.48	1.90		
Low	36	43.58			

\*Significant at the .01 level of confidence

significance at the .05 level.

Post-tests One and Three

The next analysis of variance computed on the post-test data considered the average scores of post-tests one and three. As in several other analyses, a statistically significant difference appeared in the IQ group area. As summarized in Table X, this difference was significant at the .005 level of confidence.

TABLE X .

ANALYSIS OF VARIANCE: JURORS' EVALUATION  
OF POST-TESTS ONE AND THREE

	SS	df	MS	F Ratio
Between Groups	258377.50	12		
Mean	257727.00	1		
Method	20.90	1	20.90	.9109
Teacher	41.57	1	41.57	1.8368
Method x Teacher	5.42	1	5.42	.2385
IQ Group	315.70	2	157.85	6.9418**
Method x IQ Group	25.36	2	12.68	.5577
Teacher x IQ Group	36.70	2	18.35	.8070
Method x Teacher x IQ Group	199.54	2	99.77	4.3876*
Within Groups	2660.50	117	22.74	
TOTAL	261038.00	129		

\*Significant at the .05 level of confidence

\*\*Significant at the .005 level of confidence

Another significant difference was found in the method x teacher x IQ group interaction area. Since the same interaction had shown relatively high F ratios in the post-test one and the post-test three analyses, it was not surprising to find the same effect when the first and third post-test scores were considered together. This interaction was significant at the .05 level of confidence. Since a similar finding did not appear in the post-test two analysis, however, the statistical significance of this three-way interaction disappeared whenever post-tests one or three were considered together with post-test two.

The difference shown in the IQ groups was examined further by using the Newman-Keuls Sequential Range Test. As Table XI reveals, there was a significant difference among all three IQ groups. The difference

TABLE XI  
NEWMAN-KEULS SEQUENTIAL RANGE TEST: ANALYSIS  
OF IQ GROUPS' POST-TESTS ONE AND THREE

Groups	n	Means	Groups		
			Low	Medium	High
High	33	46.70	4.39**	2.26*	
Medium	60	44.44	2.13		
Low	36	42.31			

\*Significant at the .05 level of confidence

\*\*Significant at the .005 level of confidence

between the high- and low-ability groups exceeded the .005 critical value of 3.4036. The differences between the high- and medium-ability groups and the medium- and low-ability groups, however, were significant at only the .05 level. The .05 critical value for these two comparisons was 2.107.

### Post-tests Two and Three

An analysis of variance was computed next on the average of the scores of post-tests two and three. As Table XII indicates, the only statistically significant difference which occurred in these data was in the IQ group area. The F ratio of 5.1738 was large enough to be significant at the .01 level of confidence.

TABLE XII  
ANALYSIS OF VARIANCE: JURORS' EVALUATION  
OF POST-TESTS TWO AND THREE

	SS	df	MS	F Ratio
Between Groups	237025.3	12		
Mean	236590.00	1		
Method	23.70	1		
Teacher	5.69	1	23.70	.9403
Method x Teacher	.00	1	.01	.0003
IQ Group	260.78	2	130.39	5.1738*
Method x IQ Group	16.16	2	8.08	.3207
Teacher x IQ Group	66.76	2	33.38	1.3244
Method x Teacher x IQ Group	63.96	2	31.98	1.2689
Within Groups	2948.70	117	25.20	
TOTAL	239974.00			

Significant at the .01 level of confidence

To determine which IQ groups produced superior writing skills, the Newman-Keuls Sequential Range Test was employed. Between the high- and low-ability groups, a value of 2.658 was necessary for the difference to be significant at the .05 level of confidence. To be significant at the .01 or the .005 levels, values of 3.327 or 3.583 were necessary. A value of 2.218 was necessary to reach the .05 confidence level between the high- and medium-ability groups and the medium- and low-ability groups. To be significant at the .01 level of confidence, a value of 2.932 was necessary between these groups.

Table XIII reveals that the high-ability group significantly out-performed the low-ability group. This difference was significant at the .005 level of confidence.

TABLE XIII

NEWMAN-KEULS SEQUENTIAL RANGE TEST: ANALYSIS  
OF IQ GROUPS' POST-TESTS TWO AND THREE

Groups	n	Means	Groups		
			Low	Medium	High
High	33	44.52	3.96**	1.52	
Medium	60	43.00	2.44*		
Low	36	40.56			

\*Significant at the .05 level of confidence

\*\*Significant at the .005 level of confidence

The medium-ability group also scored significantly higher than the low-ability group. This difference reached the .05 level of confidence. No significant difference was noted between the high- and medium-ability groups.

Post-tests One, Two, and Three

The final analysis of variance considered all three post-tests. The scores of the three post-tests were averaged to form a single composite score for each student. These scores were then subjected to the same analysis of variance treatment as had been used with the other data. Table XIV indicates that the IQ group F ratio far exceeded

TABLE XIV  
ANALYSIS OF VARIANCE: JURORS' EVALUATION  
OF POST-TESTS ONE, TWO, AND THREE

	SS	df	MS	F Ratio
Between Groups	252957.65	12		
Mean	252568.00	1		
Method	19.17	1	19.17	1.0638
Teacher	15.20	1	15.20	.8435
Method x Teacher	.02	1	.02	.0010
IQ Group	234.73	2	117.36	6.5128*
Method x IQ Group	20.52	2	10.26	.5694
Teacher x IQ Group	9.17	2	4.58	.2543
Method x Teacher x IQ Group	93.84	2	46.92	2.6038
Within Groups	2108.4	117	18.02	
TOTAL	255066.05	129		

\*Significant at the .005 level of confidence



the 3.07 value necessary for significance at the .05 level of confidence. The 6.5128 IQ group value was then compared with 4.79 and 5.54, the minimum limits of .01 and .005 levels of confidence. The IQ group value did surpass the .005 confidence level, but it was insufficiently large to equal 7.32, the value required for significance at the .001 confidence level.

The Newman-Keuls Sequential Range Test was again used to determine which IQ group performed significantly better in the post-tests. Table XV reveals that the high-ability group performed better than the low-ability group, not only at the .05 level, but at the .01 level of confidence as well.

TABLE XV

NEWMAN-KEULS SEQUENTIAL RANGE TEST: ANALYSIS OF  
IQ GROUPS' POST-TESTS ONE, TWO, AND THREE

Groups	n	Means	Groups		
			Low	Medium	High
High	33	46.08	3.94**	1.78	
Medium	60	44.30	2.16*		
Low	36	42.14			

\*Significant at the .05 level of confidence

\*\*Significant at the .01 level of confidence

A range equal to or greater than 2.2482 between the high- and medium-ability groups was necessary for significance at the .05 level of confidence. At the .01 level of confidence, a value equal to or greater than 2.8136 was necessary. Between the averages of the high- and medium-ability groups and the medium- and low-ability groups, a value equal to or greater than 1.8757 was needed for significance at the .05 level of confidence. The medium-ability group did perform significantly better than the low-ability group, but the difference between the high- and medium-ability groups did not reach significance at the .05 level of confidence.

#### Summary of Analysis of Variance Findings

Seven analysis of variance computations were made on the data produced by the jury's evaluation of the three post-test writings. The post-test one, post-tests one and two, post-tests two and three, and post-tests one, two, and three analyses produced basically the same findings. In the post-test two, post-test three, and post-test one and three analyses, however, different statistical patterns were found. The significant differences found in each analysis are shown in Table XVI.

Based on the results of these analyses, the first null hypothesis can be accepted; that is, the two methods by which the students in this study learned to write business letters appeared to be equally effective.

The second null hypothesis, however, cannot be accepted since the analyses showed significant differences among the three IQ groups identified for this study. Consequently, the idea that students of

high, medium, and low abilities will achieve equal letter-writing skills was not supported by these analyses. The findings of this study did show, however, that students of comparable academic abilities performed equally well under the letter-writing method and the letter-evaluation method. This fact was verified by the lack of significant differences in the method x IQ group interaction variable.

TABLE XVI  
SIGNIFICANT DIFFERENCES FOUND IN ANALYSIS  
OF VARIANCE COMPUTATIONS

Post-test	Area of Significant Difference
1	IQ Group*
2	Teacher x IQ Group*
3	IQ Group** Method x Teacher x IQ Group*
1, 2	IQ Group*
1, 3	IQ Group*** Method x Teacher x IQ Group*
2, 3	IQ Group**
1, 2; 3	IQ Group***

\*Significant at the .05 level of confidence

\*\*Significant at the .01 level of confidence

\*\*\*Significant at the .005 level of confidence

## Analysis of Covariance: Post-tests

### One, Two, and Three

No writing pretest was administered to the students involved in the experiment since such a test would have introduced a compounding variable in the letter-evaluation group, the group which completed no letter-writing assignments during the experiment. As an alternative, the students' IQ scores were used as a covariate in an analysis of covariance calculation which compared the participants' post-test scores. The analysis of covariance technique takes into account initial pre-experiment student differences and makes adjustments for them when comparing post-test scores. Table XVII indicates that no statistically significant differences occurred when the covariance analysis was used.

In light of the previous analysis of variance results which revealed significant differences among the three IQ groups, this covariance analysis suggested that these ability differences existed before the experiment was conducted. In other words, the students retained their relative group standings throughout the study. The high-ability students began the experiment with superior abilities, and they held their same group standing when the study concluded. Likewise, the medium- and low-ability students exhibited no change in their relative group standings from the beginning to the end of the experiment.

Like the analysis of variance results, the covariance findings supported the first null hypothesis which suggests relative equality in the effectiveness of the letter-evaluation and the letter-writing methods. The covariance analysis also added some support to the second null hypothesis which states that there is no significant difference

in the letter-writing abilities of high-, medium-, and low-ability college students when each group is taught by either the letter-evaluation method or the letter-writing method. The hypothesis cannot be totally accepted, however, because of the significant differences revealed by the analysis of variance computations. Considered together, the covariance and variance analyses indicated that students with different academic abilities exhibited unequal performance on the post-tests but that students with similar academic abilities performed equally well regardless of the learning method used.

TABLE XVII  
ANALYSIS OF COVARIANCE: JURORS' EVALUATION  
OF POST-TESTS ONE, TWO, AND THREE

	SS	df	MS	F Ratio
Between Groups	252695.89	12		
Mean	252568.00	1		
Method	28.00	1	28.00	1.5770
Teacher	3.80	1	3.80	.2163
Method x Teacher	.05	1	.05	.0003
IQ Group	2.37	2	1.18	.0674
Method x IQ Group	17.84	2	8.92	.5081
Teacher x IQ Group	11.81	2	5.91	.3365
Method x Teacher x IQ Group	64.02	2	32.01	1.8237
Within Groups	2035.9	117	17.55	
TOTAL	255060.79	129		

Correlation Between IQ Scores and  
Achievement Scores

Because the studies reported in the second chapter of this report revealed differences of opinion regarding a relationship between IQ and writing ability, the data produced in this study were subjected to a Pearson product-moment correlation analysis. The results of this calculation, it was hoped, would provide additional information which would either support or refute the idea that IQ correlates positively with writing ability.

The correlation analysis produces a correlation coefficient which, if sufficiently large, indicates that a systematic relationship between the two variables being studied really does exist and that such a relationship can be expected to occur again in similar studies. A positive correlation between the two variables does not indicate that one of the variables causes the other; rather it shows that when one variable is present the other variable is also likely to be present.

The analysis of the students' overall average scores and their IQ standard scores produced a correlation coefficient of .3599. A value equal to or greater than .254 was needed for significance at the .01 level of confidence; therefore, the correlation between the students' IQ scores and writing scores was significant at the .01 level of confidence.

This finding supported the results of the earlier analysis of variance computations which also indicated that the letter-writing abilities of the three intelligence groups being tested were significantly different.

Although this correlation was high enough to reach statistical significance, a correlation of .3599 is too low to be of much practical significance. In other words, at this level of correlation, a teacher would not be safe in assuming that a student with a high IQ also possesses and equally high skill in writing business letters.

### Analysis of Course Evaluation

#### Questionnaire Results

During the class period immediately following the completion of the experimental post-tests, the four classes involved in this study were given a paper-and-pencil questionnaire. The main purpose of this questionnaire was to determine whether the students' reactions to the business communication class would indicate any practical difference between the control and experimental groups. Since the responses varied not only from experimental to control group, but also from teacher to teacher, the questionnaire results are presented separately for each teacher rather than being presented as average ratings for both the cooperating instructor and the researcher. Generalizations about the students' reactions to the methodology used in this study were made only when the findings from both instructors' classes were similar. The course evaluation questionnaire is presented in Appendix D.

The first question asked about the students' general enjoyment of the communication class. The responses from the researcher's experimental class and the cooperating instructor's control and experimental classes were basically the same; that is, the large majority seemed to enjoy the class about the same as most other classes they had taken

at Brigham Young University. The researcher's control class, however, seemed to be much more pleased with the class as 60 percent indicated that they enjoyed the class more than most other classes they had taken. The results of the first question are shown in Table XVIII.

TABLE XVIII

COMPARISON OF ENJOYMENT RECEIVED FROM BUSINESS COMMUNICATION CLASS WITH ENJOYMENT RECEIVED FROM OTHER CLASSES  
(BY PERCENTAGE)

Enjoyment Received	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
More than from other classes	12	6	27	60
About the same as from other classes	69	73	67	37
Less than from other classes	19	21	5	3

The second question sought to determine how well the students liked the subject matter of the course. Over half of the students in both of the researcher's classes liked the class "quite a bit." The cooperating instructor's classes also showed consistent results, although nearly half stated that they liked the class only "moderately well." The results of question two are presented in Table XIX.



TABLE XIX

SUMMARY OF THE STUDENTS' REACTIONS TO THE SUBJECT MATTER  
OF THE BUSINESS COMMUNICATION COURSE  
(BY PERCENTAGE)

Alternatives	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Liked very much	12	6	8	6
Liked quite a bit	25	39	51	57
Liked moderately well	47	42	32	31
Liked very little	16	13	8	6
Liked not at all	0	0	0	0

Question three dealt with the amount of time spent by the students in preparation for the class. Although one might assume that the experimental group, which did not have to actually write any letters, would spend less preparation time than would the control group, this did not prove to be the case. In the cooperating instructor's classes, both the experimental and the control students spent about the same amount of time preparing for the class. In the researcher's classes, the experimental group reported spending considerably more out-of-class preparation time than did the control group. Only 37 percent of the researcher's control group said that they spent two or more preparation hours per week, while 60 percent of the experimental group claimed to spend more than two hours per week in preparation time. Table XX gives additional information about the third question results.

TABLE XX  
 NUMBER OF BUSINESS COMMUNICATION PREPARATION HOURS  
 SPENT EACH WEEK BY STUDY PARTICIPANTS  
 (BY PERCENTAGE)

Preparation Hours Per Week	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Less than one	25	27	11	11
One	31	24	30	51
Two	37	33	46	20
Three	0	9	14	17
Four or more	6	6	0	0

The fourth question asked of the students at the end of the experiment concerned the amount of work required of the students during the experiment. Although the out-of-class reading requirements for both the experimental and control groups were the same, the out-of-class writing requirements were different. This question, therefore, sought to determine whether one group felt differently from the other group in the appropriateness of the course work load.

No difference of any practical significance was noted in the cooperating instructor's classes. More than 80 percent of the students in those classes felt that the work load of the course was "about right." The method used seemed to have little effect on the outcome of this question in the cooperating instructor's class. In the

researcher's class, however, the students in the experimental group did react differently from those in the control group in their answer to question four. While 97 percent of the control group thought that the work load had been "about right," only 76 percent of the experimental group thought that the work load had been "about right." Another 22 percent felt that the work load was "usually too light." Since it was apparent that a teacher variable caused some differences in this data, however, no general conclusion suggesting that the methodology was the cause of the difference was made. Table XXI presents additional information about the results of question four.

The fifth question sought the same general kind of information as was asked for in questions three and four. All three questions asked about student work and the amount of preparation involved in the business communication course. This question showed that about 25 percent of the students in both experimental classes felt that they had worked less in business communication than they had in most other classes. On the other hand, only 9 percent of the subjects in the two control classes said that they worked less in business communication than they had done in other classes. As Table XXII shows, the students in the control groups were also more inclined to say that they had worked harder in the business communication class than they had in other university classes.

An examination of the findings presented in Tables XX, XXI, and XXII reveals some interesting results. In these tables, the researcher's experimental group claimed (1) that they spent more preparation time than did the control group, (2) that, on the average, the work load in business communication tended to be too light, and (3) that, on the average, they worked less in business communication than they had done

TABLE XXI

STUDENTS' PERCEPTION OF THE WORK LOAD REQUIRED  
IN BUSINESS COMMUNICATION  
(BY PERCENTAGE)

Perception of Work Load	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Impossibly burdensome	0	0	0	0
Usually too heavy	0	6	3	3
About right	90	82	76	97
Usually too light	6	12	22	0
Negligible	0	0	0	0

TABLE XXII

COMPARISON OF WORK PUT FORTH IN BUSINESS COMMUNICATION  
WITH THAT EXPENDED IN OTHER UNIVERSITY CLASSES  
(BY PERCENTAGE)

Work Comparison	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
More than in other classes	3	9	11	20
About the same as in other classes	68	81	65	71
Less than in other classes	29	9	24	9

in other classes. These data suggest that although more time was required of these experimental students, the work was not as difficult nor as demanding as that which was required of them in other university classes. Since these findings were not supported by the cooperating instructor's classes, however, no general conclusion to this effect was made.

Question six concerned the students' impression of the text used in the business communication course. By far the majority of the students in all four classes thought that the text was either "excellent" or "good." No major differences were noted in the responses from the control and the experimental groups. The results of this question are presented in Table XXIII.

The students were next asked to rate the teaching of the business communication class in terms of its helping them acquire new knowledge, skills, and abilities. The findings of this question showed that the students in both experimental classes gave slightly higher ratings to the class than did their control-group counterparts. In the cooperating instructor's experimental class, 37 percent rated their achievement above the "moderate" level, while only 24 percent of the cooperating instructor's control class gave ratings this high. Likewise, the researcher's experimental class gave higher ratings to their feeling of achievement in the class. In the experimental class, 57 percent of the students gave ratings of "very good" or "excellent." With the control group, however, only 52 percent of the students rated their achievement as "very good" or "excellent."

Although the findings of this question did not differ widely enough to suggest that the teaching methods used in the experimental group gave

the students a significantly greater sense of satisfaction, the results do suggest that the letter-evaluation method was no less effective in this category. A complete tally of the responses to this question is given in Table XXIV.

TABLE XXIII  
STUDENTS' RATING OF THE TEXT USED IN  
BUSINESS COMMUNICATION  
(BY PERCENTAGE)

Rating	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Excellent	41	27	16	26
Good	50	61	65	60
Fair	9	12	19	11
Poor	0	0	0	3
Completely unsuitable	0	0	0	0

The four classes involved in this study were then asked to rate the effectiveness of the teaching methods by which they had been taught during the semester. This rating, the students were told, was to be based on their comparison of the business communication teaching and the teaching they had observed in other university classes. In the cooperating instructor's classes, the ratings were almost identical;

the experimental methodology elicited the same response pattern as did the traditional teaching method.

TABLE XXIV  
 VALUE OF TEACHING IN HELPING STUDENTS TO ACQUIRE  
 NEW KNOWLEDGE, SKILLS, AND ABILITIES  
 (BY PERCENTAGE)

Rating	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Excellent	0	3	3	6
Very good	37	21	54	46
Moderate	59	67	43	40
Not very good	3	9	0	9
Negligible	0	0	0	0

The researcher's two classes, however, did respond differently. While 60 percent of the students in the control class rated the researcher's teaching methods as more effective than the teaching methods used in other classes they had taken at Brigham Young University, only 30 percent of the experimental class gave such a rating. The majority of the researcher's experimental class rated the teaching methods as "about equally effective." Since a similar difference was not noted in the cooperating researcher's class, however,

the teacher variable appears to have been a significant factor in the outcome of this question. Table XXV gives additional information about these findings.

TABLE XXV  
EFFECTIVENESS OF THE TEACHING METHODS USED IN  
BUSINESS COMMUNICATION AS COMPARED WITH  
THOSE USED IN OTHER CLASSES  
(BY PERCENTAGE)

Comparison	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
More effective	12	12	30	60
About equally effective	66	67	58	34
Less effective	22	21	11	6

The next question asked about the helpfulness of the instructors' evaluation of students' work. The control group had received the traditional type of evaluation; i.e., handwritten comments concerning their business letters. The experimental group, however, had submitted no business letters to the class instructor. Instead, their work consisted of letter evaluations which they compared with the evaluations given by the letter-evaluation jury and the instructors.

In spite of the differences in the evaluation methods, the



results of question nine were relatively similar. Although both control classes gave higher ratings to the value of their instructor's evaluation of students' work, the cooperating instructor's ratings were only slightly different. Consequently, the overall differences appeared to be too minor to be of any practical significance. These findings are summarized in Table XXVI.

TABLE XXVI  
HELPLEFULNESS OF INSTRUCTOR'S EVALUATION OF STUDENTS' WORK  
(BY PERCENTAGE)

Helpfulness of Evaluation	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Always very helpful	31	33	11	23
Generally helpful	34	39	62	65
Sometimes helpful	31	24	22	9
Seldom helpful	3	3	5	3
Never helpful	0	0	0	0

After rating the helpfulness of the instructors' evaluation, the students were asked about the degree to which the instructors were fair in their grading practices. The results of this question did show a consistent difference between the experimental and control groups. The

students in the control group expressed general satisfaction with the instructors' grading practices, whereas the experimental group felt less satisfaction with the grading practices used in the classes.

This feeling was in line with the frustration noticed in the students as they would try to make their numeric letter evaluations match those of the jury and the instructors. The students realized the degree of subjectivity that existed in the comparisons, and they felt some hesitation in being graded on such a subjective scale. Table XXVII illustrates the students' feelings about the grading policies and procedures used in the different classes.

TABLE XXVII  
 TABLE XXVII  
 DEGREE TO WHICH INSTRUCTOR WAS FAIR IN  
 DEGREE TO WHICH INSTRUCTOR WAS FAIR IN  
 GRADING POLICIES AND PROCEDURES  
 (BY PERCENTAGE)

Rating	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Consistently fair	37	45	35	48
Fair most of the time	28	36	43	37
Usually fair	28	15	19	11
Sometimes fair	6	3	3	3
Seldom fair	0	0	0	0

The eleventh question concerned the degree to which students felt prepared for course examinations; i.e., the experiment post-tests. Consistent differences between the experimental and control groups were found in this question. Over 90 percent of the control group felt that their preparation for course examinations was "sufficient" or "excellent," but only slightly more than half of the experimental group felt that their preparation for course examinations was that high. Nearly half described the adequacy of their preparation as "moderate," "marginal," or "insufficient." These findings are presented in Table XXVIII.

TABLE XXVIII

EXTENT TO WHICH ADEQUATE PREPARATION HAS BEEN GIVEN  
FOR COURSE EXAMINATIONS  
(BY PERCENTAGE)

Adequacy of Preparation	Cooperating Instructor		Researcher	
	Experimental	Control	Experimental	Control
Excellent	12	9	8	20
Sufficient	47	82	43	71
Moderate	25	9	30	9
Marginal	9	0	11	0
Insufficient	6	0	8	0

Finally, the students were asked to list their recommendations for improving the business communication course in future semesters. This was an open-ended question with no guidelines suggested for answering. Only those comments related to teaching methodology were tallied for this report.

In the control group no suggestions occurred with any degree of regularity. None occurred more than four times in either class. In the experimental classes, however, distinct differences were found. In the cooperating instructor's experimental class, 63 percent mentioned that more letters should be written by students. In the researcher's class, 84 percent made a similar comment. Additional comments from the experimental students occurred with such little frequency that no generalizations could be made from them. The students' comments which pertained to teaching methodology are reported in Appendix E.

#### Summary

The findings of this report gave support to the first null hypothesis which suggested that there is no significant difference between the letter-writing abilities of two groups of college students after one group is taught by a letter-evaluation process and the other by a letter-writing process.

The second null hypothesis was not supported by the findings. The data showed that students in the higher IQ groups performed better on the letter-writing tests than did the students in the lower IQ groups. The analysis of IQ and methodology together, however, produced no significant difference; that is, the same-level IQ groups

performed equally well under both teaching methods.

The findings of this report also showed that some variation occurred in the quality of students' various writing; i.e., the three post-test writings yielded significantly different findings when they were analyzed separately. The statistical significance of the differences in the second and third post-tests disappeared, however, when all three post-tests were analyzed together.

This report also showed a positive correlation between IQ and writing scores, although the correlation was not extremely high. This finding substantiated the results of the analysis of variance which showed differences in the writing abilities of the different IQ groups.

The questionnaire completed by the students at the conclusion of the research study also yielded some interesting findings. As far as students' feelings about the class were concerned, the experimental methodology used in the study produced negative results in the students' perception of the fairness of the instructor's grading practices and in the students' feeling of preparedness when taking an examination. In addition, the control group reported working harder for the communication class than did the experimental group. The experimental class frequently suggested that more letter writing be incorporated into the class. In most other areas, such as enjoyment of the class, the subject matter, and the text, the feelings of the experimental group were basically the same as those reported by the control group.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The main purpose of this study was to determine whether a letter-evaluation method would be as effective as the traditional letter-writing method when used as a learning device in a college-level business correspondence class. A second concern of the study was to determine which of the two methods used in the study would produce the better results with college students of low, medium, and high intelligence.

Two problems of a secondary nature were also dealt with in this study. The first was to determine whether a single post-test writing could be considered a reliable measurement of students' writing. The second problem was to determine the students' reactions to the teaching methods used in this study.

This experimental study was conducted during the fall semester of 1973 at Brigham Young University. Four classes of business communication students were divided into two experimental and two control groups. Two classes were taught in the traditional manner, and two were taught according to the experimental method designed for this study.

During the experiment, the control classes were required to write six business letters which were evaluated, graded, and handed back by the class instructor. The students in the experimental classes, on the

other hand, wrote no letters during the experiment. Instead, they evaluated and rated six letters which the researcher had written especially for those assignments. The students' ratings were then compared with the ratings given to those same letters by the researcher, a cooperating instructor, and a three-member letter-evaluation jury called especially for this study. The students in the experimental group were given penalty points whenever their ratings differed from the jury's and instructors' ratings. Except for these different writing and evaluation assignments, the control and experimental groups received the same instruction during the experiment.

Following the instructional period of the experiment, both student groups were required to write three different kinds of business letters; i.e., pleasant news, unpleasant news, and collection. These post-tests were subsequently evaluated by the letter-evaluation jury. The scores resulting from this evaluation were then statistically analyzed to determine whether there were any significant differences between the writing abilities of the experimental and the control groups. This statistical analysis also provided information about the writing skills of the different IQ groups studied.

The students' scores were also analyzed in various combinations--post-test one alone, post-test two alone, post-test three alone, post-tests one and two combined, post-tests one and three combined, post-tests two and three combined, and post-tests one, two, and three combined--to determine whether a single post-test writing could be considered a reliable measurement of students' writing.

Following the writing of the post-tests, the students completed a paper-and-pencil questionnaire which provided information about the

students' reactions to the methods by which they had been taught during the experiment.

The findings of the study supported the first null hypothesis which states that there is no statistically significant difference in the letter-writing abilities of two groups of college students when one group is taught by a letter-evaluation method and the other by a letter-writing method.

The second null hypothesis was not supported by the findings. The students in the higher IQ groups performed better on the letter-writing tests than did the students in the lower IQ groups. Intelligence showed some positive correlation with writing ability in this study. The analysis of IQ groups and methodology together, however, produced no significant differences; that is, the same-level IQ groups performed equally well under both teaching methods. Neither method showed any superiority with any IQ group.

The findings of this report also showed that some variation occurred in the quality of students' various writings; i.e., the three post-test writings yielded significantly different findings when they were analyzed separately. The statistical significance of the differences in the second and third post-tests disappeared, however, when all three post-tests were analyzed together.

The questionnaire completed at the conclusion of the study indicated that the experimental methodology employed in this study produced negative results in the students' perception of the fairness of the instructor's grading practices and in the students' feeling of preparedness when taking an examination. In addition, the control group reported working harder for the communication class than did the



experimental group. The experimental class frequently suggested that more letter writing be incorporated into the class. In most other areas, such as enjoyment of the class, the subject matter, and the text, the feelings of the experimental group and the control group were quite parallel.

### Conclusions

The following conclusions are based on the findings reported in Chapter IV of this report.

1. Since the findings of this study showed no significant differences between the letter-writing abilities of the experimental and the control groups used in this research, the first null hypothesis cannot be rejected. Therefore, it can be concluded that the letter-evaluation method is as effective as the traditional letter-writing method given similar conditions to those which existed in this study.

2. The findings of this study also suggest that students of comparable academic abilities achieve equally well under the letter-evaluation method and the letter-writing method. Neither method shows superiority for any intelligence level.

3. There was a positive correlation between IQ and letter-writing ability for students taught by both methods. This correlation suggests that students with high IQ scores are likely to demonstrate superior writing skills following instructional situations similar to those reported in this study.

4. Because of the variation noted in the different post-test writings, it is concluded that a single sampling of students' writing is not a reliable measurement of students' writing abilities. Additional

samplings tend to produce increased reliability.

5. Students tend to perceive grading as being somewhat less than fair when it is based on their evaluations of business letters rather than on their ability to compose business letters.

6. Students taught by the letter-evaluation method feel less well prepared for letter-writing examinations than do students who are taught by the traditional letter-writing method. As a result, students taught by the letter-evaluation method feel that some actual letter-writing practice should be included in business correspondence classes.

7. Students being taught by the letter-writing method report that they work harder for the class than do their counterparts who are taught by the letter-evaluation method.

8. The letter-evaluation method does not produce negative effects in students' perception of business correspondence as a subject area, of the value of the text used in the course, or of the feeling of progress and achievement experienced in the course.

#### Recommendations

As a result of the conclusions that have been drawn from this study, the following recommendations are made:

1. Since the letter-evaluation and letter-writing methods yielded equally good results in terms of student writing abilities, teachers of business correspondence should not be hesitant to use letter-evaluation as a learning device. A reduction in paper-grading time could be brought about by such an action, thus leaving the teacher more time for other activities. Larger classes could also

be taught by increased use of this method, and immediate teacher feedback could be given by the use of letter-evaluation assignments.

2. Since a pure diet of the letter-evaluation method seems to produce some negative student reactions in terms of feeling ill prepared for writing examinations, business correspondence teachers would be well advised to include at least some writing exercises in the learning process. This study suggests, however, that the teacher's reading and grading of such letters would not produce increased learning.

3. Because of the subjectivity involved in evaluating letters, and because no correlation has been shown between students' ability to evaluate letters and their ability to write letters, letter-evaluation should be used as a learning method only. The students' ability or lack of ability to evaluate letters should not be used for grading purposes unless the validity of such a practice can be confirmed.

4. Persons conducting experimental research in writing classes should obtain at least three writing samples from each study participant for evaluation purposes. In addition, teachers of business communication should use at least three writing samples for evaluating students' writing abilities. As revealed by this study, fewer writing samples may yield unreliable data.

5. Additional studies should be conducted to find ways of helping students with lower IQ's to achieve the same writing abilities as students with higher intelligence.

6. Additional study should be conducted to determine whether a combination of the two methods used in this study can produce even better learning results than were obtained in this experiment.

7. A study should be conducted to determine the effectiveness of the letter-evaluation method as a writing refinement technique for students who are more advanced in their written communication skills.

8. A study should be conducted to determine whether students can learn more from evaluating their peers' writings than they can by evaluating the instructor's contrived writings as was the case in this study.

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APPENDIX A

LETTER-EVALUATION FORM

## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

7 No improvement needed	3 Significant improvement needed
6 Slight room for improvement	2 Major revision required
5 Some modification suggested	1 Complete revision required
4 Medium improvement needed	

1. Appearance (placement, neatness, etc.) \_\_\_\_\_
  2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.) \_\_\_\_\_
  3. Proper paragraph organization (unity, coherence, development, etc.) \_\_\_\_\_
  4. Clarity of message (major idea(s) emphasized and easily recognized) \_\_\_\_\_
  5. Conciseness of message (no unnecessary words, phrases or sentences) \_\_\_\_\_
  6. Appropriate approach (inductive or deductive) \_\_\_\_\_
  7. Appropriate language style and word choice (formal or informal, talk language, etc.) \_\_\_\_\_
  8. Tone (friendly, positive) \_\_\_\_\_
  9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude) \_\_\_\_\_
  10. Overall effectiveness of the letter \_\_\_\_\_
- TOTAL \_\_\_\_\_

(Justify your evaluation in the space provided after each of the ten categories.)

APPENDIX B

LETTERS AND LETTER EVALUATIONS

January 16, 19--

Mr. Niel Edwards  
321 West Couch Street  
Woodbrige, Iowa 75891

Dear Niel:

We very sincerely apologize for the misunderstanding which you seem to have had with the personnell of the Carleton Department Store in Woodbridge. The sales girl was wrong to not allow you a 10 percent discount on your recent purchase. I am sending a copy of this letter to the store manager to inform them of our action in your behalf.

I sincerely hope that this will straighten out any difficulties this problem has caused you, Niel. We hope to continue our excellent relations with Goodman Insurance Company and are happy to give you any assistance we can.

Sincerely yours,

Arthur D. Walker  
Customer Service Manager

clb

cc

P.S. Enclosed please find a check in the amount of \$7.80.

## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

- |                               |                                  |
|-------------------------------|----------------------------------|
| 7 No improvement needed       | 3 Significant improvement needed |
| 6 Slight room for improvement | 2 Major revision required        |
| 5 Some modification suggested | 1 Complete revision required     |
| 4 Medium improvement needed   |                                  |

1. Appearance (placement, neatness, etc.) No serious problems; 7  
however, the first paragraph is a bit long in comparison to the size of the letter.
2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.) Personnel, Woodebridge misspelled. Improper use of pronoun "them." Split infinitive "to not allow." Last sentence could be improved. 3
3. Proper paragraph organization (unity, coherence, development, etc.) P.S. notation should appear in body. Coherence and unity lacking a bit. "This" in sentence one of last paragraph is vague. 4
4. Clarity of message (major idea(s) emphasized and easily recognized) Refund should be emphasized. "Misunderstanding you seem to have had" indicates doubt about reader's honesty. Why was the girl wrong? What about future purchases? 5
5. Conciseness of message (no unnecessary words, phrases or sentences) "Very sincerely" is a doubtful term. Last paragraph has generalities instead of specifics. 5
6. Appropriate approach (inductive or deductive) Writer should tell what will be done for reader at beginning of letter. P.S. should be placed at the first of the letter. Apology is less relevant than the refund. 2
7. Appropriate language style and word choice (formal or informal, talk language, etc.) Stereotyped phrases and unnecessary words in P.S.--"We very sincerely apologize," "We hope to continue"--indicate writer insincerity. 4
8. Tone (friendly, positive) Generally a friendly tone, but "the sales girl was wrong" could have been cast more positively. Positive tone slightly overdone in first paragraph. Use of name in last paragraph adds personal touch. 6
9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude) Needs more information on current policy. Begins with "we" and is quite "we" oriented. Perhaps a bit too penitent. Good use of name. 4
10. Overall effectiveness of the letter 4

TOTAL           

(Justify your evaluation in the space provided after each of the ten categories.)

March 15, 19--

Mr. Calvin R. Shields  
653 West Elwood Street  
Omaha, Nebraska 67329

Dear Mr. Shields:

I'm happy to sign your form. You have every right to be proud of your son and his accomplishments here at school. So far, he has a cumulative GPA of 3.67, and he tells me that he is hoping for a 5.0 this semester, to. He has, in addition, been invited to join Beta Gamma Sigma this semester. He also tells me that he is making application to take the aptitude test for law school. We wish him well.

We actively try to recruit students like your son and are very pleased when we are able to entice students like him to attend our school. Thanks for sending such a fine son to us.

Cordially,

Carl Osborn  
Advisor

clb

Enclosure

## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

- |                               |                                  |
|-------------------------------|----------------------------------|
| 7 No improvement needed       | 3 Significant improvement needed |
| 6 Slight room for improvement | 2 Major revision required        |
| 5 Some modification suggested | 1 Complete revision required     |
| 4 Medium improvement needed   |                                  |

- |   |          |
|---|----------|
| 1. Appearance (placement, neatness, etc.)   | <u>6</u> |
| Two words run together. Placement a bit too high.   |          |
| 2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.)   | <u>4</u> |
| "Cumulative," "too" misspelled. Verb split by "in addition." Subject, verb separated: "he also tells," "We actively try."   |          |
| 3. Proper paragraph organization (unity, coherence, development, etc.)  | <u>3</u> |
| 1st paragraph too long, incoherent, unity lacking. Too little information about B.G.S.; more development needed.  |          |
| 4. Clarity of message (major idea(s) emphasized and easily recognized)  | <u>4</u> |
| Idea hidden by eyewash. Little organization; jumbled. Emphasis of main idea could be better. Some word choice gives wrong connotation--actively, recruit, entice. |          |
| 5. Conciseness of message (no unnecessary words, phrases or sentences)  | <u>5</u> |
| "So far, he has a cumulative" is redundant. "This semester" is unnecessary.   |          |
| 6. Appropriate approach (inductive or deductive)  | <u>6</u> |
| Basically, a deductive approach is used. Some room for improvement, however.  |          |
| 7. Appropriate language style and word choice (formal or informal, talk language, etc.)   | <u>6</u> |
| "Entice," "actively . . . recruit" could be improved.   |          |
| 8. Tone (friendly, positive)  | <u>6</u> |
| Quite good, but perhaps a bit overdone in parts.  |          |
| 9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude)  | <u>6</u> |
| "Cumulative GPA," "Beta Gamma Sigma"--does reader understand these? Perhaps too much "we" in last paragraph.  |          |
| 10. Overall effectiveness of the letter   | <u>4</u> |

TOTAL

(Justify your evaluation in the space provided after each of the ten categories.)

May 11, 19--

Mr. Delbert Johnson  
798 N. Fourth Avenue  
Wellington, Kansas 69134

Dear Mr. Johnson:

You will recall that when you purchased insurance for you home you agreed that a \$50 deductible clause be included in your policy. This means that the home owner pays for all home damages under \$50 and for \$50 of all damages exceeding that amount. The deductible clause reduces the premiums charged to the home owner.

Because your insurance policy has a \$50 deductible clause, we are unable to refund any part of the \$47.15 you paid for your new bedroom window. Had the cost exceeded \$50.00, we would have reimbursed that amount above \$50.00.

Since we cannot offer you coverage on this loss, you may wish to check with the vandal's father to see if his insurance contains a liability clause which will cover your loss.

Sincerely yours,

Arthur D. Walker  
Claims Adjuster

clb



## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

- |                               |                                  |
|-------------------------------|----------------------------------|
| 7 No improvement needed       | 3 Significant improvement needed |
| 6 Slight room for improvement | 2 Major revision required        |
| 5 Some modification suggested | 1 Complete revision required     |
| 4 Medium improvement needed   |                                  |

- |   |                 |
|---|-----------------|
| 1. Appearance (placement, neatness, etc.) Too high. Numbers in address transposed. N. should be spelled out. Last paragraph not indented.   | <u>5</u>        |
| 2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.) Claus--clause. You home--your home. \$50 should be written the same way throughout the letter.  | <u>4</u>        |
| 3. Proper paragraph organization (unity, coherence, development, etc.) "This means" not a good sentence beginning. Reasons for refusal should lead logically to refusal. Paragraph contents ramble somewhat.                              | <u>5</u>        |
| 4. Clarity of message (major idea(s) emphasized and easily recognized) Incorrect information at end of sentence 2; leads reader to believe that he pays \$100 on major claims. Ideas ramble and are thus confusing.                       | <u>4</u>        |
| 5. Conciseness of message (no unnecessary words, phrases or sentences) Excessive repetition of the deductible clause. "that amount above \$50," "any part of," "charged to the home owner"--many excess words.                            | <u>3</u>        |
| 6. Appropriate approach (inductive or deductive) Inappropriate opening sentence and sequence of ideas. Ends on negative thought and emphasizes loss. Tends to be inductive, but could be improved.  | <u>5</u>        |
| 7. Appropriate language style and word choice (formal or informal, talk language, etc.) "You will recall" and "vandal" have negative connotation. Too formal for the needs of the situation.  | <u>4</u>        |
| 8. Tone (friendly, positive) "No" stated in negative terms. Last sentence re-emphasizes negative idea. Not friendly at all. "We cannot" and "We are unable" are negative. Not particularly helpful.                                       | <u>4</u>        |
| 9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude) Alternative offered--good, but could have been worded better. Very little empathy felt from reader's point of view. Rather abrupt. | <u>3</u>        |
| 10. Overall effectiveness of the letter Should have neutral beginning that leads naturally into problem. Follow with facts and analysis supporting refusal. End with neutral idea to de-emphasize refusal.                                | <u>4</u>        |
| TOTAL   | <u><u>4</u></u> |

(Justify your evaluation in the space provided after each of the ten categories.)

July 23, 19--

Mr. George Holt  
417 West Main Street  
Mesa, Arizona 84311

Dear Mr. Holt:

We can certainly appreciate your frustration in trying to obtain your father's savings account. You must realize, however, that we are compelled by law to hold such accounts until (a) there is legal proof that all heirs are accounted for or (b) the deceased has willed that his savings account go to a particular person. Mere possession of the savings passbook cannot be considered sufficient evidence for release of funds.

We do have a copy of your father's death certificate and will be happy to close said savings account as soon as you or your lawyer provide evidence which fulfills the above stated requirements (a) or (b).

We hope that you understand our position in this situation. Please let us hear from you so that we may complete this transaction as soon as possible.

Sincerely,

Arthur D. Walker  
Executive Vice President

clb

## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

7 No improvement needed	3 Significant improvement needed
6 Slight room for improvement	2 Major revision required
5 Some modification suggested	1 Complete revision required
4 Medium improvement needed	

- |   |          |
|---|----------|
| 1. Appearance (placement, neatness, etc.)<br>Too low on page. (a) runs into or.   | <u>6</u> |
| 2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.) Hyphenate "above stated." Wrong ZIP code. Syntax occasionally weak. Possession--possession.   | <u>6</u> |
| 3. Proper paragraph organization (unity, coherence, development, etc.) Last paragraph lacks unity. Last paragraph is inappropriate. First paragraph too long.   | <u>5</u> |
| 4. Clarity of message (major idea(s) emphasized and easily recognized) "All heirs accounted for" could be stated better. Message written with legal jargon that may confuse reader. Written in third person which leaves reader out.                      | <u>5</u> |
| 5. Conciseness of message (no unnecessary words, phrases or sentences) "We hope that you understand our position in this situation," "as soon as possible," "above stated requirements"--all could be stated in more concise way.                         | <u>5</u> |
| 6. Appropriate approach (inductive or deductive) A somewhat inductive approach; however, last paragraph is weak and suggests doubt on part of the writer.   | <u>6</u> |
| 7. Appropriate language style and word choice (formal or informal, talk language, etc.) Language much too formal and cold. Very stilted words used throughout the letter. Needs more talk language.   | <u>3</u> |
| 8. Tone (friendly, positive) Tone indifferent and neutral. "Mere possession," "cannot be considered"--stated negatively. Much more warmth is needed throughout the letter.  | <u>3</u> |
| 9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude) Practically no empathy at all in this letter. Definitely written from writer's point of view. First paragraph makes attempt at empathy, but fails. | <u>4</u> |
| 10. Overall effectiveness of the letter   | <u>4</u> |

TOTAL

(Justify your evaluation in the space provided after each of the ten categories.)

September 26, 19--

Mr. J. L. Doubleday  
Tides Motel  
1286 South University Avenue  
Provo, UT 84601

Dear Mr. Doubleday:

Re: Overdue bill of \$135

Since my last telephone conversation with you on September 20 I have been expecting to receive your August remittance. As of this date no payment has been received and I felt it again necessary to remind you of this overdue bill.

The September bills will soon be mailed out and that will make you two months in arrears. Please make it possible for us to continue our mutually profitable relationship.

Sincerely,

Arthur D. Walker  
Administrative Vice President

clb

## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

- |                               |                                  |
|-------------------------------|----------------------------------|
| 7 No improvement needed       | 3 Significant improvement needed |
| 6 Slight room for improvement | 2 Major revision required        |
| 5 Some modification suggested | 1 Complete revision required     |
| 4 Medium improvement needed   |                                  |

1. Appearance (placement, neatness, etc.) Too high on page. 4  
 Indentions too far to right (Re:). Margins too narrow for a letter this short.
2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.) Comma after Sept. 20. Punctuation and grammar errors. Misplaced modifier--put again after you. Passive construction. Conversation, administrative misspelled. 5
3. Proper paragraph organization (unity, coherence, development, etc.) Inadequate development of major issues. No persuasion. Letter needs to be longer. Too direct. 4
4. Clarity of message (major idea(s) emphasized and easily recognized) No effective persuasion or reasoning evident. Need to be more specific. Last sentence vague as to the action desired. 6
5. Conciseness of message (no unnecessary words, phrases or sentences) 5  
 Letter is concise, but incomplete.
6. Appropriate approach (inductive or deductive) 4  
 Inappropriate approach. Letter too brief to develop effective appeal and supporting statements. Message never really stated effectively.
7. Appropriate language style and word choice (formal or informal, talk language, etc.) Very poor. Impersonal, indifferent, and perfunctory. Stereotyped phrases weaken letter. "Arrears" inappropriate word. 3
8. Tone (friendly, positive) Too stiff and direct. More of a 3  
 threat than an appeal to reason. Nothing friendly or positive about this letter at all. Matter-of-fact, lacking positive tone.
9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude) No empathy at all. Definitely written from the writer's point of view. No reader orientation. "You" attitude omitted. Cold tone. 2
10. Overall effectiveness of the letter 3

TOTAL           

(Justify your evaluation in the space provided after each of the ten categories.)

Dear Club Member:

Just a "mind jogger" to remind you of the payment for the last Tune-of-the-Month Club record we sent you--have you forgotten? The bill which accompanied the record indicated that payment should be send immediately to us.

You will recall that in our initial contract you agreed to purchase four records per year and to pay for these records as soon as you received them. Do not let us down by failing to pay for these records.

We appreciate being able to send high-quality recordings to you and hope that we can continue to provide this service to you. Remember that you have agreed to purchase four records per year. Please keep up to date on your purchases so as to avoid any unnecessary charges.

Cordially yours,

Arthur D. Walker  
Collection Department

## LETTER EVALUATION FORM

For each of the ten categories listed below, assign a value of 1, 2, 3, 4, 5, 6, or 7 according to the following description:

7 No improvement needed	3 Significant improvement needed
6 Slight room for improvement	2 Major revision required
5 Some modification suggested	1 Complete revision required
4 Medium improvement needed	

1. Appearance (placement, neatness, etc.) Too high and a little out of alignment. No date line or inside address. Margins too wide. 4
2. Proper sentence structure (syntax, grammar, punctuation, spelling, etc.) Spelling errors--send-"t," "unnecessary." A few punctuation errors. Omit "so as." 5
3. Proper paragraph organization (unity, coherence, development, etc.) "4 records per year" repeated. Unity poor; coherence and development poor. More than one main idea in paragraphs. 6
4. Clarity of message (major idea(s) emphasized and easily recognized) How much? Last paragraph deals with a new point. More emphasis needed on central idea--"Pay your bill." 6
5. Conciseness of message (no unnecessary words, phrases or sentences) "4 records per year" repeated. Words and phrases repeated. Nags the reader. 5
6. Appropriate approach (inductive or deductive) Last paragraph deals with unrelated idea. 6
7. Appropriate language style and word choice (formal or informal, talk language, etc.) More formality than necessary. Too businesslike and impersonal. "And hope we can continue to provide" reflects doubt of writer; does not impress reader. 5
8. Tone (friendly, positive) Tone somewhat friendly but not persuasive. Complains a bit. Threat and lecture are conspicuous. "Do not let us down," "failed," and "forgotten"--all are negative. 4
9. Empathy (written from reader's point of view, all appropriate information included, "you" attitude) Do not let us down--not written from reader's point of view at all. Almost exclusively a writer's viewpoint. Nags the reader. 3
10. Overall effectiveness of the letter Does not persuade the reader to pay. 4

TOTAL                     

(Justify your evaluation in the space provided after each of the ten categories.)

APPENDIX C

POST-TEST WRITING PROBLEMS



## PLEASANT-NEWS LETTER

You are the adjustment man in a mail-order firm. A customer writes that he received the \$100 patio set that he ordered, but your shipping department has sent him the wrong type of chairs--the chairs he received are too low to allow comfortable eating from the table. Your shipping department is ordinarily very efficient, but in this case it was at fault. You are sending the chairs the customer ordered; he can return the others at your expense.

---

William C. Himstreet and Wayne M. Baty, Business Communications: Principles and Methods (Belmont, California: Wadsworth Publishing Company, Inc., 1961), p. 146.

## UNPLEASANT-NEWS LETTER

As credit manager of the Regis Department Store, you have received a credit application from Mrs. George Bann, who seems to be doing a noble job of making the family ends meet on her \$450 monthly wages. She and her husband and four children rent a \$90-a-month cottage. Her husband has been unable to work for three months because of illness, but he hopes to get a job within two or three more months. You honestly feel that a charge account is not what this family should have now. Unexpected emergencies in their financial position could cause them serious problems. Cash purchasing from your complete catalog, where they pay as they go, lets them know where they stand at any time. Also you have end-of-month sales regularly, with savings up to 50 percent. Send Mrs. Bann a catalog supplement with all the news about your sales. Perhaps when Mr. Bann is working you will reconsider her application for your monthly payment plan. Make your letter specific and genuinely helpful.

---

Herta A. Murphy and Charles E. Peck, Effective Business Communication (New York: McGraw-Hill Book Company, 1972), p. 336.

## COLLECTION LETTER

Write an appropriate letter to Miss Elsie Brennan, Owner-manager, of the Secretarial Services Office, your city. Miss Brennan is a single, aggressive businesswoman who started the business on her own and has built it into one of the most reliable secretarial services in the city. Her account balance is now \$73.00 and it is 40 days past due. Miss Brennan has received two reminders and a letter of inquiry. She has been a credit customer of yours for three years and has paid her payments promptly during that time. Your company is the Office Supply Store.

---

William C. Himstreet and Wayne M. Baty, Business Communications: Principles and Methods (3rd ed., Belmont, California: Wadsworth Publishing Company, Inc., 1969), pp. 110-111.

APPENDIX D

COURSE EVALUATION QUESTIONNAIRE

## BUSINESS COMMUNICATION MID-SEMESTER COURSE EVALUATION

1. I have enjoyed this class \_\_\_\_\_ most other classes I have taken at BYU.
  - a. more than
  - b. about the same as
  - c. less than
  
2. I like the subject matter of this course
  - a. very much
  - b. quite a bit
  - c. moderately well
  - d. very little
  - e. not at all
  
3. For each credit hour in this class, I spend approximately the following number of hours per week in preparation:
  - a. less than one
  - b. one
  - c. two
  - d. three
  - e. four or more
  
4. (In answering this question, remember that the "standard" formula for computing time to be spent outside of class is 2-3 study hours per week for each credit hour in the course.) When you consider your background for this course and its difficulty for you, the work load is
  - a. impossibly burdensome
  - b. usually too heavy
  - c. about right
  - d. usually too light
  - e. negligible
  
5. In this class, I have worked \_\_\_\_\_ I do in most classes.
  - a. harder than
  - b. about the same as
  - c. less than
  
6. How would you rate the value of the text used in this course?
  - a. excellent
  - b. good
  - c. fair
  - d. poor
  - e. completely unsuitable
  
7. How has the teaching in this class helped you in terms of acquiring new knowledge, skills, or abilities? I feel that my progress and achievement in comparison with my potential have been
  - a. excellent
  - b. very good
  - c. moderate

- d. not very good
  - e. negligible
8. When compared with the teaching methods used in other classes I have taken at BYU, the teaching methods used in this class were
- a. more effective
  - b. about equally effective
  - c. less effective
9. The instructor's evaluation of students' work is
- a. always very helpful
  - b. generally helpful
  - c. sometimes helpful
  - d. seldom helpful
  - e. never helpful
10. In his grading policies and procedures, I believe the instructor is
- a. consistently fair
  - b. fair most of the time
  - c. usually fair
  - d. sometimes fair
  - e. seldom fair
11. For examinations given in this course, I feel that I have been given
- a. excellent preparation
  - b. sufficient preparation
  - c. moderate preparation
  - d. marginal preparation
  - e. insufficient preparation
12. List your recommendations for improving this course in future semesters:
- a.
  - b.
  - c.
  - d.
  - e.

APPENDIX E

STUDENTS' RECOMMENDATIONS FOR COURSE IMPROVEMENT

CLASS	PERCENT
<u>Experimental: Cooperating Instructor</u>	
--Write more letters.	63
--More examples and in-class evaluation of them.	9
--Evaluations give no help in learning to write.	9
--Disliked evaluations.	6
--More evaluations.	3
<u>Experimental: Researcher</u>	
--Write more letters before midterm.	84
--Liked evaluating letters.	16
--Didn't like evaluations.	8
--Should have fewer evaluations.	5
<u>Control: Cooperating Instructor</u>	
--Would like more examples, class discussion, and evaluation of letters rather than just writing.	12
--More practice writing letters.	6
--Not so many letter assignments, but a more complete look at a few.	3
<u>Control: Researcher</u>	
--More examples and evaluation of other letters.	11
--More in-class writing assignments.	11
--More writing assignments.	6

VITA

William Henry Baker

Candidate for the Degree of

Doctor of Education

**Thesis:** A STUDY TO DETERMINE THE EFFECTIVENESS OF LETTER EVALUATION AS A LEARNING DEVICE IN BUSINESS CORRESPONDENCE COURSES

**Major Field:** Business Education

**Biographical:**

**Personal Data:** Born in Beaver, Utah, July 23, 1944, the son of Mr. and Mrs. Jesse Baker.

**Education:** Graduated from Beaver High School, Beaver, Utah, in May, 1962. Received a Bachelor of Science degree from Southern Utah State College, Cedar City, Utah, in May, 1969. Received Master of Science degree from Brigham Young University, Provo, Utah, in August, 1970. Completed requirements for Doctor of Education Degree at Oklahoma State University, Stillwater, Oklahoma in December, 1974.

**Professional Experience:** Lab instructor in business education at Southern Utah State College, 1968-69. Instructor of business education at Brigham Young University, 1970-72, 1973-74. Part-time instructor of business education, Oklahoma State University, 1972-73.

**Professional Organization:** Member of Delta Pi Epsilon, Beta Gamma Sigma, Utah Business Education Association, Western Business Education Association, National Business Education Association, and American Business Communication Association. Served for two terms as President, Alpha Omega Chapter, Delta Pi Epsilon.