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**AN EXPLORATION OF STUDENTS' AND BUSINESS PERSONS'
RATINGS OF THE IMPORTANCE OF WRITING SKILLS
FOR BUSINESS SUCCESS**

by

Miriam P. Coleman

**A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Educational Leadership**

**Western Michigan University
Kalamazoo, Michigan
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AN EXPLORATION OF STUDENTS' AND BUSINESS PERSONS'
RATINGS OF THE IMPORTANCE OF WRITING SKILLS
FOR BUSINESS SUCCESS

Miriam P. Coleman, Ed.D.

Western Michigan University, 1994

The central question explored in this research was whether the perceptions of undergraduate students and business employers about the importance of writing skills for success in business differ from one another. Related questions were posed about the relationship of certain individual characteristics such as sex, student classification, and student institutional affiliation and their interactions to these perceptions.

Subjects were selected from both public and private institutions of higher education and 11 medium-sized businesses in western Michigan. Data collection was accomplished using two 30-item Likert-type Importance of Business Writing (IBW) questionnaires developed for obtaining information on the perceptions of subjects relative to the importance of business writing for 70 volunteer business subjects and 214 volunteer student subjects. A rating of the importance of business writing was secured for all subjects providing responses to 10 specific items on the instruments. Comparisons of mean ratings of importance utilizing t tests of independent samples were undertaken to test the four hypotheses related to differences between subgroups; two-way analyses of variance (ANOVAs) were used to test the significance of interactions between independent variables.

The major conclusion in this study was that the perceptions of students and business persons about the importance of business writing skills for future success in business differ from one another. Other conclusions found in the study were that the perceptions of the importance of business writing for students in the public university and the private college differed, and that the interaction between students' institutional affiliation and their classification as an upper- or lowerclassman was associated with variations in their perceptions of the importance of writing skills for future success in business. The study also concluded that individuals of both sexes share essentially the same perception of the importance of writing skills for business success.

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Miriam P. Coleman

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
LIST OF TABLES	vii
CHAPTER	
I. INTRODUCTION	1
Overview	1
Purpose of the Study	3
Rationale	4
Research Questions	5
II. REVIEW OF THE LITERATURE	6
Overview	6
A Current Perspective	6
Summary of Previous Literature on Business Communication	8
Communication: The Essential Idea	8
An Escalating Interest: Literature From 1984 to 1992	9
A Critical Research Effort: Crystal Balls and Mirrors	19
Other Works Related to the Current Study	24
Importance and Value of the Current Study	27
Hypotheses to Be Tested in the Study	28
Differences in Perceptions of the Importance of Business Writing Based on Student/Business Person Status	29
Differences in Perceptions of the Importance of Business Writing Based on Sex	29

Table of Contents--Continued

CHAPTER

Differences in Perceptions of the Importance of Business Writing Skills based on Educational Classification	29
Differences in Perceptions of the Importance of Business Writing Skills Based on Institutional Type	30
The Effect of an Interaction Between Subject Status and Sex on Perception of the Importance of Business Writing	30
The Effect of an Interaction Between Classification and Institution on Students' Perceptions of the Importance of Business Writing	31
The Effect of an Interaction Between Sex and Institution on Students' Perceptions of the Importance of Business Writing	31
The Effect of an Interaction Between Sex and Classification on Students' Perceptions of the Importance of Business Writing	31
III. DESIGN AND METHODOLOGY	33
Introduction	33
Subjects	33
Sampling Procedures	34
The Student Sample	34
The Business Subject Sample	35
Approval by Human Subjects Institutional Review Board	35
Development of the Study Instruments	36
Administration of the Study Instruments	38
Data Analysis	40
Hypotheses of the Study	40

Table of Contents--Continued

CHAPTER		
	Operationalizing the Hypotheses	41
	Statistical Analysis Procedures	42
IV. RESULTS		45
	Overview	45
	Demographic Characteristics of the Sample	46
	Student Subjects	46
	Business Person Subjects	50
	Exploration of the Importance of Written Communication	52
	Exploration of Study Hypotheses	53
	Comparison of Business Persons' and Students' Ratings	53
	Mean Scores of the Students and Business Persons	53
	Rank Order Comparison of Students' and Business Persons' Ratings	60
	Comparisons of Subjects' Ratings by Sex	61
	Comparisons of Students by Classification	64
	Comparisons of Students by Institutional Affiliation ...	66
	Interaction of Independent Variables	67
V. CONCLUSIONS AND RECOMMENDATIONS		73
	Introduction	73
	Summary of the Study	73
	Conclusions	77
	Limitations of the Study	79

Table of Contents--Continued

Recommendations for Future Research	81
Summary	82
APPENDICES	84
A. Approval Letters From Human Subjects Institutional Review Board	85
B. Business Writing Survey--Student Subjects	88
C. Business Writing Survey--Business Person Subjects	91
BIBLIOGRAPHY	94

LIST OF TABLES

1. Student Subjects: Affiliation by Sex	47
2. Student Subjects: Institution by Major Field of Study	48
3. Student Subjects: Classification by Institution	49
4. Student Subjects: Previous Employment History	49
5. Student Subjects: Types of Work for Students With Work Histories	50
6. Business Person Subjects: Sex Distribution	51
7. Business Subjects: Number of Years Employed in Present Position	51
8. Comparison of Business and Student Subjects' Mean IBW Scores	54
9. Importance of Memoranda Writing for Student and Business Subjects	55
10. Importance of Letter Writing	56
11. Importance of Proposal Writing	56
12. Importance of Informational Report Writing	57
13. Importance of Taking Minutes	58
14. Importance of Analytic Report Writing	58
15. Importance of Resume Writing	59
16. Importance of Word Processing	59
17. Importance of Policy Writing	60
18. Importance of Electronic Mail	61
19. Ordered Ranking of Business Writing Skills by Students and Business Persons Based on Mean Ratings	62
20. Total IBW Scores by Sex for All Subjects	63

List of Tables--Continued

21. Comparison of Student Subjects' Mean IBW Scores by Sex	64
22. Comparison of Business Subjects' Mean IBW Scores by Sex	64
23. Comparison of Student Subjects' Mean IBW Scores by Classification	65
24. Comparison of Students' Mean IBW Scores by Institutional Affiliation	66
25. Distribution of IBW Scores by Sex and Subject Status	68
26. Two-Way ANOVA of Total IBW Scores for All Subjects by Sex and Subject Status	68
27. Distribution of Student IBW Scores by Institution and Classification	69
28. Two-Way ANOVA of Student IBW Scores by Institution and Classification	69
29. Distribution of Student IBW Scores by Sex and Institution	70
30. Two-Way ANOVA of Student IBW Scores by Sex and Institution	70
31. Distribution of Student IBW Scores by Sex and Classification	71
32. Two-Way ANOVA of Student IBW Scores by Sex and Classification	72

CHAPTER I

INTRODUCTION

Overview

Over the past several decades, communication skills have become generally accepted in the business community as the sine qua non of success. If there have been disagreements about the topic, these have been not so much about whether communication itself is of singular importance, but rather about what types of communication skills--writing, speaking, reading, listening, foreign language abilities, or technological competence--are most important in the complex, ever-changing global economy in which most businesses of the United States now compete.

Questions about the relative importance of specific communication skills are not trivial. Since academic institutions have assumed more and more responsibility for the preparation of employees for United States businesses in the 20th century, the answers to such queries logically provide foundational support for the balance sought between a variety of potential course offerings in the business school curricula in this country's institutions of higher education. For example, if faculties in institutions of higher education believed written skills were most important for success in business, it would not be surprising to find colleges and universities providing more training in these skills (rather than other communication skills) for all students as a part of their educational

offerings. Similarly, it is not unreasonable to postulate that most, if not all, students near completion of a business degree in institutions of higher learning, even at the baccalaureate level, are aware of which communication skills are important to prospective employers, and particularly, to have a notion about which of these skills are of most value for their own future success in the business world.

But even a cursory examination of general business journals--not to mention journals in such specialized fields as banking, public accounting, advertising, and data management--suggests that neither of these reasonable assumptions may be true. From virtually every source, complaints are raised that students graduating from colleges and universities in the United States are not able to read or write at the levels required for entry level business positions in United States corporations (Ruby, 1993; Schwartz, Yarbrough, & Shakra, 1992; "Writing Skills That Spell Employment," 1992).

It is difficult to understand why this is so, but at least two possibilities come to mind: (1) Schools of business in the United States do not provide adequate attention in their curricula to the communication skills that the nation's businesses require, and (2) business students do not take advantage of the curricular offerings that are available to gain the most needed skills. While the exploration of both possibilities is beyond the scope of this investigation, it is acknowledged that these are quite likely interrelated possibilities, rather than distinct. For the purposes of this study, however, attention is directed principally to students receiving undergraduate business training. It is believed that an understanding of this aspect of the question provides important clues to help

understand the gap between business school graduates' communication skills and employer's communication needs which is cited often as a contemporary issue for United States corporations.

Limiting concern principally to students, two new possibilities present themselves: Students do not secure needed writing skills because they are unaware of their future importance; in other words, they do not perceive them to be important. Or, students are aware of the importance of writing skills, but do not acquire them for some other reason. The research to be pursued addresses an exploration of the first possibility.

Purpose of the Study

As the review of literature in Chapter II demonstrates, facility in writing the English language has generally been considered to be the most important skill for employees in United States businesses. While a variety of other skills have received attention, including listening; reading; speaking; and most recently, computer-related skills, no studies of business communication in this century have found that skill in writing is unimportant or unrelated to business success. This study, therefore, explores the general topic of writing as a principal component of business communication. In specific, it focuses on examining whether differences exist between two distinct groups of individuals--business students and persons employed in business--with respect to their perceptions of the importance of specific written communication skills for success in the business world. The following written communication skills were selected from previous studies that considered these

components as important elements of business communication: memo-randa writing, letter writing, informational report writing, proposal writing, resume writing, policy writing, and abstract writing. The relationship of other individual characteristics on perceptions of importance is analyzed as well.

Rationale

While much is known about business persons' beliefs because of an extensive base of literature--Aby, Barr, and Sterrett (1991); "How Businesses Search" (1992); Sriram and Coppage (1992); Speck (1990); and Zimmerman (1992) provide some of the most recent summaries of this research--comparatively little is known about how business students themselves perceive the importance of communication skills, particularly written communication skills, while they are still in school. If their views are substantially divergent from those of persons already in business, it could be anticipated that they would be likely to graduate from schools of business and begin their professional careers with preparation considered as inadequate by their employers. If, however, the views of the two groups are substantially convergent, it could be anticipated that they would devote sufficient attention in school to developing writing skills (if opportunities are available) so that their abilities in this area would be at least adequate for job performance upon graduation.

This study examined which of these two conditions is most representative with respect to undergraduate business students in a Midwestern region. The convergence or divergence of students' and business persons' views is examined in depth and recommendations are generated

based upon the results.

A goal of this research was to discuss, based on the findings, whether and how such differences can be addressed in postsecondary institutions providing business education. Recommendations, as appropriate, are formulated to provide future direction for business school curricula and/or for business organizations' in-service training to develop written communication skills in entry level employees.

Research Questions

The central question explored in this research is: Do the perceptions of undergraduate students and business persons about the importance of writing skills for success in business differ from one another?

Several other individual characteristics related to the perceptions of importance of business writing skills were also explored, including sex, previous college study or work experience, and type of institutional setting. Specific questions addressed were: Do perceptions of males and females about the importance of writing skills for success in business differ from one another? Do perceptions of female managers and male managers about the importance of writing skills differ from one another? Do perceptions of female students and male students about the importance of writing skills differ from one another? Do perceptions of lowerclass business students (freshmen and sophomores) differ from perceptions of upperclass business students (juniors and seniors)? And, finally, do perceptions of students at a public university differ from perceptions of students at a private college?

CHAPTER II

REVIEW OF THE LITERATURE

Overview

Concern about the inability of college graduates to express themselves adequately in writing is not new. As the review of the literature which follows demonstrates, although there has been considerable interest in this topic for decades, uncertainty about many of the specific features of the problem continues to exist. Despite this large body of previous thought and research, the need for further investigations of this topic is supported.

A Current Perspective

Over the past four decades, more and more attention has been directed to the topic of preparing individuals for careers in business. A considerable proportion of business and education literature has focused upon practices in professional schools of business, generally located within colleges or universities. Beginning at least as early as the 1959 Gordon-Howell and Pierson report, reforms have been suggested in undergraduate and graduate level training to better meet the needs of the existing and emerging business community; however, most studies, articles, and reports have examined the adequacy of the business school curriculum solely from the perspectives of business managers and chief executive officers and/or educators. Comparatively little attention has

been directed to the perspectives of business school students who are the recipients of these educational efforts.

The student perspective is an important piece of the overall business education picture which is currently underrepresented in the literature base. This study addressed this generally overlooked perspective.

The review of the existing literature base provides evidence that the development of writing skills has historically been and continues to be an important topic for the business and business education communities. Journals, conferences, monographs, and reports of all types document a persistent concern with business employees' ability to write. This review also documents the glaring paucity of substantive information about student perspectives on this topic. Given the longstanding nature of concerns and the amount of space dedicated to their discussion in professional publications, this observation is somewhat surprising.

As even a cursory examination of the literature demonstrates, the topic of writing skills for professionals in business is clearly considered to be important. But this literature review also demonstrates that a more comprehensive examination of factors involved is overdue. An exploration of writing skills which includes information on students' perceptions has the potential to suggest new directions for educational and employment practices, or--depending on the results--to provide support for the status quo. The review of literature which follows provides a summary of current knowledge on this topic as well as points out gaps in this knowledge base.

Summary of Previous Literature on Business Communication

Communication: The Essential Idea

In about 400 B.C., Plato (cited in Lesley, 1957) wrote:

What is there greater than the word which persuades the judges in the courts, or the Senators in the Council, or the citizens in the Assembly, or at any other political meeting? If you have the power of uttering this word, you will have the physician your slave, the trainer your slave, and the money maker . . . will be found to gather treasures, not for himself, but for you who are able to speak and to persuade the multitude. (p. 11)

Though this ancient Greek philosopher obviously recognized the power of communication long ago, there appears to have been a period of time when this recognition was lost, or at least misplaced. Evidence Lesley's (1957) lament:

Failure to correctly evaluate the importance of communication . . . permeates our whole society's outlook. This is one of the most complex and demanding human disciplines, yet it is treated as casually as playing catch or spinning a top. . . .

This function that everyone copes with throughout life and that is vital to the functioning of all society is one of the most neglected subjects in the training of the child, getting almost no conscious attention in the home or in play groups and being miserably taught in the schools.

Yet is probable that when people realize how much trained skill in communication . . . can do for the individual, it will be studied almost as avidly as the latest line on sex. (pp. 15-16)

While it is presently impossible to document whether interest in communication skills has reached the level of studious interest enjoyed by matters of a sexual nature, it is quite easy to document that studious interest in all forms of communication--and particularly learned

communication skills--has indeed increased since Lesley's mid-1950s observation. As the Association of American Colleges (1985) noted in Integrity in the College Curriculum, "A bachelor's degree should mean that its holders can read, write and speak at levels of distinction and have been given many opportunities to learn how. It should also mean that many do so with style" (p. 19).

Not surprisingly, business has been an arena in which the abilities to read, write, speak, listen, and appropriately utilize available technological communication tools have been of interest. This review of the literature will begin with the most current research efforts on this topic and include the major works which contributed to the formulation of the present study of students' and employers' perceptions of the importance of written communication skills.

An Escalating Interest: Literature From 1984 to 1992

In 1992, the National Association of Manufacturers (cited in "How Businesses Search," 1992) conducted a survey of its members which suggested that, despite the recession, many employers were still looking for qualified employees. They were handicapped in their searches, however, because they found approximately one-third of the applicants had reading and writing skills which were substandard. Twenty-three percent of the respondent manufacturers indicated that they were offering on-the-job remedial training in writing because they could not fill positions with qualified applicants with these skills ("How Businesses Search," 1992). The same survey noted that these manufacturers found approximately 38% of their current employee population could not

communicate adequately.

As one survey respondent noted, "This appears to be a Catch-22 situation. Just as workers' skills are declining, demands from industry have increased due to upgraded technology" ("How Businesses Search," 1992, p. 1).

In the same year, a report by Zimmerman (1992) focused extensively on employers' provision of writing skills training to upgrade job performance. While agreeing that such training is often necessary because of below average entry level writing skills, the work pointed out that several other positive outcomes may accompany training in writing, including improved employee teamwork, attitude, and productivity. Zimmerman did not explore the points of view of new employees nor of business students seeking future employment in these business settings.

Moore and Mulcahy (1991) suggested that the overall field of business communication was being constantly reshaped by technological and organizational changes. In a summary of previous studies, this work, too, concluded that despite the large investment made in studying and expanding formal business communications training in the undergraduate and graduate curricula, many entry level business school graduates were still perceived by their employers to be in need of additional training once they arrived on the job. The article included no information on business school graduates' own perceptions of the need for additional training in communication skills to secure employment or achieve business success; however, a study by Blake (1992) published one year later did provide additional insight on this topic. Blake reported the results of a Purdue University alumni study which concluded that

academic preparation for business writing tasks had not been adequate. A business curriculum change to include a focus on student research projects as part of the business writing class was recommended.

This conclusion was not unlike that reached by Aby et al. (1991) who conducted a curriculum study of economics department heads in five southeastern states which suggested that college graduates were handicapped in business careers by inadequacies in the traditional curricular offerings in three areas, one of these, writing skills. Economics majors' perceptions about whether these areas of instruction had been inadequate or whether they perceived a "handicap" in their search for employment after education were not included in the study.

A number of recent articles in journals directed to particular groups of business school graduates currently employed (including works by Cunningham, 1992; Dulek, 1992; Gladis, 1991; Held, 1991; Kroeger, 1991; and Lovas, 1991) document that the issue of writing skill development and improvement continues to be of major concern to business employers of all types. Kador (1991), for example, noted that general writing and public relations proficiency count more than specific computer- or technology-related background when high-technology firms recruit new talent. Citing information from a survey of chief executive officers of hi-tech firms, Kador's work suggested that good writing was a minimal requirement when screening applicants for employment. No mention was made of whether undergraduate students preparing for careers in these fields perceived this requirement.

The importance of writing skill has also been recently described in more traditional areas of business practice as well, including discussions

by Clarcq and Conley (1991); Hayes, Hollman, and Thomas (1991); Gladis (1991); Shea (1991); Seitel (1991); Jones (1991); and Novin and Pearson (1989). Schwartz et al. (1992) studied the field of public relations, for example, and found that writing skills were rated an "overwhelming must" (p. 21) by some 86% of the respondent public relations practitioners. Writing skills, in fact, were endorsed by the large sample of survey respondents as the most important skills for career success. The study did not explore public relations students' views, however.

Public relations is just one of many specialized field where the importance of writing skills has been documented. As Hayes et al. (1991) noted, for example, many errors in the accounting profession were believed to arise from deficiencies in certified public accountants' (CPAs') basic writing ability. This work primarily described the provision of remedial writing assistance for CPAs with inadequate skills. It provided no insight into the relationship between the adequacy of undergraduate college coursework and the lack of writing skills on the part of the CPAs studied. Furthermore, the work did not explore whether CPAs themselves perceived their underdeveloped writing skills to be a problem or whether they had anticipated a need to develop such skills as undergraduate business students.

Sriram and Coppage (1992), on the other hand, described a comparison of educators' and CPA practitioners' views on communication training in the accounting curriculum. The views of some 216 educators in United States schools of business were compared to the responses secured from practicing CPAs. Both sets of respondents

agreed that writing skills were not appropriately emphasized in undergraduate training; most accounting students had taken only a single course with an emphasis on written communication in their college careers. Most respondents--educators and CPAs alike--agreed that accountants should study grammar, punctuation, and spelling as well as other courses to build skill in writing. A significant finding of the study was that most educators were unaware of the variety and types of writing skills needed by accounting professionals. The article did not examine, however, whether undergraduate accounting students are aware of the importance of writing for the performance of their future jobs when they are still in school.

Knack (1991) explored, in part, the impact of writing skills on the business careers of women and minorities employed in the field of planning. Respondents in her research suggested that students who complete their education with poor writing skills cannot expect to succeed in a field that thrives on written reports. In effect, training received in schools was considered to be a contributing factor to the "glass ceiling" experienced by groups in society which do not find maximum upward mobility in their career paths. The consideration of gender-related differences in communication skill was introduced by this article, but unresolved; however, it did provide some foundation for looking more closely at whether sex differences exist at the managerial or student level.

Mandel and Uellen's (1990) work published in Working Woman provides related support for exploring the relationship of sex and the perception of writing skill importance. Although its focus was specifically on memo-writing skill development, its findings may be generalized

to other areas of written communication as well. Neither work, however, looks at differential preparation or training for female students enrolled in business curricula with respect to their impact on the development of writing skills.

Martin and Ranson (1990), on the other hand, conducted a study of one specific component of the writing ability of undergraduate business students, the ability to spell. The spelling skills of some 430 business students were evaluated. As a group, the college students' scores exceeded established high school norms, but a significant number demonstrated skills below the ninth grade level, indicative of a rather clear deficiency. Students scoring highest tended to be females with higher overall college grade point averages who were employed only a few hours a week. Student perceptions of the importance of spelling skill development for a business career were not explored, although recommendations were provided including the creation of a specialized writing clinic to better prepare business students needing assistance.

Hiemstra, Schmidt, and Madison (1990) reviewed 200 pieces of literature on the general topic of business writing skill, most of it found to be related to communication technology rather than communication skills. Focused upon the perceptions of the need for communication skills in accounting, this particular study found that as certified management accountants (CMAs) advance in managerial fields, their need for good communication skills becomes more important. Most of the CMAs surveyed for the study indicated that the courses they completed in communication skills at the undergraduate level did not adequately prepare them to communicate as business professionals.

In the same year, Speck (1990) suggested that many graduates may possess poor writing skills because writing was not emphasized in their college coursework. Speck's proposal was for the establishment of a relationship between new graduates who have been employed and a managerial mentor, with the mentor serving as a writing tutor. According to this plan, the manager must make a commitment to improve new employees' writing skills through a three-part process which includes defining expectations about what constitutes written errors, including spelling, grammar, mechanics, and style, and providing authorized references. No information is provided to indicate the reactions of new employees to this mentoring approach to writing improvement.

Historically there has been little doubt expressed by business professionals in any specialty that communication skills in general play a vital role in the preparation and success of managers. The earliest studies, dating from the 1940s and 1950s, stressed the importance of communication in management, but often lacked a clear definition of the specific communication skills necessary for effective performance in the workplace.

In 1989, however, Golen, Lord, Penrose, and Waltman undertook a meta-analysis of a large group of existing studies to determine what specific skills were documented by other research as necessary for entry-level employees. Comparing university professors' and employers' ratings, this analysis concluded that written communication skills should be the primary focus of business communication curricula. The research was not extended to include views or perceptions of students enrolled in business curricula.

Some support for these findings was provided by Weaver (1988) whose own meta-analysis of surveys published in 1986 by the journals Personnel Administrator, Personnel, and The Endicott Report concluded that the top skills for job performance were oral communication skills, written communication skills, and enthusiasm. No studies of student perceptions, interests, or abilities were among those analyzed, however.

In the same year, Tabeaux (1988) undertook an examination of business employees' writing skills focused on common writing problems. The findings suggested that many of these problems resulted from deficiencies in undergraduate freshman-level composition courses, generally a required component of the liberal arts base or core of business school curricula. No deeper examination of whether students were cognizant of these deficiencies as their educations progressed was included.

A Chronicle of Higher Education headline of the period noted, "Reform of Undergraduate Education Requires Integration of Professional and Liberal-Arts Studies, Report Says" (1988). The example of preparation for professional business careers and facility in written and oral communication was included in the text of the article, but, again, the article did not extend its examination to concerns with student perceptions, interests, motivations, or awareness of a need for more or better writing skills.

Carnevale, Gainer, Meltzer, and Holland (1988) examined in greater detail the specific skills that employers expected their employees to have. Basing results on a 2-year joint project of the American Society of Training and Development and the United States Department of Labor, the report emphasized the importance of basic skills in a world of

new and changing technology. Among the basic skills cited as essential were written, oral, and interpersonal communication abilities. The study concluded (among other things) that written communication skills were vitally important in the workplace as the primary means of communicating policies, procedures, and concepts. Furthermore, the report suggested, since employees were often lacking in these skills, companies were forced to implement in-service training for new and existing workers, a task once assumed by colleges and universities.

A year earlier, Harper (1987) surveyed deans of schools of business and large corporation's chief executive officers (CEOs) to determine their views about the most important skills for graduates of schools of business. Deans ranked oral and written communication skills as the most important; CEOs selected the same skills but rated them as equal in importance with interpersonal skills.

Similar conclusions were reached by Bennett and Olney (1986) who replicated a 1970 survey of attitudes and perceptions of the top executives of the largest Fortune 500 companies. Examining effective communication skills related to success in business, the authors found that executives were advocates of placing greater emphasis on communication skills in postsecondary institutions. The overall conclusions of the study were that in the mid-1980s, communication skills were more important than ever before and that they would continue to be a critical component of the (then-developing) information society. Several other specific conclusions were reported, the one most germane to the present study noting that the three skill areas of interpersonal, written, and oral communication were considered by executives to be of critical

importance for their own job performance.

Bell and Richter (1986) examined the importance of communication skills in the specialty field of data processing (DP), reporting that although such skills are critical to DP professionals, their development was often ignored by educational institutions as well as by students majoring in computer sciences. The analysis also suggested that business firms reinforce the attitudes born in college classes: Communicating information to nonexperts in computer science was the responsibility of someone else. The authors concluded that although companies compensated for the lack of communication skills in their employees by offering a wide range of in-house training and by hiring technical writers, these methods increased costs and decreased time spent on job-related activities. A recommendation was made that colleges establish minimum competency standards in written and oral communication for aspiring data processors. To accomplish this it was suggested that industry pressure universities by showing a clear preference for able communicators who graduated from computer science programs.

Another specifically focused study contemporaneous with that of Bell and Richter (1986) and of particular interest to the current research was undertaken by Berryman-Fink (1985), this exploring gender differences in views related to the communication skills and training needs of women managers. Male and female managers were surveyed to determine whether differences existed. Results provided evidence that males and females differed more in their perception of female communication skills than in their perception of female communication needs. At the same time, it confirmed that for both males and females the three most

important skills for management success were considered to be listening, writing skills, and verbal communication skills.

Evidence such as this relating to sex differences between managers suggests that similar sex differences may exist between male and female undergraduate students, although there have been no studies to date exploring this likelihood.

A Critical Research Effort: Crystal Balls and Mirrors

One particular study deserves examination in greater detail because of its direct relationship to the proposed study. Austin and Ventura (1985a) studied student views on the importance of communication. The report, entitled Crystal Balls and Mirrors, reflected the results of two separate surveys: one of employers and the other of students. Employers were asked to evaluate the importance of various communication skills. Students were asked to indicate how important these skills were to their own career success (mirrors) and to provide their opinion of how they believed employers would rate the importance of these skills (crystal balls). As is generally expected in any research endeavor, this study had both strengths and weaknesses, several of them worth exploring in the context of this current research effort.

Strengths of the Study

A major strength of this study was that in the selection of subjects, communication students were included. This inclusion contrasts sharply with most other studies in the field of business communication, studies which, as is evident, have typically utilized surveys of employers,

academic authorities (deans or professors), or representatives of both of these groups--but never students themselves. Austin and Ventura (1985a) referred to this neglect in their introduction, and have clearly broadened their sample to reflect the importance they attached to students' perceptions. They have also, of course, included representatives of the business community--that is, employers--in the sample as well. The perceptions of professors and deans were not sought.

Another strength of the study was that its design was extremely straightforward, appropriate for the very simple research questions guiding the study, namely:

1. What are the perceptions of employers regarding the importance of certain communication skills for new employees?
2. What are the perceptions of employers regarding the importance of new employees' abilities to train others in these same communication skills?
3. What are students' perceptions of the importance of these communication skills for themselves as new employees after graduation?
4. What are students' perceptions of the importance of their abilities to train others in these communication skills?
5. How important do students believe that employers will perceive these communication skills to be?
6. How important do students believe that employers will perceive the ability to train others in these skills will be?

These six questions were addressed by means of two separate surveys--one each for employers and students.

The student survey was twice as long (52 items) as the employers' because students recorded not only their own perceptions of the importance of certain communication skills, but also their perceptions of what they believed employers' perceptions would be, or, in the authors' words, "what students think employers think" (Austin & Ventura, 1985a, p. 7).

Although the research questions are somewhat difficult to state succinctly, they were not highly abstract, nor hard to understand; nor was the research method employed to answer them unnecessarily convoluted. There was little or no subterfuge involved in this research. Austin and Ventura (1985a) subscribed to the notion that to know what others think, ask them directly. Each subject in the two nonprobability samples was therefore administered one questionnaire a single time. Results were tabulated and analyzed with correlations and t tests. Except that all members of the student sample had taken at least one university-level course in communication, no "intervention" had taken place, nor was the effect of any intervention--except possibly the effect of a college education in general--measured. Despite the probably very obvious temptation to translate this study into highly specialized jargon, the researchers have made an effort to describe this work and its outcomes clearly.

Weaknesses of the Study

The study does have weaknesses, however. For one, there are points at which insufficient detail was provided. For example, by design, no demographic details about respondents in the employers' sample

were sought. The ability to generalize these findings to any other employer group was limited by this omission. Furthermore, the lack of knowledge about employers raised questions about the conclusions drawn and the implications suggested. Still another problem with the study is that while much of the introductory material and literature review deals with studies of employers' and academicians' perceptions of communication majors' and/or business students' skills, the students in this sample were not communication majors nor business majors, but simply students who were enrolled in one of four communication concentration courses in a single university when the study was undertaken. The research report does not make clear why communication majors were not used as subjects when they were probably available to the authors (professors of communication) as the research was undertaken. Nor is it clear why business majors were not sought since the focus was upon preparation for business competency.

Along these same lines, scant demographic information on these student subjects was collected or reported (that is, only age, race, sex, and class status information are provided in percentages). And unfortunately, this demographic information was provided only descriptively in introductory material describing the sample in general terms; it is not used later as the basis for any data analysis. Since students of all classifications, both sexes, and a range of ages were involved, some useful comparisons would have been possible even with the few demographic variables known. (With respect to race, the sample was so homogeneous, no useful comparisons would have been possible.) Because students are discussed as a unified "clump," knowledge has perhaps been

lost, again placing limitations upon the reader's ability to generalize to similar subject groups or subgroups.

Perhaps the greatest weaknesses of this study are none of the above features, however; these serve merely as irritations, and slight ones at that. The three greatest weaknesses appear more substantial. The first weakness is the survey instrument and the procedures for administering it utilized in the survey. Nothing was said in the report about the reliability and validity of this instrument or the administration procedures. It was an instrument designed solely for this study, with no history of previous use. Even the content or face validity of the instrument itself is ignored, one of the simplest types of validity to establish. No attempt was made to make the case for the items on the questionnaire being representative of any universe (or sample of a universe) of business communication skills. In fact, the report stated only briefly (in the instructions on the employers' survey) that the survey asked these individuals to assume the hypothetical person they were considering for employment had been trained in oral and written communication, mass media production and analysis, and organizational dynamics. The justification for these three, and only these three, topical areas--much less for the 13 specific items on the survey--was never provided, and furthermore, could not be ascertained from a purview of the survey itself. In a sense, the survey could be entitled "A Few Random Communication Skills (That Might Be) Learned in College."

Another weakness of the study, and one that should be placed in the context of the first major weakness cited, was the authors' tendency to interpret the statistical relationships between survey responses as

more significant than they have been reported to be. Despite these weaknesses, Crystal Balls and Mirrors (Austin & Ventura, 1985a) provided important underpinnings for the current research effort and supported the need to provide more substantial research into students' and employers' perceptions of the importance of writing skills for success in business. Since the validity of the survey instrument was not established in the Crystal Balls and Mirrors study, the survey instrument used in this research endeavor, selected individual items from previous studies that considered these components as important elements of business communication.

Its specific findings indicated: (a) that students rated the ability to perform selected communication skills and the ability to train others to perform them as important to their career successes, (b) that students perceived little difference between their own ratings of communication performance and how they believed employers would rate them, and (c) students rated their own ability to perform communication skills as more important than the actual ratings of employers surveyed.

Other Works Related to the Current Study

More than a decade ago, a number of researchers evidenced a rudimentary interest in the relationship between writing skills and business success. Among these, Warren (1983) was one whose work underscored the essential nature of basic communication skills, listing them among the top five requirements for business success. Such skills consisted of verbal skills, listening skills, writing skills, and persuasion skills. Fifty-four percent of the executives Warren surveyed agreed that

writing skills (including grammar, organization, and style) were the most important. Fifty-four percent described their own business employees as deficient in these very skills. Most respondents believed colleges should focus more on teaching basic skills, particularly written communication skills.

Many of these early studies (e.g., Hunsicker, 1978; Katz, 1974; Stine & Skarzenski, 1979; and Lynch, 1979) generally echoed the results secured by Hilderbrandt (1982) who asked business executives which college courses best prepared employees for business leadership. Courses related to oral and written business communication were selected as very important more often than any of the other 13 course possibilities in this study. One constant feature of this and nearly every other piece of research conducted in the United States has been that all have reached the general consensus that skill in business writing is an important cornerstone for business success. This observation holds true in virtually all current and previous studies on this topic. A few of these earlier, formative pieces of research are described briefly to provide an historical context for the current undertaking.

The earliest relevant works, dating from the 1940s and 1950s (for example, Flesch, 1946, and Gunning, 1952) stressed the importance of communication in business, but often lacked a clear conception or description of specific communication skills needed for effective performance in the workplace. Traweek's (1954) survey of alumni from the University of Texas at Austin's College of Business Administration, for example, simply focused upon judgments of which coursework within the entire university curriculum graduates considered most important.

Accounting courses were ranked first, followed by business writing and English. Simmonds' (1960) survey was another of this more general type. Querying 133 upper-level managers, he found business writing was selected by this group as the most important skill, followed by personnel management skill, and skill in public speaking.

Bennett's (1971) technique was similar, but his results were slightly different. Respondents in this survey ranked oral presentations as most important, followed by the more specific written skill components of writing memorandum, writing informational reports, and writing letters.

Using these studies as a foundation, Penrose (1977) studied the perceived importance of business communication and other business-related abilities. In this research effort, business speaking ranked fifth in importance (after public relations, marketing, accounting, and finance), and business writing ranked sixth.

These early findings of Penrose (1977) were, of course, in rather dramatic contrast to those of many other researchers, including a later follow-up study in which he also participated. Golen et al. (1989) undertook an analysis of a large group of existing studies to determine what specific skills were viewed as necessary for entry-level employees in business settings. Comparing university professors' and employers' ratings, this analysis concluded that written communication skills were of greatest significance (and therefore should be the primary focus of the business communication curricula).

The principal thrust of these first efforts was to assess the importance of communication skills from one, or, at the most, two points of

view. What was generally lacking in early studies--as it has been in most of the more recent ones--was any consideration of students' views.

Importance and Value of the Current Study

The findings of the proposed study are expected to have considerable utility for business educators as well as for the business community. Comparisons between managers' ratings and students' ratings can provide insight into whether these groups differ in their perceptions of the importance of written communication skills. Effective educational strategies to address issues related to writing skill development require this information, yet none is currently available.

The relationship of sex to individuals' ratings of the importance of written communication skills will also have immediate value. At least three studies previously cited (Berryman-Fink, 1985; Knack, 1991; Mandel & Uellen, 1990) have suggested that sex differences in writing skills and perceptions of the importance of writing skills exists among individuals already employed as business managers. A third work (Martin & Ranson, 1990) suggests sex differences exist in one component of writing skills, spelling ability, among college business majors. The proposed study will extend these examinations to explore further the relationship of sex to students' and managers' perceptions of the importance of writing skills for business success.

Comparisons between freshman and sophomore students and junior and senior students proposed for this research have never been explored in previous research and are expected to yield at least

preliminary information about changes in perceptions about the importance of writing skills which occur over the course of individuals' college careers.

Overall, it is anticipated that knowledge of students' perceptions about the importance of certain written communication skills, in combination with information about business managers' perceptions, will be a useful tool in remediating the well-documented writing skill deficiencies of United States students preparing for business careers. It is anticipated that this knowledge will be the first step in developing new strategies for improving college students' business writing skills.

Hypotheses to Be Tested in the Study

Keppel (1982) and others support the notion that a hypothesis should be a logical implication of previous efforts. A research hypothesis provides a statement of an expected relationship between variables of interest. Because previous studies of the exact research question under investigation are limited in number and quality, it is necessary to utilize studies which are similar for hypothesis generation.

The preceding review of the literature supports several hypotheses relating to differences in perceptions of the importance of business writing. Furthermore, these works support exploration of hypotheses relating to the association between certain individual characteristics and their interactions with perceptions of the importance of business writing.

Differences in Perceptions of the Importance of Business Writing Based on Student/Business Person Status

Many of the studies reviewed conclude that business managers perceive their employees' writing skills to be important both in terms of hiring decisions, as well as for successful performance on the job. Some of these either conclude (Austin & Ventura, 1985b) or strongly suggest (Carnevale et al., 1988; Golen et al., 1988; Tabeaux, 1988) that business students' and business employers' perceptions of the importance of writing skills may differ from one another. Therefore, the current study hypothesizes that the perceptions of business employers and students in schools of business will be different from one another.

Differences in Perceptions of the Importance of Business Writing Based on Sex

Berryman-Fink (1985), Knack (1991), Mandel and Uellen (1990), and others have reported differences in the perceived importance of business writing skills between males and females. Other work (Martin & Ranson, 1990) has documented a sex difference in at least one writing skill, with females more proficient than males. Taken together, these studies do not provide enough evidence to support a directional hypothesis, but do provide a foundation for exploring a hypothesis that sex differences in perceptions of importance exist.

Differences in Perceptions of the Importance of Business Writing Skills Based on Educational Classification

Few studies have examined the relationship between student classification level, that is, freshman, sophomore, junior, or senior class

status. Based on common sense and logic alone, it is easy to support investigation of a hypothesis that lowerclass students (freshmen and sophomores) have different perceptions than upperclass students (juniors and seniors). Evaluation of this nondirectional hypothesis will permit a beginning assessment of whether perceptions change over the course of students' college careers.

Differences in Perceptions of the Importance of Business Writing Skills Based on Institutional Type

It is widely recognized that institutions of higher education evidence wide variations among themselves. Features such as size and public or private support interact to create a multiplicity of college and university settings. Because of this, the term college or university is not always a highly precise designation.

The plan of this study is to examine the perceptions of the importance of business writing of students from two distinctly different institutions of higher education. A difference between the perceptions of each school's student cohort is hypothesized.

The Effect of an Interaction Between Subject Status and Sex on Perception of the Importance of Business Writing

The literature base suggests that business person/student status and sex independently have effects on individuals' perceptions of the importance of business writing. A significant interaction between subject status and sex is hypothesized.

The Effect of an Interaction Between Classification and Institution on Students' Perceptions of the Importance of Business Writing

The literature base and common sense support a hypothesis that students' classifications and their institutional setting independently have an effect on their perceptions of the importance of business writing. This study examined the related hypothesis that an interaction with a significant effect on perceptions of the importance of business writing exists between these classifications and institutions.

The Effect of an Interaction Between Sex and Institution on Students' Perceptions of the Importance of Business Writing

The literature base and common sense support the notion that students' sex and their institutional setting independently have an effect on their perceptions of the importance of business writing. This study examined the related hypothesis that an interaction with a significant effect on perceptions of the importance of business writing exists between sex and institution.

The Effect of an Interaction Between Sex and Classification on Students' Perceptions of the Importance of Business Writing

The literature base and common sense support the notion that students' sex and their classifications independently have an effect on their perceptions of the importance of business writing. This study examined the related hypothesis that an interaction with a significant effect on perceptions of the importance of business writing exists

between sex and classification.

In Chapter III, the research design and methodology used to test these hypotheses are further elaborated upon.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

This chapter describes the design and methodology employed in this research effort. A discussion of the population of interest, sampling strategies, description of the instruments developed and used for gathering data, an overview of the research design, and an explanation of the statistical methods used to evaluate the findings are included.

Subjects

The populations of interest for this study are business employers and undergraduate students in accredited schools of business who worked or studied in the same geographic location. The accessible populations are medium-sized business employers in western Michigan and undergraduate students in two accredited business schools in the same geographic region as the business employers. The exact number of medium-sized business employers is difficult to confirm, but a conservative estimate by area Chambers of Commerce place the total at approximately 12,000 to 15,000. The number of undergraduate business students in the two accredited schools of business in the region is also large and varies by semester, but totaled some 14,000 at a minimum during the period of this study. Although the business employers and business students of this geographic region may differ in some respects

from other business employers and business students across the United States, neither students nor employers of the region are strikingly unique in any way. Therefore, the characteristics of the population of interest and the accessible population are assumed to be similar.

Sampling Procedures

The Student Sample

Two purposive subsamples from the accessible population of business students were selected, one subsample from each undergraduate business program. In all, some 215 undergraduate business students attending one of two specific classes selected at random from the course offerings of each university during the fall semester of 1993 were chosen as potential subjects.

Davenport College and Western Michigan University (WMU), Kalamazoo, were each selected as a site for selecting two business courses whose student volunteers would comprise the student subject base. These business programs are representative of the range of educational sites in the region, representing typical training programs for business majors across the country. The business program at Davenport College was an important department in the largest independent private college system in Michigan with multiple campuses across the states of Michigan and Indiana, all of which emphasized training undergraduate students for business careers. In contrast, the program at WMU was located within a large, multi-campus public university which offered graduate as well as undergraduate degrees, including doctoral degrees in

a variety of subject areas. The business school of the public university was one of its many academic units.

The Business Subject Sample

The business subject sample was comprised of approximately 70 business persons from 20 different medium-sized companies in the specified geographic region. Medium-sized companies were defined as those employing at least 200, but no more than 500 individuals at the time of the study. Businesses were selected randomly from lists of medium-sized businesses maintained by Kalamazoo, Michigan, and Grand Rapids, Michigan, Chambers of Commerce.

Random selection of business sites for the business employer sample was employed to achieve representation from typical medium-sized businesses of the region. Every effort was made to select individual subjects from these randomly selected business sites who themselves were typical and representative of area business persons. However, it was not possible to utilize random selection of study participants because of the strictly voluntary nature of participation.

Approval by Human Subjects Institutional Review Board

The procedures and measures utilized in this research were approved by the Western Michigan Human Subjects Institutional Review Board to insure that all procedural safeguards as required by law and research convention were observed in this undertaking. A letter authorizing this study is found in Appendix A.

Development of the Study Instruments

Two 30-item Likert-type Importance of Business Writing (IBW) questionnaires were developed for gathering information on the perceptions of subjects relative to the importance of business writing. One questionnaire was developed for each subject group (see Appendices B and C for copies of these instruments). Validation of the student and business person components listed in the IBW questionnaire was achieved by referencing all items on the scale to previous works in the field of business communication. This provided evidence of content or face validity of the measure. That is, the scale principally contained items previously considered in other studies as significant components or elements of business communication. These questionnaires are patterned after existing measures utilized in previous research in the field of business writing. Instruments available for this purpose include both the 32-item business person questionnaire and the 58-item undergraduate student questionnaire developed by Austin and Ventura (1985a).

Both instruments were pilot tested during the same semester that they were utilized in this study. The purposes of the pilot testing were to determine the amount of time required (on average) for completion of the questionnaire, to clarify the questionnaire instructions, and to insure the clarity of wording for individual questionnaire items. Responses secured from pilot study participants were not utilized in hypothesis testing.

All subjects assessed each of 30 specific business communication skills listed on the questionnaire in terms of how important (on a 7-point

scale, with 7 representing very important) the subject believed the skill to be in achieving success in a business-related career. Each of the skills listed on the survey was derived from the literature base reviewed in Chapter II. Ten of these items related to specific skills for written business communication. These 10 skills were the sole focus of analysis for this research. The other 20 items on the questionnaire (related to reading, listening, speaking, or technological communication skills) were included so that research subjects would have difficulty ascertaining the specific purpose of this inquiry and its hypotheses.

The 10 items of interest for this study were randomly distributed among all of the items of the instrument to prevent subjects from "second guessing" or attempting to please the researcher by providing a particular set of appropriate responses. The presence of a large number of communication-related items, only a third of which related to writing skills, was expected to minimize such a threat to the validity of the subjects' responses.

The items and their order of presentation were identical on the IBW instruments for student and business employer subjects. The difference between the instruments was that slightly different demographic information was requested of each group. All subjects provided information on certain demographic characteristics such as sex, classification (freshman, sophomore, etc., for students), position and years of experience in the organization (for business persons), and institutional type (public or private) for students.

Based on responses on the 7-point scale for each of the 10 written communication skills on the IBW instrument, individual subjects'

questionnaires were scored to generate a single total indicative of how important written skills as a whole were rated by that subject. All subjects completing a questionnaire received a total IBW "score" representing their perception (or rating) of the importance of written communication skills for business success. These scores theoretically ranged from a maximum of 70 (i.e., all 10 written communication skills considered to be "of high importance") to a minimum of 10 (i.e., all 10 written communication skills considered to be "of low importance").

Administration of the Study Instruments

All sites for selecting subjects were chosen during the same period in late 1993. For the student subsamples, four classes in both schools of business were randomly selected and permission was secured from the instructor/professor of each class to administer the instrument during a 15- to 20-minute period of scheduled class time.

Potential business respondents from the randomly selected businesses were contacted by letter explaining the purpose of the study and the estimated time required to participate (15 minutes). Representatives from 20 businesses were initially contacted to assure a business sample of adequate size. Representatives of businesses which agreed to serve as study sites were provided with a postcard to return to the investigator confirming their intent to participate. One follow-up call was made to representatives of business (typically the business or personnel manager) which had not responded within 2 weeks of the initial letter.

Within 2 weeks, 11 sample sites for securing approximately 60 business subjects and 4 classroom sites for securing approximately 200

student subjects from the two institutions were identified.

The questionnaire was administered to all participants during the same 2-week time period. Potential student subjects in classes selected for questionnaire administration given the option of nonparticipation. The voluntary nature of participation was stressed by the researcher and by the professor of record for each class. All student questionnaire responses were anonymous. Subjects were not requested to provide any identifying information on the questionnaire and no attempt was made to connect student subjects with their responses. It was the plan of this study to make summarized data available to all student participants through the teacher of record at the conclusion of the study and upon its final approval by the supervising doctoral committee.

Business person subjects were mailed an introductory letter requesting their help in this study and a questionnaire and were provided with a stamped, addressed envelope to facilitate the questionnaire's return to the research project. Return envelopes were coded in such a way that follow-up of nonresponders was facilitated, but such coding was not used to violate the anonymity of business employer subjects. One follow-up call was made to business employer subjects who had not returned their questionnaires within 2 weeks of its mailing. No penalty was implied for failure to respond. As with the student sample, the plan of the study is to provide business subjects with a copy of the final results of this study upon its completion and approval by the supervising doctoral committee.

Data Analysis

Hypotheses of the Study

The study was designed principally to evaluate the differences in perceptions of the importance of business writing between students in schools of business and employed business persons. Attention was also directed toward the relationship of independent variables (such as sex, student classification, and institutional affiliation) and subjects' perceptions of the importance of business writing as a dependent variable. In addition, the interaction effect of several pairs of independent variables on perceptions of the importance of business writing was also hypothesized and evaluated.

Specific hypotheses of the study included the following:

1. Business persons and business school students will perceive the importance of writing skills for business success differently.
2. Males and females will perceive the importance of writing skills for business success differently.
3. Upperclassmen (seniors and juniors) and lowerclassmen (sophomores and freshmen) will perceive the importance of writing skills for business success differently.
4. Students in private institutions of higher education and students in public institutions of higher education will perceive the importance of writing skills for business success differently.
5. There is an interaction between subject status (student or business person) and sex.

6. For the student subsample, there is an interaction between classification and institution type.

7. For the student subsample, there is an interaction between sex and institution type.

8. For the student subsample, there is an interaction between sex and classification.

Operationalizing the Hypotheses

For purposes of this study, certain terms used in the hypotheses were defined in a specific fashion. Student was defined in general as an individual enrolled full-or part-time in an institution of higher education, and specifically as an individual enrolled in a business class in one of the two institutions where the research was conducted. Business person was defined as an individual employed full-time in a supervisory or administrative position who was not, at the time of the research, also a student. Other demographic characteristics, for example, sex, class status (freshman, sophomore, etc.), and years of experience were defined as the responses provided by subjects to those questions on the IBW instrument. Thus, subjects' own determinations of what constituted "freshman" or "senior" status, or working for "1 year" or "15 years" at a business were the definitions of these terms.

Institutional type, that is, private and public, was defined in advance by the researcher and operationalized in selecting the research settings. In the first case, the definition referred specifically to Davenport College, a private business college. In the second case, the definition referred specifically to Western Michigan University, a Carnegie

Level III public university with more than 200 undergraduate, master's, and doctoral programs and an enrollment of some 27,000 students.

The dependent variable for the hypotheses--"perception of the importance of business writing"--was operationalized as a subject's overall score on the IBW instrument. For students, importance was defined as the importance of the skill for future success in business. For business persons, importance was defined as the importance of the skill for entry level workers in their (the business persons') business organizations.

Statistical Analysis Procedures

Each of the four hypotheses postulating a difference between sample groups was evaluated utilizing calculations of the mean IBW score for the specified subgroup and employing the t test for independent samples to determine whether observed differences in the means were statistically significant. Satterwite's formula for estimating degrees of freedom was employed, as well as Levene's test for equality of variances.

Considering each of the independent variables as a dichotomous variable, subjects were partitioned into two subgroups. For the first hypothesis, the mean IBW score for all business employers was compared to the mean IBW score for all students; for the second hypothesis, the mean IBW score of all males was compared to the mean IBW score of all females; for the third hypothesis, the mean IBW scores of upperclassmen was compared to the mean IBW score of all lowerclassmen; and for the fourth hypothesis, the mean IBW score of all students at the

small private college was compared to the mean IBW score of all students at the large public university. An alpha level of .05 for rejecting each of the null hypotheses was used.

The study also sought to explore not only the effects of single independent variables on perceptions of the importance of business writing, but also for the effect of combinations of these variables on subjects' perceptions. This was an important concern, since combinations of variables often have a different effect than the effect of each variable alone. The effect of the interaction of the individual variables of subject status (student or business person), sex (male or female), student classification (upperclass or lowerclass), and institution (Davenport College or WMU) and perceptions of the importance of business writing was explored utilizing two-way analyses of variance. For each effect (individual and interactional), the F statistic--or mean ratio of the mean square for that effect to the mean square for the residual--was calculated. The statistical significance level of the F statistic for rejection of the null hypotheses was set at .05.

The nominal data collected in the study were used as the basis for describing the subject groups in general terms. These descriptions were derived from aggregating responses of subjects to questions of personal (demographic) characteristics. Conceptually, these constituted the independent variables for this research effort.

Information on the following independent variables was available on each participant who voluntarily provided it: (a) student or business person status; (b) sex; (c) organization or institution type; and (d) classification, major, and work history (for students) or organizational

position and years in position (for business persons). Appropriate measures of central tendency and variance were utilized to describe the features of the samples with respect to these specific characteristics.

Other data available were total and item-by-item ratings or scores on the Likert scale IBW instrument. Conceptually, these ratings were considered to be the dependent variables of the study. Although the instrument's specific validity and reliability were not known because the IBW was specifically created for this effort, equal intervals between scaled points on the instrument was assumed, and the data secured were treated as interval data. Thus, scale point integers for the 10 written skill items were added to create the Importance of Business Writing (IBW) total score, the operational definition of each participant's perception of writing skill importance.

Likewise, individual respondents' overall ratings were summed across samples and subsamples, and an average or mean score for certain groups (i.e., students, business persons, males, females, upperclass members, lowerclass members, public institution students, and private institution students) were calculated and used in hypothesis testing.

Because information collected on the independent variables was nominal in nature, the mode was utilized as the most appropriate indicator of central tendency for these characteristics. Information on responses to individual demographic items was also determined in terms of frequencies and percentages to provide an overall participant profile and thus a broader context for understanding the study's results. Chapter IV contains these results.

CHAPTER IV

RESULTS

Overview

Administration of the survey instruments to the sample of business school students and persons employed full time in businesses was completed in early 1994. Some 284 surveys were returned, 214 from students and 70 from persons in business. All subjects lived in western Michigan at the time of their participation in the research.

Of the 120 surveys sent to business persons, 58% ($n = 70$) were returned by persons from the following businesses: banking, health care (hospital), engineering, sales, manufacturing, and environmental testing. Cooperation from the business subjects, although generally good, could have been affected by the timing of the letter and that the questionnaire was sent 2 weeks prior to the holiday season. Of the 70 business persons returning their questionnaires, data were complete.

Of the 214 surveys from student subjects, 53% ($n = 113$) were returned by individuals studying in the undergraduate business program at the public institution; 47% ($n = 101$) were returned by individuals studying at the private business college. Since student subjects could complete the surveys during class, cooperation was great. Missing surveys were the result of students absent from class on the day of survey administration. Very little data were left incomplete in the returned student surveys, and the small amount of missing data had no

effect on the interpretation or analysis. All subjects, business and student, were uncompensated volunteers.

Demographic Characteristics of the Sample

Demographic information was collected from each subject, with students and business persons responding to slightly different but related questions. The breakdown of this descriptive data is provided below in tabular and narrative form as a context for interpreting and understanding the results.

Student Subjects

As is evident from Table 1, male subjects outnumbered female subjects in the subsample from the public university, but the situation was reversed at the private college, where female subjects comprised approximately two-thirds of survey respondents. Overall, 55% of all student subjects were female, a figure which closely approximates the number of females pursuing undergraduate degrees in undergraduate institutions nationwide.

Table 2 suggests that the distribution of student majors was also different at the two educational institutions. One very evident contrast is that more than three times as many public university students had majors in the "other" category, including those whose majors were undecided or undeclared. (This may have been a result of the greater number of different fields of study offered in the public university, as well as the presence of different institutional practices and policies regarding the declaration of a major field of study in each institution.)

Table 1
Student Subjects: Affiliation by Sex

Sex	Public university		Private college		Total	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Male	58	51	38	38	96	45
Female	55	49	63	63	118	55
Total	113	100	101	100	214	100

Students at the private college were less likely to indicate an "undecided" or "undeclared" major field of study, although, as Table 3 demonstrates, proportionally more of these private college students were members of the freshman or sophomore classes.

Table 3 demonstrates that some 33% ($\underline{n} = 37$) of the student subjects from the public institution were freshmen or sophomores, while at the private college, the proportion of freshmen or sophomore subjects was nearly 75% ($\underline{n} = 76$). The proportion of upperclass subjects (juniors and seniors) to lowerclass subjects (freshmen and sophomores) differed at each institution, with the ratio 33%:65% at the public institution, and 76%:25% at the private institution.

The single class with the largest proportional representation in the student sample was freshmen, comprising approximately 35% ($\underline{n} = 64$) of this group. The class with the smallest proportional representation was the senior class, comprising about 20% ($\underline{n} = 43$) of the student sample. The proportions were generally comparable to class size

Table 2
Student Subjects: Institution by Major Field of Study

Major	Public university		Private college		Total	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
General business	21	19	16	16	37	17
Accounting/finance	14	12	47	47	61	28
Management	10	8	9	9	19	9
Marketing	18	16	9	9	27	13
Computer science	2	2	5	5	7	3
Other (including undecided)	45	40	15	15	60	28
Not specified (missing)	3	3	0	0	3	1
Total	113		101		214	

Note. Percentage totals do not equal 100 due to rounding.

distribution in undergraduate education as a whole, with the freshman class generally the largest class and the senior class the generally smallest.

According to Table 4, about two-thirds of the student respondents had worked in some business setting for more than one year. For the 134 individuals with an employment history, Table 5 provides a breakdown of the type of business in which work was performed.

For students with a history of work, employment in the service sector was clearly the most prevalent. This was in sharp contrast to the

Table 3
Student Subjects: Classification by Institution

Classification	Public university	Private college	Total
Freshman	29	35	64
Sophomore	8	41	49
Junior	37	19	56
Senior	37	6	43
Unknown (missing)	2	0	2
Total	113	101	214

Table 4
Student Subjects: Previous Employment History

History	<u>n</u>	%
Had worked in business setting for > 1 year	134	62
Not worked in business setting > 1 year	77	36
Unknown (missing)	3	2
Total	214	100

relatively few students with manufacturing work experience, and the six students with governmental work experience. Most of the students had worked, but their work experience was generally confined to the service sector of the economy.

Table 5
Student Subjects: Types of Work for Students
With Work Histories

Type	<u>n</u>	%
Service	101	76
Manufacturing	27	20
Governmental	6	4
Unknown (missing)	1	1
Total	134	100

Business Person Subjects

As with student subjects, female business subjects outnumbered their male counterparts, but the margin of difference was less (see Table 6). Four business persons did not provide information on their sex, making it impossible to calculate the exact sex distribution in this group; however, even if all respondents who did not provide information were male, the proportion would still closely approximate the distribution of sex in the general population.

Table 7 provides information on length of employment for business subjects; almost a third of the business subjects had been employed in their present positions for less than a year, although about one-fifth had been employed for 5 years or more. The greatest number of business persons had been employed for 1 to 5 years with their current employer.

Table 6
Business Person Subjects: Sex Distribution

Sex	<u>n</u>	%
Female	35	50
Male	31	44
Unknown (missing)	4	6
Total	70	100

Table 7
Business Subjects: Number of Years Employed
in Present Position

Years employed	<u>n</u>	%
Less than 1 year	22	31
1 to 5 years	33	47
6 to 10 years	8	11
11 to 15 years	3	6
16 to 20 years	4	6
Total	70	100

Types of businesses at which these subjects worked included a retail grocery enterprise, a bank, a hospital, an environmental testing company, an engineering firm, three manufacturing companies, a public relations company, and two specialized sales companies.

Exploration of the Importance of Written Communication

In addition to providing the demographic information summarized above, each subject provided a rating of how important they believed written communication is for college graduates in an initial employment setting. Business subjects rated each business writing skill in terms of how important they felt mastery of those skills was for entry level employees in their companies. Student subjects rated each writing skill in terms of how important they felt those skills would be for them personally in their first job after graduation.

As noted in Chapter III, items included on the Importance of Business Writing (IBW) instrument related to written communication skills, oral communication skills, listening skills, persuasive skills, and technological communication skills (see Appendices B and C for examples of student and business person questionnaires.) All subjects rated the importance of all 30 skills, but only ratings of the 10 items related to written communication were used in this research. The business writing skills rated by each subject were (in order of their appearance on the IBW instruments:

1. Memoranda writing
2. Letter writing
3. Proposal writing
4. Informational report writing
5. Taking minutes
6. Analytical report writing
7. Resume writing

8. Using word processing programs
9. Policy writing
10. Using electronic mail

An overall Importance of Business (IBW) score was computed for each subject by summing the ratings given to the 10 items. IBW scores could theoretically range from 10 to 70.

Exploration of Study Hypotheses

The hypotheses of the study required the responses of subjects to be evaluated in terms of subsamples based on several demographic characteristics, including status (student or business person) and sex. Additional subgroups were created by partitioning the student and business person subjects by sex; student subjects by classification (upperclassmen and lowerclassmen); and student subjects by institutional affiliation (private college or public university). The results of these comparisons were as follows.

Comparison of Business Persons' and Students' Ratings

Mean Scores of the Students and Business Persons

The IBW scores secured from the business subjects were compared to those secured from student subjects. Mean scores for each subsample were compared, as were item-by-item mean scores for each business writing skill on the IBW instruments. To insure utilization of the appropriate *t*-test statistic for evaluating outcomes, Levene's test for equality of variances was utilized. When indicated, adjustments in

degrees of freedom for unequal variances were made. Instances where comparisons utilized t tests for unequal variances are indicated in the tabular presentation of results which follows.

Note that mean scores for the 10 subjects who had incomplete information (3 business subjects and 7 student subjects) are not included in these analyses.

With respect to the hypothesis related to whether business students' and business employers' perceptions of the importance of business writing differ from one another, the information in Table 8 provides evidence to support rejection of the null hypothesis. These results indicate that student subjects rated the 10 business writing skills to be of more importance for success than the business subjects rated them.

Table 8
Comparison of Business and Student
Subjects' Mean IBW Scores

Sample	n	Mean	SD
Business person	67	46.9	10.1
Student	207	51.2	10.3

Note. Mean difference = -4.3017; t value = -3.00; df = 272; two-tailed p < .01; 95% CI for difference = (-7.127, -1.475).

The total IBW mean score for student and business subjects was then analyzed in terms of mean scores for each of the 10 business writing items on the IBW instrument to determine whether the difference between students' and business subjects' summarized ratings of

importance extended to each element of business writing. The total number of subjects for each item varied, depending on the number of subjects failing to rate the item.

For memoranda writing there was no evidence upon which to base the rejection of a null hypothesis of no difference between student and business employer ratings. Students and business persons had virtually identical perceptions about the importance of memoranda writing for success in business, each group rating the skill as highly important with average ratings between 5 and 7 (see Table 9).

Table 9
Importance of Memoranda Writing for Student
and Business Subjects

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	5.15	1.56
Student subjects	212	5.15	1.49

Note. Mean difference = 0.00; t value = .01; df = 280; two-tailed p = .994.

As Table 10 demonstrates there was no evidence upon which to base the rejection of the null hypothesis that business and student subjects perceived the skill of writing business letters as equally important. Both groups rated this skill as highly important, with average scores above 5.

Table 10
Importance of Letter Writing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	5.05	1.51
Student subjects	213	5.37	1.45

Note. Mean difference = -0.32; t value = -1.53; df = 281; two-tailed p = .127.

As Table 11 shows, proposal writing was a skill for which evidence was available to support rejection of a null hypothesis of no difference between these groups' ratings. Business persons and students provided different ratings of the importance of proposal writing for success in business. Students rated the skill as more important than business persons, giving it an average rating of 5.23 which placed it in the highly important category. Business persons' ratings placed the skill in the moderately important category, with an average rating of 4.51.

Table 11
Importance of Proposal Writing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	4.51	1.65
Student subjects	214	5.23	1.55

Note. Mean difference = -0.72; t value = -3.29; df = 282; two-tailed p = .001.

Informational report writing was another skill where no difference between ratings of the two groups was seen (see Table 12). Both groups of subjects rated proposal writing as a highly important skill, with business subjects rating it as slightly more important than student subjects.

Table 12
Importance of Informational Report Writing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	69	5.30	1.44
Student subjects	214	5.28	1.47

Note. Mean difference = 0.02; t value = 0.12; df = 281; two-tailed p = .906.

Taking minutes was another business writing element which was not rated differently by the two groups of subjects, both evaluating it as of moderate importance with scores between 3.61 and 3.92 (see Table 13). Taking minutes was consistently rated as the least important business writing skill element by all subjects.

The students' and business persons' ratings of the importance of the business writing skill element of analytic report writing were different from one another. Although both groups placed the skill in the moderately important category, the students' average rating at 4.76 was higher than the average rating of business persons at 4.10 (see Table 14).

Table 13
Importance of Taking Minutes

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	69	3.61	1.51
Student subjects	211	3.92	1.77

Note. Mean difference = -0.31; t value = -1.35; df = 278; two-tailed p .177.

Table 14
Importance of Analytic Report Writing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	69	4.10	1.69
Student subjects	214	4.76	1.58

Note. Mean difference = -0.66; t value = -2.97; df = 281; two-tailed p = .003.

Table 15 provides evidence that the ratings of the two subject groups regarding the importance of resume writing differed, with students generally rating the skill as more important than business persons rated it. While business persons rated the skill to be of moderate importance, students rated the skill to be of high importance.

Word processing is another skill element where the average ratings of students and business persons differed. Although both groups rated the skill as highly important, students' ratings on average were higher than the ratings of business persons (see Table 16). For this skill

Table 15
Importance of Resume Writing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	4.87	1.84
Student subjects	214	5.45	1.67

Note. Mean difference = -0.58; t value = 0.245; df = 282; two-tailed p = .02.

element, the variances around the means were also unequal. Students' ratings showed less variation around their group mean than business persons' variances around their mean. The t value computed in this case utilized the formula for unequal variances, with a reduction in degrees of freedom. The skill element of word processing was consistently evaluated by subjects as the most important business writing skill.

Table 16
Importance of Word Processing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	5.30	1.75
Student subjects	214	5.95	1.38

Note. Mean difference = -0.65; t value for unequal variances = -2.85; df = 98.68; two-tailed p = .005.

Policy writing was another skill element whose ratings of importance were different for the two groups of subjects, with student

subjects providing the higher ratings (see Table 17). Both groups considered policy writing to be of moderate importance; however, student scores were at the higher end of this range with scores of 4.80, approaching the level of high importance, while business persons were at the lower end at 4.09. Variances around the two means were also unequal, prompting a reduction in the degrees of freedom.

Table 17
Importance of Policy Writing

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	4.09	1.95
Student subjects	213	4.80	1.69

Note. Mean difference = -0.71; t value for unequal variances = -2.74; df = 105.54; two tailed p = .007.

The ratings of business persons and students had no relationship for the final item, electronic mail (E-mail), although business subjects rated the skill using of electronic mail as falling in the moderately important range and student subjects rated it as highly important (see Table 18).

Rank Order Comparison of Students' and Business Persons' Ratings

Although ratings of business persons and students on 5 of the 10 business skills on the IBW instrument (i.e., proposal writing, analytic report writing, resume writing, word processing, and policy writing) as

Table 18
Importance of Electronic Mail

Sample	<u>n</u>	Mean	<u>SD</u>
Business subjects	70	4.67	2.13
Student subjects	214	5.14	1.77

Note. Mean difference = -0.47; t test for unequal variances = -1.67; df = 102.4; two-tailed p = .099.

well as the total IBW score evidenced differences, a further exploration of the relationship between ratings of the two groups was undertaken. An analysis was performed to ascertain the relationship between the rankings of the importance of these skills by each subject group. To achieve this, the 10 writing skills were ordered by the mean scores for each subject group's ratings. Table 19 lists the rank orderings that were created.

It appeared that although the mean ratings of the two groups differed, the rank order of importance for these 10 skills was similar. Spearman's rho was computed to measure the strength of this relationship, resulting in a rank-order correlation of .783--indicative of a strong positive correlation.

Comparisons of Subjects' Ratings by Sex

Based upon previous research which suggested that sex may influence individual's perceptions of the importance of certain business communication skills, study hypotheses were framed to explore this

Table 19
Ordered Ranking of Business Writing Skills by Students
and Business Persons Based on Mean Ratings

Students		Business persons	
Writing skill	Mean	Writing skill	Mean
1. Word processing	5.95	1. Word processing	5.30
2. Resume writing	5.45	2. Informational reports	5.30
3. Letter writing	5.37	3. Memo writing	5.15
4. Informational reports	5.28	4. Letter writing	5.05
5. Proposal writing	5.23	5. Resume writing	4.87
6. Memo writing	5.15	6. E-mail	4.67
7. E-mail	5.14	7. Proposal writing	4.51
8. Policy writing	4.80	8. Analytic reports	4.10
9. Analytic reports	4.76	9. Policy writing	4.09
10. Taking minutes	3.92	10. Taking minutes	3.61

likelihood. A series of comparisons were utilized, including comparisons of the mean IBW scores of all female subjects and all male subjects; a comparison of the mean IBW scores of female subjects and male subjects in the business person subsample; and a comparison of the mean IBW scores of female subjects and male subjects in the student subsample. As in the previous section, total IBW mean score comparisons were utilized, along with comparisons of individual skill element means. Table 20 summarizes the results of all the subjects grouped by sex into two subgroups.

Table 20
Total IBW Scores by Sex for All Subjects

Sample	<u>n</u>	Mean	<u>SD</u>
Females	148	50.98	10.17
Males	125	49.21	10.75

Note. Mean difference = 1.77; t value = 1.41; df = 271; p = .160.

For the sample as a whole, although women subjects rated business communication skills as somewhat more important than men rated them, the difference between the mean IBW scores was not great enough to support rejection of the null hypothesis. No difference between male and female subjects' ratings of the overall importance of business writing skills was seen.

This was true not only for the means of the total IBW score, but also for the means of all 10 IBW items considered individually as well. There was no difference in the ratings between male subjects and female subjects.

When the sample was considered in terms of two subsamples comprised of students and business persons, no sex differences were evident. Table 21 provides the comparison of mean scores by sex for student subjects and Table 22 provides a comparison by sex for business subjects.

Table 21
Comparison of Student Subjects'
Mean IBW Scores by Sex

Sample	<u>n</u>	Mean	<u>SD</u>
Females	113	51.88	10.37
Males	94	50.45	10.11

Note. Mean difference = 1.43; t value = 1.00; df = 205; two-tailed p = .319.

Table 22
Comparison of Business Subjects'
Mean IBW Scores by Sex

Sample	<u>n</u>	Mean	<u>SD</u>
Females	35	48.09	8.26
Males	31	45.41	11.91

Note. Mean difference = 2.63; t test for unequal variances = 1.03; df = 52.58; two-tailed p = .296.

Comparisons of Students by Classification

Another of the study's hypotheses involved differences between upperclass student subjects' (juniors and seniors) and lowerclass student subjects' (freshmen and sophomores) ratings of the importance of business writing for success. Two subgroups of student subjects were created based on their classification. These subgroupings were utilized

to evaluate this hypothesis. Table 23 shows the comparison of these upperclass subjects' and lowerclass subjects' mean IBW scores.

Table 23
Comparison of Student Subjects' Mean
IBW Scores by Classification

Sample	<u>n</u>	Mean	<u>SD</u>
Freshmen and sophomores	109	51.80	10.61
Juniors and seniors	97	50.43	9.78

Note. Mean difference = 1.37; t value = 1.03; df = 204; two-tailed p = .340.

As Table 23 demonstrates, mean IBW scores for upperclass and lowerclass subjects were both within the range of high importance, but although they did differ somewhat--with freshmen and sophomores having the slightly higher scores--the difference between these groups does not support rejection of the null hypothesis of no difference. Comparisons of the 10 IBW skill items resulted in similar findings. There were no differences between the mean ratings of upperclass and lowerclass subjects on any of these items. The slight differences which did exist were consistent with the direction of difference for the IBW means--with freshmen and sophomores generally rating certain of the writing skills as of greater importance for success than their upperclass counterparts.

Comparisons of Students by Institutional Affiliation

Another hypothesis of the study related to the effect of institutional affiliation on students' ratings of the importance of business writing skills. A comparison of the mean IBW scores were undertaken, with a partitioning of the student subjects into two subgroups, one comprised of subjects from the public university, and the other comprised of subjects from the private college (see Table 24).

Table 24
Comparison of Students' Mean IBW Score
by Institutional Affiliation

Sample	<u>n</u>	Mean	<u>SD</u>
Public university	112	52.83	9.74
Private college	95	49.34	10.56

Note. Mean difference = 3.49; t value = 2.47; df = 205; two-tailed p = .014.

This comparison utilizing the t statistic provided evidence to support rejection of the null hypothesis of no difference between these two means. It was concluded that a difference existed between the mean ratings of students in these institutions, with students at the public university rating business writing skills as more important for their future success than students at the private college rated these skills.

Differences were also noted in mean scores for the following business writing items subjects at the two institutions: Memoranda writing (t = 2.39, df = 210, p = .01); proposal writing (t = 3.55,

$df = 212$, $p = .000$); analytic report writing ($t = 3.00$, $df = 212$, $p = .003$); and policy writing ($t = 2.28$, $df = 211$, $p = .024$). In every instance, the mean from subjects at the public university was higher, indicative of a higher rating of importance for these items.

Interaction of Independent Variables

Since the relationships of several independent variables (subjects' status, sex, student subjects' classification, and student subjects' institutional affiliation) and the dependent variable (rating of the importance of business writing for success) were used to evaluate the first four hypotheses, questions logically arose about the interactions of the independent variables with one another and the potential effects of such interactions on subjects' IBW ratings. Four additional hypotheses exploring such interactions were evaluated with two-way analyses of variance (ANOVA).

A two-way ANOVA evaluating the effects of sex and student/business person status on IBW total scores was calculated. Mean scores and standard deviations for the four subgroups are shown in Table 25. The results of the two-way ANOVA are displayed in Table 26.

The ANOVA confirmed that for the total sample, sex differences did not exist, but the main effect of subjects' status (i.e., as a student or business person) did exist. This analysis further showed that the effect produced by the interaction of sex and status did not exceed the effect predicted by chance for a sample of this size. Two-way ANOVA results did not provide evidence to support rejection of the null hypothesis that there was no interaction between subjects' sex and status.

Table 25
Distribution of IBW Scores by Sex and Subject Status

Status	Male		Female		Total	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Student	50.45	10.11	51.88	10.37	51.20	10.30
Business person	45.41	11.91	48.09	8.26	46.90	10.10
Total	49.21	10.75	50.98	10.17	50.20	10.30

Table 26
Two-Way ANOVA of Total IBW Scores for All Subjects
by Sex and Subject Status

Source of variation	<u>df</u>	Mean squares	<u>F</u>	<u>p</u>
Sex	1	74.910	0.682	.410
Status	1	1051.583	9.568	.002
Sex with status	1	15.662	0.143	.706
Residual	279	109.905		

Results of a two-way ANOVA exploring the effect of the interaction of institutional affiliation and classification on students' total IBW scores are shown in Tables 27 and 28.

The interaction of classification and institutional affiliation was more highly associated with variations in student IBW scores than

Table 27
Distribution of Student IBW Scores
by Institution and Classification

Status	Upperclass		Lowerclass		Total	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Public university	51.52	9.67	53.55	10.85	52.83	9.74
Private college	49.13	9.92	49.68	9.02	49.34	10.56
Total	50.43	9.78	52.80	10.61		

Table 28
Two-Way ANOVA of Student IBW Scores
by Institution and Classification

Source of variation	<u>df</u>	Mean squares	<u>F</u>	<u>p</u>
Institution	1	535.797	5.62	.004
Classification	1	975.940	10.23	.002
Institution with classification	1	1092.547	11.45	.001
Residual	202	95.410		

either of the two independent variables considered separately. Furthermore, the results provided support for rejecting the null hypothesis of no interaction between student subjects' classification and institutional affiliation.

Tables 29 and 30 provide results of the two-way ANOVA examining the relationship of sex and institutional affiliation to student IBW total scores.

Table 29
Distribution of Student IBW Scores
by Sex and Institution

Institution	Male		Female		Total	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Public university	52.71	10.21	52.93	9.94	52.83	9.74
Private college	49.88	10.06	50.93	10.97	49.34	10.56
Total	50.45	10.11	51.88	10.37		

Table 30
Two-Way ANOVA of Student IBW Scores
by Sex and Institution

Source of variation	<u>df</u>	Mean squares	<u>F</u>	<u>p</u>
Institution	1	872.163	8.220	.005
Sex	1	91.635	0.864	.354
Institution with sex	1	112.835	1.064	.304
Residual	210	106.092		

As Table 30 demonstrates, neither the main effect of sex nor the two-way interaction of sex and affiliation was related to variations in

IBW scores, although the main effect of institutional affiliation was different. These results did not provide evidence to reject the null hypothesis that there was no interaction between student subjects' sex and institutional affiliation.

A final two-way ANOVA examined student IBW scores in relation to sex and classification. The distribution of scores and ANOVA results are displayed in Tables 31 and 32.

Table 31
Distribution of Student IBW Scores
by Sex and Classification

Classification	Male		Female		Total	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Upperclass	50.35	10.23	50.57	10.54	50.43	10.61
Lowerclass	50.58	10.13	52.10	9.47	51.80	9.78
Total	50.45	10.11	51.88	10.37		

Neither sex nor classification, nor the interaction of sex and classification was found related to students' IBW total scores. The results do not provide evidence to support the rejection of the null hypothesis that there is no interaction between student subjects' sex and classification.

Table 32
Two-Way ANOVA of Student IBW Scores
by Sex and Classification

Source of variation	<u>df</u>	Mean squares	<u>F</u>	<u>p</u>
Classification	1	187.254	1.73	.190
Sex	1	43.932	0.41	.525
Classification with sex	1	162.714	1.50	.222
Residual	209	108.475		

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purposes of Chapter V are to present a summary of the study, as well as conclusions regarding the research conducted, and recommendations for further research.

Summary of the Study

The overall purpose of the study was to explore the general topic of writing as a principal component of business communication. More specifically, this effort examined differences in the perceptions of several groups about the importance of business writing skills for success in business careers following college graduation. The relationship of other characteristics of the study's subjects—including sex, educational classification, and institutional affiliation—was also explored individually and in combination with subjects' perceptions of the importance of business writing skills.

Chapter I presented an overview of current thinking about the importance of writing skills for employee business success. Note was made of the fact that recent college graduates have often been considered deficient in these skills by their employers. The discrepancy between the need of U.S. business for entry level workers who can write effectively was underscored. Chapter I also explored the locus of

responsibility for these perceived deficiencies in recent college graduates, with the preponderance of evidence suggesting that the problem may be caused by inadequate attention to the issue in institutions of higher education. This conclusion was further refined by delineating undergraduate students' perceptions of the importance of business writing as a probable feature of the problem.

Chapter II presented a selected review of the professional educational and business literature base which further substantiated the scope and severity of the problem as well as the need for further study. The chapter concluded with the statement of the hypotheses which were the subject of the study. The first four hypotheses entailed an analysis of: (a) differences in perceptions of the importance of business writing between students and persons in business; (b) differences in perceptions of the importance of business writing between males and females generally, and between male students and female students, and male business persons and female business persons; (c) differences in perceptions of the importance of business writing between students from different institutions of higher education; and (d) differences in perceptions of the importance of business writing between students who are upperclassmen and students who are lowerclassmen.

The fourth through eighth hypotheses provided a basis for assessing the interactions between individual subject characteristics and the association of these interactions with variations in subjects' perceptions about the importance of business writing. Four interactional hypotheses were detailed exploring: (a) an interaction between subject status (student or business person) and sex, (b) an interaction between student

subjects' classification and their institutional affiliation, (c) an interaction between student subjects' sex and their institutional affiliation, and (d) an interaction between student subjects' sex and their classification.

Based on the review of the literature, the first set of hypotheses predicted nondirectional differences between subgroups based on status, sex, classification, and institutional characteristics; the second set predicted that the interactional effects of all specified independent variables would be related to variations in perceptions of the importance of business writing skills.

Chapter III presented the design and methodology of this study. A detailed description of the population and the procedures used to secure the sample of 70 business persons and 214 students were provided. Procedures utilized in the development, piloting, and distribution of the Importance of Business Writing (IBW) instrument were discussed. Statistical methods used to analyze the data were described.

Chapter IV presented the findings of the study, including the response rates and tests of the eight hypotheses. The first hypothesis that perceptions of business employers and students in schools of business about the importance of business writing skills are different was supported. Students considered business writing skills to be more important for success than business employers did. The second hypothesis that perceptions of male and female subjects about the importance of business writing skills are different was not supported. Investigations of this hypothesis for all 284 subjects, as well as for subgroups of students and business persons, provided no evidence upon which to base rejection of the null hypothesis of no difference.

The third hypothesis related to differences in students' perceptions of the importance of business writing based on their classifications as upper- or lowerclassmen was also not supported. No evidence was provided upon which to base the rejection of the null hypothesis of no difference.

The fourth hypothesis predicting differences in the perceptions of the importance of business writing based on institutional affiliation (private college or public university) of the student subjects was supported by the data.

Of the four hypotheses predicting interactions between these independent variables, only the hypothesis related to the interaction of institution and classification was supported by the results of a two-way analysis of variance (ANOVA). Other two-way analyses of variance determined that the effect of the interactions of sex and subject status (student or business employer), students' sex and institutional affiliation, and students' sex and classification on perceptions of the importance of business writing skill do not differ from the effect of chance alone. No evidence was secured to support rejection of the null hypotheses related to these three interactions.

Although differences in the perceptions of the importance of writing skills between business persons and students was supported, a moderately strong relationship between the order of importance for these skills by the two groups was found. That is, there was general agreement about which skills were the most important for business success and which skills were the least important.

Conclusions

The major conclusion of this study is that the perceptions of students and of business persons about the importance of business writing for future success in business differ from one another. The most surprising aspect of this difference is that students perceive business writing skills to be more important than business persons perceive these same skills. This finding is particularly perplexing in the light of an extensive literature base which reflects assessments of the U.S. business community that recent college graduates' writing skills are woefully inadequate. As the National Association of Manufacturers reported in a survey conducted in 1992, many employers were hindered in their searches for qualified employees because they found approximately one-third of the applicants had reading and writing skills which were below standards. Additionally, 23% of the respondent manufacturers indicated that they were offering on-the-job remedial training in writing because they could not fill positions with qualified applicants with these skills ("How Businesses Search," 1992).

The assumption that students' business writing skills are inadequate because students do not perceive these skills to be important for their future success does not comport with the results of this study. Yet, it is interesting to note that a study conducted in 1985 by Austin and Ventura, reported similar findings. They stated that students rated the ability to perform selected communication skills and the ability to train others to perform them as important to their career successes. The study also found that students rated their own ability to perform

communication skills as more important than the actual ratings of the employers surveyed. The contrast between these findings and other conclusions in the literature suggested that a factor other than student perceptions of the importance of writing skills for their future success in business is responsible for the abysmal reputation of recent graduates as inadequately prepared to participate productively in U.S. businesses without further on-the-job instruction in these skills.

Another conclusion of the study is that individuals of both males and females share essentially the same perception of the importance of writing skills for business success. The findings in this study differ greatly from previous examinations of sex differences in writing skills as evidenced in the reports of Knack (1991), Berryman-Fink (1985), and Mandel and Uellen (1990). For all subject cohorts—including the total sample, business person cohort and student cohort—the absence of sex differences in perceptions was striking. Note may also be made of the lack of an interactional effect on perceptions by subject status (business person or student) and sex.

For the student subsample, differences in the mean ratings of importance are documented as occurring between students at the private college and the public university, with university students perceiving business writing skills as more important. Why this should be so is unclear; however, these two institutions probably differ on a number of unmeasured variables which confounded this finding. For example, average student age may be different, as may average level of competence, levels of motivation, levels of income, and so on. These may all contribute to this finding of an institutional difference between these

subjects' perceptions.

Of the variables explored in this study, subject status (as a business person or student) and student subjects' institutional affiliation were the only two related to differences in ratings of the importance of business writing skills for future business success.

Limitations of the Study

It has been noted that an extensive literature review was conducted to provide content (face) validity of the component skills items found in the Importance of Business Writing (IBW) questionnaire, but despite these efforts additional information would have been beneficial to this study. In particular, on the student IBW questionnaire additional questions that could determine a general writing ability level of the student such as: number of classes where written communication was an essential portion of the course and the grade point average for these courses. Perhaps questions that would provide information as to actual writing competence based on type of coursework and level of achievement would begin to account for the differences in student perceptions and entry level employee performance in U.S. businesses. It would also have been interesting to determine if students who indicated previous employment experience had any writing experience or requirements while employed.

In the same capacity, the employer IBW questionnaire lacks specific information regarding how essential is written communication for their job to function successfully and how much of their time is actually spent writing on-the-job and the time engaged in writing for entry-level

employees. Future studies would benefit from using the skill components on the IBW questionnaire used in this research, and the additional questions surrounding writing skills as mentioned. Since the findings of this research indicate that students perceive writing skills as more important for success in business than employers do, it is vital to find out where these differences exist.

Another change that could be made to increase confidence in the results of a survey such as this would be to add items which make the point of this survey less evident, items which do not make communication skills appear to be the only important skills for business success. The overall high ratings for writing skills are not surprising given the context of answering a questionnaire on business writing. Placing items on the questionnaire related to math, science, history, or any other academic discipline--in addition to communication items--would provide a more accurate appraisal of employers' and students' actual perceptions of the importance of writing skills.

Future studies could also be conducted using a qualitative approach rather than a quantitative approach or a combination of both. In a strictly qualitative study, students and employers could be interviewed, using parts of the IBW questionnaire with additional questions. Answers would be more spontaneous and less structured; generally the interviews would have to be recorded, transcribed, and finally coded for themes. To answer the general question about differences in perceptions of the importance of writing skills comparisons of themes expressed by employers and students would then be compared and discussed.

Using such an approach it would be possible to see what words each subgroup uses in discussing these skills. It is likely that there are many definitions of important and not important on scales instrument are insensitive to. Also in an interview, it would be possible to secure more detail about situational features of importance; when is a certain skill important, why is one skill more important than another, what are the personal characteristics associated with skill importance? Furthermore, the definition of written skills would not be limited to the researchers' conceptions, experiences, or imaginations. All participants in the research would have a chance to provide elaboration upon this theme. When a field of inquiry is at its earliest stages--as in the field of business communication research--this openness would appear particularly valuable.

Recommendations for Future Research

The findings of this study point to several areas for future research on the topic of business students' preparation for successful employment, with a specific focus on students' acquisition of adequate business writing skills to meet employer requirements. Useful research built on the current effort includes the following:

1. An exploration into the nature of the specific writing skill deficiencies employers encounter in recent college graduates would be of value in determining whether the greatest sources of employer dissatisfaction are mechanical skills (for example, spelling, punctuation, or grammatical), conceptual, or some combination of the two.

2. An examination of in-service training in writing skills provided by U.S. businesses compared to writing skills stressed in the course offerings in undergraduate business programs of institutions of higher education to ascertain which sector has assumed responsibility for teaching what content.

3. A qualitative study of individuals who have made a smooth transition from institutions of higher education to careers in business to determine their writing competencies, as well as any deficiencies in specific writing skill areas. Such a study might include an exploration of strategies successful individuals have employed to secure training in the skills they did not develop in undergraduate programs.

4. The explication of a more complete model for predicting students' acquisition of essential business writing skills which examines factors other than their perceptions of the importance of these skills. The current study has documented that students do perceive business writing skills to be important for their future success; what remains to be explored is why they do not acquire these skills at the levels that their future employers expect in new employees. Such issues as personal motivation and intelligence should be examined in detail to see whether and how they would fit into such an explanatory model.

Summary

The central question explored in this research is whether the perceptions of undergraduate students and business employers about the importance of writing skills for success in business differ from one another. Related questions are posed about the relationship of certain

individual characteristics such as sex, student classification, and student institutional affiliation and their interactions to these perceptions.

Subjects were selected from two institutions of higher education and 20 medium-sized businesses in western Michigan. Data collection was accomplished using separate but similar questionnaires for 70 volunteer business subjects and 214 volunteer student subjects. A rating of the importance of business writing was secured for all subjects providing responses to 10 specific items on the instruments. Comparisons of mean ratings of importance utilizing t tests of independent samples were undertaken to test the four hypotheses related to differences between subgroups; two-way ANOVAs were used to test the interactions between independent variables.

Conclusions include:

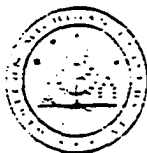
1. Students' and business persons' perceptions of the importance of business writing for future success in business were different.
2. The perceptions of the importance of business writing for students in the university and students in the college differed.
3. The interaction between students' institutional affiliation and their classification as an upper- or lowerclassman was associated with variations in their perceptions of the importance of writing skills for future success in business.

Recommendations for future research on the topic were provided.

APPENDICES

Appendix A
Approval Letters From Human Subjects
Institutional Review Board

Human Subjects Institutional Review Board



Kalamazoo, Michigan 49008-3899

WESTERN MICHIGAN UNIVERSITY

Date: June 10, 1993

To: Miriam Coleman

From: M. Michele Burnette, Chair *M. Michele Burnette*

Re: HSIRB Project Number 93-06-15

This letter will serve as confirmation that your research project entitled "An exploration of differences between students' and managers' ratings of the importance of writing skills for business success" has been **approved** under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: June 10, 1994

xc: Warfield, EL

Human Subjects Institutional Review Board

Kalamazoo, Michigan 49008-3899
616 387-8293

WESTERN MICHIGAN UNIVERSITY

Date: November 8, 1993
To: Miriam Coleman
From: M. Michele Burnette, Chair
Re: HSIRB Project Number 93-06-15

A handwritten signature in cursive script, appearing to read "M. Michele Burnette", is written over the printed name.

This letter will serve as confirmation that the changes in your research protocol, "An exploration of differences between students' and managers' ratings of the importance of writing skills for business success" have been approved by the Human Subjects Institutional Review Board.

xc: Warfield, Ed. Leadership

Appendix B
Business Writing Survey--Student Subjects

BUSINESS WRITING SURVEY

General Information

Age _____ Major _____

Class Rank (circle one) Freshman Sophomore Junior Senior Gender F or M

Have you previously been employed in a business setting for over 1 year? Y or N

If so, what type? (circle one) Service Manufacturing Governmental

Survey Section

Many of the components of business communication are listed below. Beside each component is a seven-point scale which provides an opportunity for you to indicate how important you feel this component will be for you in your initial employment setting after graduation.

The scale point 7 indicates "Significant Importance" and the scale point 1 indicates "No Importance." The five scale points between 7 and 1 should be used to indicate perceptions which fall between these two points. Please circle the number that indicates your preference.

		Significant Importance					No Importance	
		7	6	5	4	3	2	1
a)	Memoranda writing	7	6	5	4	3	2	1
b)	Speaking within the company	7	6	5	4	3	2	1
c)	Managing meetings	7	6	5	4	3	2	1
d)	Letter writing	7	6	5	4	3	2	1
e)	Communicating by telephone	7	6	5	4	3	2	1
f)	Audio teleconferencing	7	6	5	4	3	2	1
g)	Encouraging others	7	6	5	4	3	2	1
h)	Proposal writing	7	6	5	4	3	2	1
i)	Speaking to outside groups	7	6	5	4	3	2	1

j)	Using photocopier machines	7	6	5	4	3	2	1
k)	Participation in discussions	7	6	5	4	3	2	1
l)	Mediating others' conflicts	7	6	5	4	3	2	1
m)	Informational report writing	7	6	5	4	3	2	1
n)	Interviewing others	7	6	5	4	3	2	1
o)	Receiving supervision	7	6	5	4	3	2	1
p)	Persuading others	7	6	5	4	3	2	1
q)	Taking minutes	7	6	5	4	3	2	1
r)	Analytical report writing	7	6	5	4	3	2	1
s)	Gathering information	7	6	5	4	3	2	1
t)	Using a personal computer	7	6	5	4	3	2	1
u)	Resume writing	7	6	5	4	3	2	1
v)	Using a foreign language	7	6	5	4	3	2	1
w)	Resolving conflicts	7	6	5	4	3	2	1
x)	Using word processing programs	7	6	5	4	3	2	1
y)	Video conferencing	7	6	5	4	3	2	1
z)	Using a fax machine	7	6	5	4	3	2	1
aa)	Policy writing	7	6	5	4	3	2	1
bb)	Using dictation equipment	7	6	5	4	3	2	1
cc)	Using a cellular telephone	7	6	5	4	3	2	1
dd)	Using electronic mail	7	6	5	4	3	2	1

Appendix C
Business Writing Survey--Business Person Subjects

BUSINESS WRITING SURVEY

General Information

Number of full years with your current company _____

Gender F or M Position/title _____

Organization _____

Survey Section

Many of the components of business communication are listed below. Beside each component is a seven-point scale which provides an opportunity for you to indicate how important you feel this component is for entry level college graduates in your company.

The scale point 7 indicates "Significant Importance" and the scale point 1 indicates "No Importance." The five scale points between 7 and 1 should be used to indicate perceptions which fall between these two points. Please circle the number that indicates your preference.

		Significant Importance					No Importance	
		7	6	5	4	3	2	1
a)	Memoranda writing	7	6	5	4	3	2	1
b)	Speaking within the company	7	6	5	4	3	2	1
c)	Managing meetings	7	6	5	4	3	2	1
d)	Letter writing	7	6	5	4	3	2	1
e)	Communicating by telephone	7	6	5	4	3	2	1
f)	Audio teleconferencing	7	6	5	4	3	2	1
g)	Encouraging others	7	6	5	4	3	2	1
h)	Proposal writing	7	6	5	4	3	2	1
i)	Speaking to outside groups	7	6	5	4	3	2	1
j)	Using photocopy machines	7	6	5	4	3	2	1
k)	Participation in discussions	7	6	5	4	3	2	1

l)	Mediating others' conflicts	7	6	5	4	3	2	1
m)	Informational report writing	7	6	5	4	3	2	1
n)	Interviewing others	7	6	5	4	3	2	1
o)	Receiving supervision	7	6	5	4	3	2	1
p)	Persuading others	7	6	5	4	3	2	1
q)	Taking minutes	7	6	5	4	3	2	1
r)	Analytical report writing	7	6	5	4	3	2	1
s)	Gathering information	7	6	5	4	3	2	1
t)	Using a personal computer	7	6	5	4	3	2	1
u)	Resume writing	7	6	5	4	3	2	1
v)	Using a foreign language	7	6	5	4	3	2	1
w)	Resolving conflicts	7	6	5	4	3	2	1
x)	Using word processing programs	7	6	5	4	3	2	1
y)	Video conferencing	7	6	5	4	3	2	1
z)	Using a fax machine	7	6	5	4	3	2	1
aa)	Policy writing	7	6	5	4	3	2	1
bb)	Using dictation equipment	7	6	5	4	3	2	1
cc)	Using a cellular telephone	7	6	5	4	3	2	1
dd)	Using electronic mail	7	6	5	4	3	2	1

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