

AN EXPERIMENTAL STUDY TO DETERMINE THE EFFECTS
OF INDIVIDUALLY PRESCRIBED INSTRUCTION ON
ACHIEVEMENT IN, AND ATTITUDES TOWARD A
WRITTEN COMMUNICATION COURSE

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CHAPTER I

INTRODUCTION

Instructors of the written communication courses have always been concerned with depicting the most effective communication processes available in order to increase students' perceptions and comprehension of desired objectives. Although different methods of instruction have been selected from time to time, the basic goals of the courses have remained the same. These goals are listed as follows:

1. To give students an appreciation of the importance of effective communication in business,
2. To develop students' ability to write effectively in a variety of business situations,
3. To teach students problem-solving approaches in the area of business communication,
4. To teach students care and precision when attempting to communicate,
5. To make students aware that communication problems must become their problems,
6. To teach students the fundamentals of business report writing,
7. To teach students to apply critical judgment in evaluation of effective communication.

A teaching method currently being applied at Oklahoma State University consists of individually prescribed instruction in a

laboratory-writing format. No formal lectures are presented, and students complete certain writing assignments in class. A portion of the class time is devoted to short critiques on common writing problems and to individual consultation sessions.

The purposes of this study were to test and evaluate the assumption that individually prescribed instruction of written communication courses would provide an effective method of teaching business letter writing skills. An additional objective was to determine the students' attitudes toward the need for study of business communication processes and to increase their mastery of English fundamentals and writing techniques.

Statement of the Problem

The principal purpose of this study was to determine the effectiveness of teaching by the individually prescribed instruction method. Criteria used in measuring this effectiveness consisted of answering such questions as: How well can students write various kinds of letters? How well can they construct sentences and paragraphs? How effective is their language mechanics? Are those skills which will help them succeed in the world of work also being developed?

Several writing techniques and communication styles were assessed through controlled pre-tests, post-tests, and competency measurements. A bi-polar semantic differential instrument was used to measure the entry-level attitude of the students toward the business communication course. To measure entry-level learning of students, the Writing Skills Test, Form A, McGraw-Hill Skills System, was given.

To measure exit-level attitude of students, the bi-polar semantic

differential instrument was given as a post-test. To measure exit-level learning, the Writing Skills Test, Form B, McGraw-Hill Skills System, was given. Certain developmental competencies were judged by instructor experts.

Hypotheses

To determine whether significant degrees of change have occurred or whether significant differences in responses have occurred, several hypotheses will be tested.

Null

1. There will be no significant change in writing skills, as measured by the McGraw-Hill Skills Writing Test (Part A as a pre-test and Part B as a post-test), during the period of instruction.

2. There will be no significant change in attitudes concerning the study of written communication, as measured by the Bi-polar Semantic Differential Questionnaire (pre-test and post-test), during the period of instruction.

Research

1. Writing abilities of students can be assessed by instructor experts using a characteristics-check list instrument.

2. Personal development of students can be assessed by instructor experts using a characteristics-check list instrument.

Importance of the Study

Deficiencies of written communication are frequently encountered

in the business world. Business people continue to complain that employees do not possess the proper writing skills. Many executives point out that effective writing ability is crucial to success. The current interest in and concern over the inability of some individuals to write acceptably reinforces the need for a written communication course in the college curriculum.

Instructors of written communication courses have exerted continuing efforts through the years to offer students the best possible opportunities for developing competent writing skills. This has included the careful scrutiny of course contents, the frequent examination of available textbooks, and the continuous evaluation of different methods of teaching.

Instructors face the problem of combining in one course methods to enhance written skills while at the same time preparing the student psychologically for the business world. Such training and preparation should improve a student's chances for fulfilling the requirements and expectations of an employer. One of the most appropriate means for reaching the several course goals is individually prescribed instruction through letter and report writing.

Many studies will be cited which emphasize the importance of the written communication skill for success in the business world. Most professional men and women rated the skill either "very important" or "highly essential." In no study was written communication ever described as "unimportant."

It has been suggested (Van Voorhis, 1974) that research should be conducted to determine if the objects and content of business communication courses are based on the actual needs of students to prepare

them for business, industry, government, and private life.

A review of the literature was made to determine the most important competencies that should come from a written communication course. An instrument of these competencies was devised in order to determine if they were taught and acquired in the written communications course.

It is believed that the initial attitude values of the student of business communication have a bearing on his/her reaching course objectives. In order to assess these attitudes, an attitudinal opinion survey was given at the beginning of the course. It was repeated near the end of the course to determine whether changes in attitude values had occurred.

Definition of Terms

Communication--all methods of giving and receiving information whatsoever.

Written communication--all forms of conveying written messages.

Business communication--written messages dealing with the transmission of ideas through business letters, oral and written reports, charts, graphs, and interviews and common forms of written messages (Good, 1973).

Written communication course--refers specifically to the course GENAD 3113 taught at Oklahoma State University. The University catalog description is: "Analysis of business communication problems in terms of generally accepted communication principles. Practice in written messages; specifically: special goodwill letters, neutral and good-news, disappointing, persuasive and employment messages."

Business communication course--synonymous with the term "Written communication course."

Feedback--a basic response made to what is heard, read, or seen (Lewis, 1975).

Attitude--the predisposition or tendency to react specifically towards an object, situation, or value, usually accompanied by feelings and emotions (Good, 1973).

Individually prescribed instruction--as it refers to GENAD 3113, individual instruction and consultation during the class and outside of class; no formal class lectures are given. Class time is devoted to short, informal critiques on common writing problems.

Limitations

This study was limited to six sections of written communication classes (GENAD 3113) taught during the 1978 fall semester at Oklahoma State University. Several instructors taught the course. Data from those students completing the course were collected and analyzed.

This study sought to determine the effects of individually prescribed instruction on achievement in, and attitudes toward a college business communication course.

Writing Tests A and B of the McGraw-Hill Basic Skills Test were administered as pre- and post-tests.

Student competencies were judged on several writing skills by instructor experts. Those who qualified as instructor experts had at least one year of experience teaching the written communication, had written articles and/or books in that field, or conducted research in some area of communication.

Student personal development was also judged by instructor experts.

A bi-polar interest and attitude inventory was completed in order to

assess opinions of the participants.

It was assumed that the students enrolling in the course for the fall semester, 1978, were representative of students who have enrolled in the course in the past and those who will enroll in the future.

It was assumed that a similar study using larger samples would yield the same results.

A history of communication theory together with definitions and models is contained in Chapter II. A history of business communication as a distinct area together with a review of selected experimental studies in the business communication field are also included in Chapter II.

CHAPTER II

HISTORY AND REVIEW OF SELECTED RESEARCH

Communication Theory

Communication in our society is increasingly becoming the primary way we obtain data about our environment. Our interpretation of events depends upon the understandings we have and the words we use. Because an understanding of what goes on around us depends upon communication from others, it is important that we interpret messages as accurately as possible. There is a widely held belief that everything one does results in communication; that one cannot not communicate. A theory, or theories, of communication should be developed and studies conducted to further explain human communication. Perhaps no one theory of communication will gain universal consensus just as no one definition has unanimous acceptance. However, the recognition of the need for developing theory and research is what is important here.

Several theoretical positions, representing different fields of inquiry, will be summarized. The authors of these positions show many and varied methods of approaching theory. They lay the groundwork for theory building. They present new theories, definitions, and models. The most important of these will be presented because it is from such theorists that the distinct area of business communication evolved.

The theoretical underpinnings or framework of human communication

theory finds its genesis in Aristotle. He conceived of communication as persuasion. Communication for Aristotle was rhetoric--the production of persuasive messages. A development from the eighteenth century comes from "faculty" psychologists who felt that communication informs the mind and persuades the soul. Today, we look at the behavioral effects of communication, rather than simply looking at messages by themselves. The empirical research character of communication research as we know it today derives from the approaches of social scientists in many fields (Hanneman, 1975).

Paul Lazarsfeld, a sociologist, developed many of the tools of survey research and performed basic studies of voting behavior and mass media influence. Kurt Lewin, a psychologist, specialized in experimental methods applied to the group communication process. During the same period Harold Lasswell, a political scientist, performed studies in political propaganda and developed scientific techniques for content analysis. Perhaps one of the most famous research programs on communication and attitude change was one directed by Carl Hovland. The type of research he conducted set the tone for some of the experimental approaches in use today. It was in the early 1960s that the field of communication research came into its own as a discipline, emerging partly from the speech and journalism fields and partly from various social science disciplines (referred to in Hanneman, 1975).

In developing a theory for communication processes, Hawes (1977) suggested that communication is a spatio-temporal series of concatenaneous acts. Stated more simply, each of us affects each other in all aspects. Communication is a process phenomenon simultaneously involving two or more symbol-using animals. Communication functions to create and

validate symbol systems which define social reality and regulate social action.

A theory of communication advanced by Pearce (1977) is a rules-based theory of interpersonal communication through the management of meaning. He feels the term "coordinated management of meaning" is more descriptive of what people do when they communicate. His theory rests on the judgment that its assumptions are better. They admit the diversity of human actions; they stress the importance of actors' meanings; they structure teleological as well as causal explanatory models.

A theoretical perspective for dealing with the initial entry stage of interpersonal interaction is provided by Berger and Calabrese (1975). These authors present seven axioms and 21 theorems suggesting a set of research priorities for studying the development of interpersonal relations. They warn that several problems can occur if theory is to be extended beyond the initial stages of interaction.

Several obstacles to comprehensive theory-building in communication have been posed by Thayer (1963). He suggests that one of the basic obstacles is the assumption that communication is a thing which can be studied and dealt with apart from human behavior. He stresses the fact that this cannot be done. It is the human who communicates. Another inappropriate assumption, according to Thayer, is our labeling of how or why things happen as they do. What one assumes about the basic causes or reasons for events in his/her world will broadly determine the kind of theory he/she is going to articulate. Thayer believes the immediate problem for theory-building in communication is that of the theorist's basic assumptions.

Metatheoretical Positions of Theory

Finding none of the above approaches to theory building acceptable, several theorists determined to develop a stronger base. From this theory on theory they launch additional conceptions of communication.

Monge (1977) states that the best way to study a discipline as young as communication theory is to develop a systems theory that allows a relationship to alternative theoretical bases of the study of human communication. Monge argues that this approach offers more information and allows a continuing quest for knowledge. With this view, one looks at the total system of inter-dependent variables.

Another position posed by Berger (1977) is the covering-law perspective as a theoretical basis for the study of human communication. This provides the most complete explanation of a phenomenon when that phenomenon is true. The law is assumed to hold for the past, the present, and the future over time and space. When a stimulus is presented, a response occurs. The law adopts a set of logical assumptions.

A rules-based perspective for studying human communication has been investigated by Cushman (1977) and others. This perspective suggests that rules reflect the complex cognitive and behavioral functions of human beings. Rule behaviors are viewed as capacities of a powerful mechanism. If we can discover the rules governing another's behavior, we can better understand his actions. Rules generate regularities which are different in kind from causal regularities. They are situationally specific. They rest on the notion of choice and intentionality.

Each of these positions has staunch advocates and numerous critics. A continuing effort is needed to develop clear and precise rules of correspondence between our conceptualization and observable

communication.

Measurement instruments have been developed by R. D. Laing, H. Phillipson, and A. R. Lee. These instruments have been thoroughly analyzed and contain high content validity and criterion-related reliability which can determine the levels of agreement, understanding, and realization involved in an individual's perception of his relationships to others or objects (authors cited by Cushman and Florence, 1974).

Definitions and Models

Theorists may never agree on a communication theory for, in fact, there may be no one communication theory. The same holds true of a definition of communication. Experts in various fields have posed several definitions.

Lindgren (1953) sees communication as a process which is concerned with all situations involving meaning. Krippendorff (1969) defines it as a process of transmission of structure among the parts of a system which are identifiable in time and space. Miller (1966) states that communication has as its central interest those behavioral situations in which a source transmits a message to a receiver(s) with conscious intent to affect the latter's behavior(s). Gerbner (1968) says communication is social interaction through symbols and message systems. Schramm and Roberts (1971) think communication is the sharing of an orientation toward a set of informational signs.

In a continuing effort to state what is involved in communicating, several models have been developed. Models have been introduced as a conceptual tool. The main purpose of such tools is to structure a system based on real world activities and to eliminate superflous detail.

Aristotle gave us perhaps the first and simplest model--that of a speaker with a message sent to a listener. With few alterations this was the main model until 1948.

The introduction of cybernetics as a field in the late 1940s ushered in the publication of articles with a different view of communication. Shannon produced a model which dealt with the problems from the perspective of electronic communications systems--source, transmitter, channel (noise), receiver, and destination (Osgood and Sebeals, 1967). Weiner viewed communication as a primary element in man's effort to control himself and his environment (Albers, 1965).

A helical model was introduced by Dance (1967). The circular-communication image does an excellent job of making the point that what and how one communicates has an effect that may alter future communication. The main shortcoming of this model is the suggestion that communication comes back, full-circle, to the same point from which it started.

Devlin (1968) introduced a communication model with more flexibility. His model, which includes message, transmitter, channel, and receiver, recognizes noise at every step. Devlin feels the problems of noise must be assumed by those who compose messages, not by those in the channel-receiver area.

Berlo (1960) pictured the interactional qualities of communication through a model using source, message, channel and receiver. His model showed the dynamic qualities of the interaction process and had a great impact on the study of communication.

A later model showing the forward movement and never-ending process of communication was demonstrated by Wenburg and Wilmot (1973). The model is represented by a looping effect indicating several participants

with different meanings and understandings. Each representative is attempting to derive meaning and understanding and while doing so is giving off signals that may be picked up by others.

All the theories and models presented can easily be adapted to a wide variety of situations. Harder (1969) thinks many advantages can come to a communicator by studying communication theory. One realizes a message is a means to an end, not an end in itself. It becomes clear that one should think people, not writing. The study helps us appreciate the many psychological and socio-psychological factors that affect behavior. A realization that symbolic factors, other than language, may also influence behavior becomes evident.

Business Communication

Communication ranks as one of the great achievements in man's cultural development. Communication is accomplished through actions, spoken words, and printed or written symbols.

The first formal study of communication, according to Cherry (1955), can be traced back to 1689. John Locke and David Hume performed studies concerned with knowledge of "the real world; its social and ethical system."

In 1832, a new aid to communication was invented--the Morse Code by Samuel Morse. This was followed in 1876 by Alexander Graham Bell's invention of the telephone (Morison, 1965).

The historical significance of these inventions is clear. Distance was shortened as man began sending messages over wide areas. The concern for better communication methods in the 19th century paved the way for the expansion which occurred in the 20th century.

The invention of the first practical typewriter by Sholes in 1868 was to become a major means of moving business messages. The machine gained little notice until R. G. Dunn & Co., the predecessor of Dunn and Bradstreet, stepped into the picture. They convinced Remington the machine would become popular and urged its production. When Dunn & Co. issued typed annual reports to their 25,000 subscribers, attention of the business world focused on the typewriter almost overnight (Russon and Wanous, 1973).

As the longhand method of writing gave way to the typed copy, a system of writing began to emerge. In the early 1900s a method of using form paragraphs developed. This gave way in the 1920s to individuals writing with reference to a particular situation. Much of the stereotyped phrasing continued however. It was not until the introduction of scientific management and the humanistic attitude in the 1940s, that friendlier tones and a "you" attitude developed.

The evolving materials for trade communication stemmed from three main sources: economic needs of a particular period, psychological and practical research in advertising and selling, and the contemplative research of alert and trained minds applied to the needs and materials (Boyd and Inman, 1976).

Courses in business writing were instituted shortly after the early American schools of business were established in the latter part of the seventeenth century. Programs continued to develop as the need for better business writing became evident to businessmen and to members of the business school faculties (Gerfen, 1961).

Courses in letter improvement appeared as early as 1913 at Boston University, and before 1920 courses were begun in several other

universities (Boyd and Inman, 1976).

The first collegiate business textbook was published in 1915. As the course became more firmly entrenched in the collegiate curriculum, the role of training business leaders became more and more a responsibility of colleges and universities.

The first significant reference to communication within organizations was found in the work of Henry Fayol (Pietri, 1974). Although Fayol focused his attention on the underlying structure and job functions within an organization, he considered good communication a necessary element.

According to many sources, Dale Carnegie is responsible for the first popular treatment of communication to come to the attention of the businessman. His writings and courses first achieved nationwide popularity in the early 1920s. Dale Carnegie could have been the first to link communication skill with success as a manager (Redding and Sanborn, 1964).

For the 1929-30 school year, 150 colleges and universities offered one or more courses each in the field of business correspondence as determined by the Advertising Federation of America. Their graduates uniformly rated these courses as being of high value and usefulness in their business and professional careers (Boyd and Inman, 1976).

As instructors began teaching letter writing, they soon found that students were deficient in their command of the English language in such areas as grammar, spelling, and punctuation. In an attempt to eliminate these weaknesses, much of the written communication course involved reviewing basic grammatical rules. Eventually, the various types of business letters were used to teach business English to

students in schools of business. As the students' English improved, report writing was added with less time devoted to teaching the basic skills.

Several historical events have given impetus to the need for writing letters effectively. The stock market crash of 1929 led to the use of personal application letters to gain an advantage in making effective contact with prospective employers. Because there were so few jobs available, the matter of getting a job for the student took on new dimensions. A nationwide merchandising system using catalogs appeared on the scene and gained wide acceptance. The mail order houses of the 1930s developed promotional use of the mails. Increased credit operations soon followed. This required correspondence modification and an increasing need to communicate effectively in order to obtain desired results. Sales correspondence began with the early days of business, and the many regulations it imposed brought the need for more and more writing.

During the 1930s and 1940s the theory and practice of internal organizational communication were just beginning. Chester Barnard developed the notion that communication was the first function of an executive. Alexander Heron viewed communication as a line function. Carl Rogers, Kurt Lewin, and Paul Pigors stressed the two-way notion of communication. The reader was no longer considered a passive receiver of information. A message was designed to promote reader interest and action. Written communication courses in business schools were introduced. Research in communication was initiated during the War (Hay, 1974).

During the period from World War II through the 1950s, significant advances were made in defining the nature of the communication process

and in building conceptual models of mathematical and behavioral theories of the phenomena involved. Organizational communication practices, although frequently paying homage to these developments, typically remained much more mechanistic and simplistic than might have been possible had the theoretical advances been applied more extensively. It remained largely for practitioners of more recent times to recognize and understand the real significance of the research findings of the period (Pietri, 1974).

Several technological innovations through the years have placed great emphasis on communication. The widespread use of electric typewriters, office communication systems, word processing units, data processing systems, duplicating machines, and computers meant efficiency in some areas but also created additional problems.

The traditional approach of employing an individual for a position without regard to his individual needs and desires has virtually disappeared. The satisfaction and morale of an employee is now an important consideration. Motivating an employee is also a matter of concern. The best method for sending messages, directing, and persuading was needed. Cost must also be considered as an important reason for developing effective methods of communication. The loss of a sale or a customer because of a poorly constructed communication hurts a business.

Communication in organizations began appearing as a distinctive area of scholarly interest. People from various academic disciplines began working in this discipline. A summary of several contributors to current research has been documented by Schramm (1971). Contributors are from the fields of sociology, anthropology, political science, economics, linguistics, education, mathematics, and engineering, in

addition to various communication experts:

Since 1952 there has been added to our libraries much of the work of Carl Hovland and his associates in the Yale study of communication and attitude change; Charles Osgood and his associates at Illinois, on the empirical study of meaning; Paul Lazarsfeld and his associates at Columbia, on the study of interpersonal as related to mass communication; Festinger, Katz, McGuire, and others on dissonance theory, consistency theory, and other psychological processes related to communication; Pool, Deutsch, Davison, and others on international communication; Newcomb, Asch, Sherif, Leavitt, Bavelas, and others on groups and group processes as related to communications; Miller, Cherry, and others, applying Claude Shannon's mathematical theory of communication to human communication problems; Berelson, Holsti, and others on content analysis; Miller and others on system theory, Carter on orientation; Chomsky and others on language; May, Lumsdaine, and others on learning from the mass media. During this time communication study has moved so fast that it has seldom stood still for its portrait (pp. 4-5).

The results of this research have caused business people and those in the academic community to view the business communication course differently. From research completed in 1970, Bullard identified several characteristics of the business communication course. Variations were found in the course titles, credit given, prerequisites, and administrative placement in the curriculum. He found that more emphasis is now being given to communication theory and oral communication. A decreased emphasis is given to letter writing and language mechanics. From this study the business communication course emerges as a strong collegiate-level offering with a sound base of communication theory that culminates in activities of a problem-solving nature that permit the student to apply the theory to which he has been introduced.

Instructors of business communication have demonstrated a willingness to adjust to needed changes and a desire to integrate content and teaching strategies that will enhance the learning of students (Boyd and Inman, 1976).

Business Communication Research

The written communication course is firmly established in the business curricula of many institutions of higher learning in this country. Numerous studies attest to its high value to business students. The studies which were critical of the course have caused instructors to study their course offerings more carefully. A variety of approaches to teaching this course have been tried.

Many studies will be cited which refer to educator's attempts to discover the most effective course content. Business people and educators do not always agree on certain specifics of the course, but both believe written communication skill is essential. Reference to several pertinent studies conducted from the standpoint of business people, of educators, and of students follows.

Written business communication is a yearly multi-billion dollar business in the United States (Almaney, 1971). Many businesses today still stress putting material in writing so it will have less chance of being misunderstood (Lesikar, 1968).

As the nation has grown and changed, so has the language of business. Gordon and Howell (1959) conducted an extensive study financed by the Ford Foundation with many implications to the area of communication. The report following the study was extremely critical of collegiate business writing courses. The authors made several suggestions and recommended the continued teaching of communicative skills at the collegiate level.

Gordon and Howell described abilities that businessmen desired in prospective employees based on data they received. Businessmen

wanted colleges to "sharpen analytical abilities, stimulate imagination, develop human relation skills," (p. 28) and "develop skill in verbal communication and abilities to write and speak effectively" (p. 29).

One of the main points of the Gordon and Howell (1959, p. 59) report is that ". . . of all areas concerning student competence, the one concerning educators and employers alike is that of communication."

Frank Pierson et al. (1959) conducted a significant study which was subsidized by the Carnegie Foundation. Although both the Howell and Pierson reports were completed nearly two decades ago, their impact is still being felt. These investigations were made independently of each other, but their recommendations were surprisingly similar. Major recommendations included increasing the general education content of the business administration curriculum to more than 50 percent. They suggested offering less specialization at the undergraduate level. They wanted to increase standards in all areas, and encouraged more research and evaluation of teaching methods (Nanassay, Malsbury, and Tonne, 1977).

Other research completed in the same year, 1959, by Kephart, McNulty, and McGrath showed that good command of written communication is essential in working with people.

In a survey taken of managing executives of General Electric (1957), the executives indicated that their English and communication courses had been most useful in their collegiate training. In 1961, the General Electric Company polled 14,000 of its employees who identified English as the most important course (Bennett, 1971).

William R. Sears, Managing Partner of Sears and Company of San Francisco, outlined the qualities that he felt were essential to reach

top-management positions. These qualities were the ability to plan, organize, make decisions, control actions, and--most important of all--communicate these ideas to others (Bennett, 1971).

Donald Seibert, Chairman of the Board and Chief Executive Officer of J. C. Penney Company, Inc., addressed the 1978 National Business Education Association Convention. He placed great emphasis on business communication skills--both oral and written, stating they were the most important skills that a student could bring to the J. C. Penney Company.

Simonds (1961) asked businessmen what skills they recalled using most during the past year rather than what skills they would recommend be taught to prospective executives. Of 240 executives questioned throughout the United States, 132 or 55 percent replied. The executives indicated that the course they used most frequently was their business letter writing course.

In a smaller study of 27 personnel executives, while not statistically sound as being a representative sample, interesting results are worth mentioning. Vincent (1966) interviewed these men in order to get their ideas and opinions concerning the college graduates employed by their firms and concerning the type of educational background most appropriate for the college graduates employed by their firms. Twenty-one of the 27 executives listed written English as being the most important course out of the 31 courses listed. When asked to name the weakness of college graduates today, the weakness ranked as second highest was the inability of the college graduate to communicate, either orally or in written form. When asked how schools of business could better prepare their graduates to meet the needs of their business,

the most frequent answer was that all levels of the school system should do a better job of improving the graduate's ability to communicate.

Each business organization is a distinct unit in itself. Because of this organizational uniqueness, Brenner and Sigband (1973) believe firms have unique communication problems. They think that every organization develops a pattern which reflects the unique manner in which it sends, receives, and processes information. In a survey of 700 managers conducted through the Research Institute for Business and Economics, 70 percent of the respondents indicated that 75 percent of the assignments given to them by superiors were oral in spite of memos and notices that plead "write it out."

Young people entering the business world today appear to want more knowledge and understanding about the company they work for. Many are interested in relating the place their particular position holds in the formal organization structure. The new employee may be several levels beneath top executives. All information about the company may come to them through an immediate supervisor. Difficulties sometimes arise as information is channeled through several levels. No matter where communication problems occur, better communication with supervisors is being sought by the young operatives. Bird (1976) conducted a study of 94 lower level managers and found that these managers recognized the importance of such communication.

In a large survey conducted by Nemeo (1973) more than 21,000 employees, including 17,000 non-supervisory personnel, of the Bank of America were questioned concerning communication problems. It was found that the 20- to 34-year-old age group harbored major concerns

about the bank's communication programs. The younger employees wanted steadily developing improvements accelerated, and had particularly strong interests in open, candid, two-way communication. On the other hand, many managers viewed open communication as subversive to corporate goals.

Drucker (1954) has said that 60 percent of management problems are caused in whole or in part by faulty communication. He states that everything hinges on communication--communication based on the premise that people want to know, to understand, to contribute. He thinks much of the problem lies in word meanings and notes the dictionary lists 14,000 meanings for the 500 most common English words, or an average of 28 meanings per word.

Bromage (1973) indicated that readers need to be programmed in sequential fashion. She introduced the idea of finding pathways to the reader's mind--his level of familiarity, his threshold of interest, his degree of readiness or receptivity. She proposed that merely "to be able to write" is no longer enough for the successful business person; he/she must write in a very special way. Clarity and brevity have become the criteria for successful communication, according to business people. There is little evidence to indicate that the proportion of the business person's time spent poring over paper is going to decline.

Businessmen were asked to identify the most serious deficiencies of their college graduate employees in a Harvard Business Review survey (1968). "Lack of communication abilities and skills of understanding" was one of the first three categories they identified.

In a survey of personnel managers by Hailstone, Roberts, and Steinbruegee (1955) business letter writing and English were identified

as two of four most needed courses required for initial employment of collegiate business students.

A study concerning 58 California executives who directed companies were among Fortune's 500 largest U. S. industrial corporations reflecting the following information. Every one of the respondents (35) felt that effective business communication skills had played a vital role in advancement to a top executive position in their company. Sixty-six percent of the respondents indicated that "effective communication skills" had played a "major part" in their advancement while only 34 percent indicated "some part" in their advancement. A formal course in business communication had been taken either in college or since college by 69 percent of the respondents. Those who had taken such a course indicated the course content was as follows: 43 percent had studied report writing; 40 percent had studied oral communication; 34 percent had studied communication theory; 23 percent had studied letter writing; 17 percent had studied memorandum writing; and 11 percent had studied grammatical usage.

Almost 83 percent of the executives said they used written communication skills extensively in their present position; 14 percent said occasionally; and only 3 percent said rarely (Bennett, 1971).

Rainey (1972) conducted a study among 105 professors of business communication courses and 50 corporate executives. He sought to appraise the general area of business communication instruction and the needs in this area. From the executives the following findings were considered to be significant. Fifty-four percent said that general report writing is of crucial or great importance. Rainey asked if collegiate-trained managers would benefit equally as much, in terms of

long-term benefit to the employing firm, from a course in the analysis of business letters, reports, and proposals as from taking a course in the analysis of financial statements. A total of 80 percent of the respondents indicated they felt this to be true. Forty percent of the respondents personally believed that "poor written communication" is costing their companies a significant amount of money in lost sales or contracts. The 105 American Association of Collegiate Schools of Business professors indicated Principles of Business Communication was taught at their institution and each agreed on the high value of the course.

From 183 Beta Gamma Sigma graduates of the University of Florida School of Business (Edgeworth, 1971) came another indication of the high worth of the written communication course. The course was ranked second highest in terms of benefit as it related to the students' business careers.

A survey among 85 graduating seniors to determine their views about the basic course in business communication indicated that more than half felt the course should be changed. The mean time spent in lecturing was 53 percent. Respondents thought this excessive. They also wanted the content proportions changed. They rated the course and quality of instruction above average. Respondents felt the course should be offered at the freshman/sophomore level and that it should be required of all business major students.

A study of business engineering graduates revealed some surprising contradictions. In general, there was a marked tendency for entry job level employees to over-evaluate their communication skill effectiveness. Very few of the respondents perceive themselves as poor or very

poor communicators. Interestingly enough, there was no apparent difference discovered in grade point averages between respondents indicating poor or very poor communication skills effectiveness and those perceiving themselves as quite skilled (Huegli and Tschirgi, 1975).

A significant disparity existed between employees' perceptions of their communication skills effectiveness and their supervisors' perceptions of skill effectiveness. Almost all of the supervisors interviewed responded that entry-level employees were deficient in communication skills application. This discrepancy between self-perception and employer expectations reinforces the notion that some role ambiguity does exist. The authors feel these students are misled in believing they are equipped to satisfy communication expectations when they are perceived by employers as not effective. New employees were found to be avoiding using written media when they could because they were not effective in using it (Huegli and Tschirgi, 1975).

In a thesis completed at San Fernando Valley State College, communication skills were found to be among the most highly desired qualities in business administration graduates. Of all general education courses required for the bachelor's degree, written expression was ranked number one as the most helpful for graduates accepting jobs in business and industry according to 50 recruiters who were interviewed for the study. The business communication course ranked tenth (out of 68 courses) in importance for potential employees. Those interviewed thought that the ability to communicate both verbally and in writing, was one of the most desirable assets for business administration graduates (Malouf, 1967).

Decker (1974) sent questionnaires to 100 companies and one of the findings indicated the ideal curriculum would have seven credit hours of business writing.

Lewis (1975) summarized several studies which showed that communication skill is necessary preparation for business students and communication effectiveness is at or very near the top of the list for success in the business world.

A survey of the attitudes of personnel officers of 250 large organizations (Belohlov and Popp, 1978) showed that if they were designing a course in business communication, 36 percent of the time would be devoted to oral communication, 34 percent to written communication, and 27 percent to nonverbal communication. The study indicates that communication skills are critically important to later success within the organization.

In an attempt to find problems and priorities within the business communication course, Allred and Clark (1978) found that two types of letters were rated "essential" by 25 percent or more of the personnel group--acknowledgment letters and letters of inquiry. Three types of letters were ranked as "essential" by 25 percent or more of the faculty group: job application letters and resumes, letters of inquiry, and acknowledgment letters. Areas indicated as those in which beginning employees had most difficulty were: conciseness, making meaning clear, making message accomplish purpose, spelling, sentence construction, organization, and paragraph construction. The authors felt the findings indicate a need for the college business communication course to stress the planning and organizing processes as well as the syntax- and grammar-related activities.

A report by Murphy and Peck (1962) indicated that significant numbers of schools of business throughout the nation were offering courses in business writing. Over half of the 223 colleges and universities surveyed required all of their business majors to take a basic course in business writing. In the basic course 37 percent required 10 to 19 letters to be written while 33 percent required 20 to 29 letters to be written.

When business majors from four large universities were surveyed by Weeks (1971), it was found that the business writing course ranked second as the most important to them since their graduation. Graduates from one school rated their business writing course as most important.

LeNoir (1976) studied the business communication courses in Texas institutions and found that business leaders assigned a high value to the business communication course. Many stated it was the most valuable course they had taken. They suggested more training in this area should be required of the business graduate. LeNoir suggested that colleges need to offer a major in the area of communication; that this would serve to emphasize the importance of communication. He also recommended that the content of the business communication course be explored in greater detail; that in-depth surveys within the course be conducted to determine the effectiveness of the business communication course.

Bale and Coonrad (1970) believe the undergraduate business student needs a change of attitude and a change of communication behavior. Communication problems must become the student's problems. These problems can be internalized in a business writing course if the course is taught effectively. Student motivation must be sought by structuring the course for more realism. This ordering is seen as one of the

instructor's primary objectives.

Written Communication Courses
at Oklahoma State University

Students currently enrolled in the written communication course should have completed OSU College of Business Administration lower division requirements of six credit hours of freshman composition. The college catalog indicates that the first semester's composition course (3 credit hours) consists of practice of the fundamentals of expository writing with emphasis on structure and development. An English ACT test score of 17 is necessary to enter the course. The second semester of the composition course (3 credit hours) is expository composition with emphasis on technique and style through intensive and extensive reading of literature. If a student makes an "A" or "B" in the first semester course, the second semester's program allows the substitution of an English Honors course. Class size in the Honors course is limited to 20 students receiving individually directed writing growing from discussions of books and ideas.

From the descriptions given, it appears that grammar and English fundamentals have no prominent place in the course objectives. Perhaps this is one reason many students enter the written communication course lacking in such skills.

For several years instructors of business communication have been criticized for teaching remedial English skills. It was not their intention to have the course serve as a remedial writing course. The lack of ability on the part of many students, however, necessitated homework assignments of a remedial nature, additional class time devoted to reviewing basic English fundamentals, or teaching sentence and

paragraph construction.

Students today, according to several instructors of the written communication course, are not unlike their counterparts of 10 or 20 years ago. In spite of English requirements and an endeavor to offer excellent training programs, many students still have not mastered grammar and English fundamentals. Therefore, not all students completing the written communication course have developed optimal writing skills. The instructors have planned the course with the idea of reaching every student enrolled and offering the individual opportunities to improve on several levels and develop business communication writing techniques to the fullest.

Instructors of the written communication course at Oklahoma State University have continually strived to improve teaching methods and have made several successful innovations. In the past, instructors assigned supplementary writing to be completed outside of class. The attendant problems of no control over collaboration or conferring with others detracted from reaching the course objectives.

The Hatch (1967), the Hay-Pinkerton Study (1964), the Stead Studies (1971), and the Kohler Study (1966) proved that programmed approaches to present basic English principles were as successful as other methods and that they should be utilized as supplemental learning methods in business writing courses (Hartman, 1973).

Programmed approaches became a good remedial tool for students with English deficiencies and proved beneficial to OSU students. The approach proved beneficial in several areas: lab sessions, programmed LAP units, tapes on basic grammar, texts on English fundamentals, or conferring with an instructor.

A portion of class time allowing students to work in small groups to resolve problems has been tried. Each group would be given the same problem and, as a group, they presented the best written letter to answer the problem. Deficiencies attendant with this method were the unequal participation of individual group members and the difficulty of assigning proper credit for accomplishments.

The amount of class time devoted to lectures has changed from almost all lecture to almost none. The latter is currently in effect at OSU. Many instructors have supplemented cases and problems at the ends of text chapters as in-class or out-of-class assignments.

Report writing has been given varying degrees of emphasis through the years. It is usually reserved for the latter portion of the semester. Some instructors allowed students to write reports on topics they chose for themselves.

Problems of motivation have continually plagued the written communication instructor. How could they expect students to project themselves realistically into a different fictitious situation with each new writing assignment. Whether the assignment was completed in class, out of class, in a group, or as a case letter, students had difficulty turning on and off the roles they were expected to play. Instructors wanted students to undergo involvement in a situation, not just solve a problem.

Years of teaching experience and experimentation have led OSU instructors to structure the written communication course as an in-class writing laboratory. Students are required to complete certain tasks in class with textbooks closed. The individual tasks are completed after textbook chapters, applicable to a letter writing assignment, have been

assigned.

Written communication instructors at OSU follow the same general procedures. The same task assignments, chapter assignments, and report writing are required. Several instructors administer the same tests. All instructors require writing assignments completed in class. No instructor gives formal lectures and all allow class time for answering students' questions and/or reviewing common problems.

Students enrolling in the written communication course come from several departments in the College of Business and some from other colleges. Most students enrolling in the course are juniors or seniors, but a few are sophomores. The Department of Administrative Services and Business Education sponsors a two-year program. Some of those students are allowed to enroll in the written communication course during the last semester of their sophomore year.

The majority of enrollees in the course are College of Business students, but the course has gained in popularity and an increasing number of students from several areas are now enrolled. These areas include departments of hotel and restaurant administration, technology, agricultural economics, and technical and industrial engineering. Because of the continuing popularity of the course, class size has grown larger. Instructors regret this and realize an increasing difficulty in providing the close, careful, and individual analysis required.

The written communication course is firmly established in the business college curriculum. Changes in the future can be expected, but instructors have been successful with innovations in the past and face the future with confidence. The writing instructor's job is difficult, however. The job of changing communication behavior is uniquely

theirs. These instructors are forced to violate one of the most important principles of good communication while teaching good communication. He/She is forced to criticize and evaluate the work of those he/she is trying to help. This tends to have a student look upon the course as another hurdle, just like all other courses, rather than as a means to learning a way of behavior that will help him/her in everything he/she does (Bale and Coonrad, 1970).

Summary

These studies summarized several surveys in order to emphasize the importance of the business communication course. Business people from several areas attest to the high value of the course, and many suggested that it be required. Students, upon graduation, have also agreed that the course was helpful to them. Even though new graduates do not immediately have written assignments upon initial employment, several sources indicate later success is greatly dependent upon effective writing skills. Instructors of the course continue to develop a methodology of teaching in keeping with the requirements of business and industry and expectations of students. Several methods previously taught at Oklahoma State University were summarized along with a description of the course as it is presently taught.

Chapter III will contain a detailed description of the written communication course including task assignments, chapter assignments, and class hand-outs. The procedures designed to test the hypotheses of the study, the attitudes and opinions about business writing, and competencies to be gained will also be described.

CHAPTER III

METHOD

This chapter will introduce the instruments used in the experimental study. A description of the various instruments together with criteria measurements will be given. The outline of the course, textbook used, testing procedure, data compilation, evaluation, and summary are also included.

The population for this study consisted of all students enrolled in and completing requirements for the written communication course GENAD 3113 during the fall semester, 1978, at Oklahoma State University. These students represented six sections taught by five instructors. Each section met for 15 weeks, two and one-half hours per week.

The written communication course is a writing laboratory consisting of 16 tasks. Three of the 16 tasks are theory and application tests. Thirteen of the 16 tasks are letter writing assignments (Appendix A). All tasks are completed during regularly scheduled class periods. Students are not allowed to complete tasks at other times or places. Tasks are completed in sequence. The section of the chapter applicable to a letter writing assignment is a homework assignment to be thoroughly and thoughtfully studied before a letter is written in class. All letters are written in class with books closed. For all letters except test letters, students could refer to the basic objectives and selected objectives while writing. The objectives for each assignment were given

to students as a study guide.

Participants received instruction based on current course objectives and teaching emphases. These emphases included letter writing exercises, critiques, question and answer periods, and common problem discussions.

Students are allowed to write only one letter during a class period. The time required for case analysis, planning the message, rapid writing for coherence, editing, and writing a final copy would preclude any attempt to write more than one letter in one period. The final draft of a student's letter, which is handed in and evaluated, is written in ink on 8-1/2 by 11, white, unruled typing paper.

Test letters are written in class with books closed and with no reference to the statement of objectives.

Critiques consisted of oral feedback to the class as a whole, to individual students, and written comments placed on individual assignments returned to students.

The textbook for the course was Communicating Through Letters and Reports by J. H. Menning, C. W. Wilkinson, and Peter B. Clarke.

Instruments and Procedures

The McGraw-Hill Basic Skills System Writing Test, Forms A and B, was administered for this study. Form A was given as a pre-test, and Form B was administered as a post-test. Alton Raygor of the University of Michigan was consulting editor for the test which was published in 1970. The Examiner's Manual lists the following purposes: "The materials were designed not only to fill remedial needs . . . but to provide essential instruction for skill improvement in English . . ." (p. 5).

The Manual (Raygor, 1970) states that the test measures students' skills in written communication.

Each form of the test, A and B, is divided into three parts: Language Mechanics (30 items), Sentence Patterns (26 items), and Paragraph Patterns (15 items). Each part is separately timed. The working time for the test is 15 minutes for each part, or a total of 45 minutes. A separate score is reported for each of the three parts as well as for the entire test (p. 7).

The researcher administered Form A of the Writing Test as a pre-test during the third week of the semester. Form B was administered as a post-test during the fifteenth week of the semester. The objective was to measure any change in writing skills that occurred during the intervening weeks.

Nationwide norms for this test are based on samples testing 1,168 students for Form A and 1,178 students for Form B.

An explanation of the content validity that author Raygor (1970) established is:

The universe from which the sample of items was selected for inclusion in the MHBSS Writing Test may well be defined as the content of the following three texts which were developed by Learning Technology Incorporated for the McGraw-Hill Basic Skills System: Writing Skills I, Writing Skills II, and Paragraph Patterns.

After studying the content of these books, CTB/McGraw-Hill staff members prepared test items . . . Every effort was made to prepare items that are answerable by those students who have learned rules and techniques for good writing, whether or not they had studied these books.

The items were tested in various sections of the United States on samples of students like those for whom the tests were designed. These items were thoroughly analyzed: Point-biserial correlation coefficients were computed between item and Part scores, as well as between item and Total score. The distracters were checked for effectiveness and revised or replaced if not effective (p. 27).

Reliability was computed using the same norming group described above. The Kuder-Richardson 20 formula (KR-20) was computed. Form A had .85 reliability. Form B had .86 reliability.

Attitudinal Measures

The attitudes and opinions of students toward the written communication course was measured with a bi-polar semantic differential instrument (Appendix D). The opinionnaire was used as a pre-test administered during the third week of the semester. It was also administered as a post-test during the fifteenth week of the semester. The objective was to determine if an attitude change toward the study of written communication occurred during the intervening weeks.

The semantic-differential guide to attitude measurement was developed in 1957 (Osgood, Suci, and Tannenbaum). Osgood et al. has given the following logic of the proposed method:

1. The process of description or judgment can be conceived as the allocation of a concept to an experiential continuum, definable by a pair of polar terms. An underlying notion . . . is that these 'experiential continua' will turn out to be reflection (in language) of the sensory differentiations made possible by the human nervous system.
2. Many different experiential continua, or ways in which meanings vary, are essentially equivalent and hence may be represented by a single dimension. It is this fact about language and thinking that makes the development of a quantitative measuring instrument feasible.
3. A limited number of such continua can be used to define a semantic space within which the meaning of any concept can be specified . . . this opens the possibility of measuring meaning-in-general objectively and specifies factor analysis as the basic methodology. If it can be demonstrated that a limited number of dimensions or factors are sufficient to differentiate among the meanings of randomly selected concepts . . . then such

a 'semantic differential,' is an objective index of meaning (p. 31).

The authors state that the term "semantic differential" accurately describes the intended operation--a multivariate differentiation of concept meanings in terms of a limited number of semantic scales of known factor composition.

The authors developed an instrument which was a combination of controlled association and scaling procedures. Their subjects were provided a concept and a set of bi-polar adjectival scales against which differentiation was to be made. The subject's task was to indicate for each concept the direction of their association and the intensity of the attitude. A mark could be placed on a seven-step scale.

Each semantic scale, defined by a pair of polar or opposite-in-meaning adjectives, was assumed to represent a straight line function that passed through the origin or the neutral mode. The scales represented a multidimensional space. The authors indicated that nouns or verbs could be used in the scale as easily as the adjectives they chose.

The multidimensional semantic space used by Osgood was the device for scaling in order to locate a point in space representing the meaning of a word or concept. The differential was composed of a series of scales, and the person being tested rated the concept or term on each of the scales. Each scale was composed of a pair of opposite meanings (polar adjectives placed at opposite ends) of a straight line continuum. The continuum was segmented into seven parts, each segment representing a rating intensity whereby the individual reacted to the concepts being considered in relation to the alternative polar terms. The mid point indicated a neutral position and the deviation from that point to its

opposite critical limits was equated and assessed. Direction and degree determined amounts and agreement or disagreement with the meaning of the polar adjectives.

One method for "differentiating" the meaning of a concept against a series of scales was illustrated by Osgood et al. (1957, p. 62) with the term:

FATHER

Happy _____ : _____ : x : _____ : _____ : _____ : _____ Sad
 Hard _____ : x : _____ : _____ : _____ : _____ : _____ Soft
 Slow _____ : _____ : _____ : _____ : x : _____ : _____ Fast

Each judgment represents a selection among a set of given alternatives and serves to localize the concept as a point in the semantic space. The larger the number of scales and the more representative the selection of these scales, the more validly does this point in the space represent the operational meaning of the concept. And conversely, of course: Given the location of such a point in the space, the original judgments are reproducible in that each point has an orthogonal projection onto any line that passes through the origin of the space, i.e., onto any scale.

A quantitative measure for a word or concept was achieved by assigning a numerical value to each of the seven points on the linear continuum. This is illustrated by Osgood et al. (1957, p. 67) in the following situation:

CONCEPT

Polar term X _____ : _____ : _____ : _____ : _____ : _____ : _____ Polar term Y
 (1) (2) (3) (4) (5) (6) (7)

The numbered response (4) signifies a neutral response toward the concept, the response numbered (1) represents an extreme feeling toward polar term X, and the response numbered (7) represents an extreme feeling toward polar term Y. Thus, several different numerical ratings were obtained by including a series of bi-polar adjective scales under each concept.

The authors (Osgood et al., 1957) then used the factorial analysis tool to assess the dimensions of meaning measured by their bi-polar differential instrument. They attempted to identify general measurement factors which could be applied to all data. Their study established three general factors of meaning measured by the semantic differential technique: an evaluative factor, a potency factor, and an activity factor. These three factors are taken as independent dimensions of the semantic space within which the meaning of concepts may be specified. These are described by the authors:

The evaluative component proved to have prominence and stability in semantic judgment. It is obvious in a catalogue of the high-coordinate variables: beautiful-ugly, nice-awful, clean-dirty, and pleasant-unpleasant. The evaluative factor accounts for by far the largest portion of the extracted variance.

The potency variable displays the lowest correspondence between factors, but even here the evidence is satisfactory. The three most heavily loaded variables were: strong-weak, large-small, and heavy-light.

The activity factor is clearly interpretable with both loadings and coordinates. The three most highly loaded variables: sharp-dull, active-passive, and fast-slow (pp. 53-54).

The authors concluded that the semantic differential scales were effectively assessing over-all ratings of attitude. Osgood et al. (1957) stated how remarkable it was that such a large portion of the total variance in human judgment or meaning could be accounted for in

terms of such a small number of basic variables. These men developed a measure that was easily administered and scored. They concluded that since attitude was very evaluative in nature, the evaluative factor could then be used to measure an individual's attitude.

A similar attitudinal scale was developed by Downie (1958) and Towner (1956) although the method of scoring was different. The semantic differential measure used by these researchers is a "split halves technique."

The fundamental assumption of the Odd-Even Split Halves Technique employed in conjunction with the Spearman-Brown Prophecy Formula is that the two half-tests obtained by using the odd and even items are equivalent--they have the same means, standard deviations, and contents. Another assumption is that the items are experimentally independent so that the group's performance on one item has no influence upon what it does on another item (Downie, 1958).

The odd/even method overestimates test reliability since variability due to day-to-day variations in ability is ruled out as are the effects that might be caused by a slight practice or fatigue effect. This is also a coefficient of internal consistency. It consists of dividing a test into two parts and obtaining a correlation between scores on the two parts. The usual procedure is to obtain for each paper an odd score, the number of odd items answered correctly, and an even score. The correlation obtained by this method is actually the correlation between two tests, each of which is one half the length of the original test. The size of a reliability coefficient is directly related to the length of the test. At this point, a correction can be made by using the Spearman-Brown formula (Towner, 1956).

For the purposes of this study a bi-polar attitude survey instrument based on the Amyx Study (1972) was used. Amyx devised an instrument using 15 selected adjectives. He indicated his objectives as selecting adjectives that were evaluative in nature with bi-polar scales, and valid for the related concepts being judged. Amyx followed Osgood et al. (1957) by listing "high loaded" evaluative scales. Researchers in several fields have used this list. Hartman (1973) conducted a study using prescribed remedial techniques in written communication classes at Oklahoma State University using Amyx's list. Terry (1976) conducted a study of listening skills in written communication classes at Georgia State University using the same list.

The 15 selector adjectives used in these experiments had a significant correlation (example: good-bad correlated 1.00).

Osgood et al. (1957) stated that the semantic differential instrument measured what it was supposed to measure. They concluded that the instrument yielded high validity.

The authors feel their instrument provides a "natural" means of testing the congruity principle. Along each semantic dimension, events modify each other in proportion to their relative intensities, yielding changes in meaning or resolutions into new combined meanings that are predictable.

Another important characteristic of any measuring device is its reliability. Osgood et al. (1957) concluded that their measurement was consistent and repeatable, hence, reliable.

Osgood et al. (1957) related test-retest reliability coefficients for the differential from .83 to .91. Amyx (1972) obtained correlation coefficients which ranged from .75 to .81. Hartman (1973) obtained

correlation coefficients which ranged from .73 to .77. Terry (1976) obtained correlation coefficients of .78 and .79.

The attitudinal scale (Appendix D) was administered to all groups of written communication students at two different times, and the correlation between the two sets was computed. The t test was used to analyze the data.

Characteristics of a Good Letter Check List

This instrument was designed by Himstreet and Baty (1973) and is a composite of items believed characteristic of good written communication (Appendix B). Its purpose was twofold. The first letter assigned to students was studied by instructors. Content was weighted 1 to 5 with a total 50 points possible. A carbon copy of the weighted sheet was returned to the students and served as a method of feedback. Instructors could also use the results to structure remarks on particular problem areas. The researcher obtained an additional copy of the results to compare with each individual's score on the same measure obtained on the last written assignment of the course. Instructors were given a check list to aid in assigning points on the 1 to 5 scale of the instrument (Appendix B).

Characteristics of Student Development Check List

This instrument was designed by the researcher based on those characteristics believed basic for personal development (Appendix C). It was admittedly the most difficult to assess. Its purpose was to determine if instructors could detect changes in student development during the intervening weeks of the study. Since instructors had no

way of measuring the level of development of new students entering their classes, they were asked only to rate students on a 1 to 5 scale at the end of the course. A check list was given to each instructor to aid in assigning points on the 1 to 5 scale (Appendix C).

Experimental Procedures

This experimental study began the third week of class. Students at Oklahoma State University are allowed to drop and add courses during the first two weeks of the semester; therefore, the experiment began only after students were unable to enter the course. The experiment was concluded the fifteenth week of the course.

The Bi-Polar Attitude Questionnaire was completed during the third week of the semester by written communication students in six classes (Appendix D). Students completed the 30 items in approximately five minutes. No timing was initiated. The completed papers were scored by the researcher and placed on a master tally sheet of each individual student.

The Skills Writing Test Form A was administered in six classes by the researcher during the third week of class as a pre-test. The testing session was planned so that each student could perform on the test to his/her maximum ability. All materials were assembled prior to the test session. Time limits and classroom conditions were carefully monitored. All students were given identical instructions. Students were told that this test was given for diagnostic purposes and results would be used to help determine which areas of grammar, punctuation, capitalization, and sentence construction needed to be emphasized in class.

The completed pre-tests on SCOREZE IBM sheets were hand scored by the researcher. Each individual's score was listed on his/her master

tally sheet. A carbon copy of the diagnostic sheet was returned to the instructor.

The first business letter written in class was completed during the third week of the semester. Instructors completed the check list for characteristics of a good letter and submitted the scores to the researcher. These scores were recorded on the individual student's master tally sheet.

The same Bi-Polar Attitude Questionnaire was again completed by students near the end of the semester (fifteenth week) to determine any attitude changes. Students completed the 30 items and, again, no timing was initiated. The completed papers were scored by the researcher and placed on a master tally sheet of each individual student.

The Skills Writing Test Form B was administered in six classes by the researcher during the fifteenth week of class as a post-test. The completed post-tests on SCOREZE IBM sheets were again scored by the researcher. Each individual's score was listed on his/her master tally sheet.

The last business letter written in class was completed during the fifteenth week of the semester. Instructors completed the check list for characteristics of a good letter (Appendix B) assessing the last letter written by students and submitted the scores to the researcher. These scores were recorded on the individual student's master tally sheet.

Instructors were asked to rate written communication students on characteristics of student development (Appendix C) based on their assessment of student improvement or lack of improvement during the semester. Because students entering the course were not known to the instructors, this assessment could only be made after 15 weeks of

observation. Instructor ratings, based on a check list devised by the researcher (Appendix C), were returned to the researcher and entered on the individual student's master tally sheet.

Compilation of Data

The pre- and post-test of the bi-polar attitudinal measure for each individual was given a point value and a total score for each individual was derived. Validity was established through prior research within acceptable ranges of .75 to .93. The t test was used to analyze data obtained from the attitudinal measure. The analysis of covariance with pre-test scores as the covariate is one method that is usually preferable to simple gain-score comparisons (Campbell and Stanley, 1966). The analysis of covariance with pre-test scores as the covariate was used in this study.

Forms A and B of the McGraw-Hill Basic Skills System Writing Test were administered as pre- and post-tests to examine English skills and writing knowledge. Content validity was established. The reliability coefficient using the Kuder-Richardson formula, suggested by the test authors, was computed.

Instructors of the written communication classes judged each student's first and last business letters written in class. This judgment was based on a point system assigned to various characteristics of good written communication. The t test was used to analyze the data. The analysis of covariance with scores on the first letter written in class as the covariate was used.

Instructors of the written communication classes judged characteristics of student development at the end of the semester. A tabulation

of these scores was made.

Summary

This chapter described the content of the written communication course (GENAD 3113) and the instruments used in this experimental study. For the purposes of this study the McGraw-Hill Basic Skills System Writing Test was administered. Form A was given as a pre-test and Form B was given as a post-test. The Kuder-Richardson formula was used to compute reliability coefficients.

A bi-polar attitudinal measure as pre- and post-tests was administered. Data were analyzed by using the t test.

The first and last business letter written by students was judged by instructors. The researcher then used the t test to analyze the data.

Student development in the written communication course was judged by instructors. Scores were tabulated and analyzed.

The results of the experiment are reported in Chapter IV.

CHAPTER IV

RESULTS AND DISCUSSION

Data in this chapter were obtained from administering and/or analyzing the McGraw-Hill Skills System Writing Test, Forms A and B, the questionnaires on the study of business communication, the first and last letter completed by students and evaluated by instructors, and personal characteristics of students evaluated by instructors. The analysis is based on results obtained from 107 students who completed all test instruments. In addition, 88 students completed the initial tests--the McGraw-Hill Skills System Writing Test, Form A, and a questionnaire on the study of business communication. This will also be discussed.

McGraw-Hill Skills System Writing Test

As indicated previously, the McGraw-Hill Skills System Writing Test was given as a pre- (Part A) and a post-test (Part B) to determine if a significant change occurred in the writing skills of students enrolled in GENAD 3113, Written Communication. This test was administered to students in six sections of GENAD 3113 in the fall of 1978 at Oklahoma State University. As indicated in Chapter III, this test consists of three sections--Section 1, Language Mechanics; Section 2, Sentence Patterns; and Section 3, Paragraph Patterns. The null hypothesis stated that there would be no significant change in writing skill as measured by this test. The tests were analyzed by submitting the data to a "t test" for

significance between means (See Appendix E).

One hundred seven students completed Part A and Part B of the McGraw-Hill Skills System Writing Test. The t test was applied to the total scores of Parts A and B of the test. In addition, Sections 1, 2, and 3 of Parts A and B were tested separately. As can be seen from Table I, the mean for the pre-test (Part A) was 44.66. The mean for the post-test (Part B) was 48.45. These means were significantly different at the 0.01 level of probability. The null hypothesis must therefore be rejected.

TABLE I
TESTS A AND B SHOWING MEAN, STANDARD DEVIATION, T,
AND SIGNIFICANCE LEVEL FOR SECTIONS AND TOTAL

Source	Test A		Test B		<u>t</u>	Sig.Level
	Mean	Standard Deviation	Mean	Standard Deviation		
Total	44.66	8.71	48.45	9.40	3.05	0.01
Sec. 1	18.75	4.12	21.32	4.24	4.48	0.001
Sec. 2	14.74	4.14	15.72	4.92	1.89	n.s.
Sec. 3	11.12	2.97	10.98	2.59	0.36	n.s.

To explain the differences in these two tests further, t tests of the individual sections are indicated in Table I. The mean for Section 1 of Test B was 21.32. These means were significantly different at the

0.001 level. As shown in Table 1, the mean for Section 2, Part A, was 14.74. The mean for Section 2, Part B, was 15.72; and the mean for Section 3, Part A, was 11.12 and for Section B, 10.98. These means were not significant at the .05 level of probability. These tests would seem to indicate that the only improvement in basic writing skills applicable to this test was in Section 1 or Language Mechanics. In addition to the above tests, an F test was conducted on the variances of each test to determine if there were significant differences. There was no significant difference in any of the four t tests conducted. This test was performed to validate one of the conditions for conducting a t-test; namely, that the samples have similar variances.

It should be noted that in addition to the 107 students completing all parts of the experiment, 88 students in GENAD 3113 completed either the pre-test or post-test of the McGraw-Hill Skills System Writing Test. The mean for this group of students on the total score of Part A was 43.84 compared to a mean of 44.66 for the 107 students who finished the course. The difference in means is not considered significant. Of these 88 students who took the pre-test, a large number completed the course but were not in attendance the day the researcher gave the post-test (Part B, McGraw-Hill Skills System Writing Test). Hence, for purposes of this research, they could not be included as having completed all test instruments.

Regression Analysis

Simple and multiple regression tests of numerous models were applied to these data to determine if there was a correlation between the various tests and to ascertain which of the tests was the best indicator of basic

writing skills (see Appendix E).

The basic models employed were:

$$\begin{aligned} \text{simple regression} & Y = a + bX \\ \text{multiple regression} & Y = a + b_1X_1 + b_2X_2 + b_3X_3 \end{aligned}$$

where Y = the dependent variable
 a = the y intercept
 b = slope
 X = an independent variable

TABLE II
 REGRESSION ANALYSIS, TOTAL TEST B SCORES
 ON SECTIONS 1, 2, AND 3 OF TEST B

Model	β_0	β_1	β_2	β_3	R^2	F	Sig. Level
Total Test B on Sec. 3, Sec. 2, Sec. 1	-1.07	0.98	1.06	1.01	.94	507.7	.001
Total Test B on Sec. 3, Sec. 1	0.88	1.33	--	1.55	.80	204.8	.001
Total Test B on Sec. 3, Sec. 2	1.99	1.41	1.47	--	.76	168.3	.001
Total Test B on Sec. 2, Sec. 1	6.66	--	1.12	1.12	.90	489.6	.001

As shown in Table II, several multiple regression models were used to test the correlation of the total score of Part B on the three sections of Part B. Table II shows that the regression of the total score of Part B on Sections 1, 2, and 3 accounts for 95% (R^2) of the variation in Part B. These models show that Sections 1 and 2 account for 90% (R^2) of this variation. Adding Section 3 increases the ability to predict

total scores by only 4%. F tests for all models of the total of Test B on its various parts gave a highly significant F value (see Table II). As shown by Table II the omission of Language Mechanics (Section 1) reduces the reliability of the test by the greatest amount (18%). This reinforces information obtained from the t-test indicating that language mechanic skills were the skills which were most improved in this course.

TABLE III
REGRESSION ANALYSIS, TOTAL AND SECTIONAL
TEST B SCORES ON TEST A SCORES

Model	Y Intercept	Slope	Pearson r	R ²	F	Sig. Level
Total Test B on Total Test A	23.19	.56	.53	.27	40.3	.01
Sec. 1 Test B on Sec. 1 Test A	13.73	.40	.39	.15	18.6	.01
Sec. 2 Test B on Sec. 2 Test A	8.34	.52	.44	.20	25.6	.01
Sec. 3 Test B on Sec. 3 Test A	9.49	.14	.17	.03	3.0	n.s.

Simple regression analyses were executed on the total score and the three sections of Test B regressed on Test A. These results are summarized in Table III. As can be seen from this summary, there was correlation between students' scores on Part A and their scores on Part B. Both the Pearson r and F tests showed significant correlation. However the R² value reveals that only 27% of the variation between the two tests was

explained by this correlation. When the tests were evaluated by each individual section, Section 1, Language Mechanics, and Section 2, Sentence Patterns, showed the greatest correlation with significance indicated in both the Pearson r and F tests. However, only 15% and 20% of the variation were explained in these two tests. There was no correlation between the third section, Paragraph Patterns, of this test.

The Study of Business Communication

One hundred and seven students completing the experiment were given a questionnaire as a pre- and post-test to evaluate their opinions concerning the study of business communication. Results of this test are shown in Table IV. In the pre-test (Q1) the mean score was 79.61, and the mean for the post-test (Q2) was 81.56. These numbers indicate a slight improvement in opinion, but a t test conducted on these data indicated that there is no significant difference between means. The null hypothesis is therefore accepted (see Appendix E). This compares favorably with the results obtained by Amyx (1972), Hartman (1973), and Terry (1976) using the same questionnaire.

First and Last Letter Handed in by Students

The mean scores of the first letter written by students in GENAD 3113 and the last letter written by these students were evaluated by instructor experts as previously described. The t-test (see Appendix E) was applied to the means. As shown by Table IV, there was a significant improvement in letter writing by the students in this course. The mean for the first letter was 34.35; the mean for the last letter was 38.62. The means were significant at the 0.001 level of probability.

TABLE IV
ANALYSIS OF QUESTIONNAIRES 1 AND 2, FIRST
AND LAST LETTER HANDED IN, AND PERSONAL
CHARACTERISTICS OF STUDENTS

Test	Mean	Standard Deviation	<u>t</u>	Sig. Level
Q1	79.61	9.68	1.28	n.s.
Q2	81.56	12.50		
First Letter	34.35	7.88	4.11	0.001
Last Letter	38.62	7.29		
Personal Characteristics	22.45	3.50		

Personal Characteristics

In an effort to determine whether or not instructors could determine improvement in various developmental characteristics of students, a checklist was developed (see Appendix C). The mean for this test as shown by Table IV was 22.45 out of a possible 30. The standard deviation of this mean was 3.5, which demonstrates a rather close grouping around the mean.

Additional Regression Analysis

Several multiple regression models were developed (see Appendix E) to test the possible correlation of the various segments of this experiment. These models were designed to test whether or not there was a correlation between the scores achieved on the McGraw-Hill Basic Skills System Test, Part B, the student questionnaire (Q2), the last letter

students completed, and the personal characteristics as evaluated by the instructors. Table V summarizes these data. This table indicates that the only significant relationship between the various parts of this test were, as might be expected, between the basic writing skills as revealed by the McGraw-Hill Writing Skills Test B and the last letter written by the students. There is a positive correlation between these two tests. A model, consisting of the total score of Writing Skills Test, Part B, on personal characteristics, last letter and post-opinion questionnaire (Q2) shows an R^2 value of .12 and a highly significant F test. When the last letter is omitted from the model, as shown in the second model on Table V, the test is not significant and the R^2 value is close to 0; thus indicating that virtually all the variation derived in these regression models is between the total score of Writing Skills Test, Part B, and the last letter written by the students. It should be pointed out that although the Writing Skills Test, Part B, and the last letter written are significantly correlated, the last letter has an R^2 value of only .12.

TABLE V

REGRESSION ANALYSIS TEST B ON QUESTIONNAIRE 2, THE
LAST LETTER COMPLETED AND PERSONAL CHARACTERISTICS

Model	β_0	β_1	β_2	β_3	R^2	F	Sig. Level
Total Test B on PC, Last Letter, Q2	30.14	-0.21	0.46	0.06	.12	4.99	0.01
Total Test B on PC, Q2	40.47	0.13	--	0.06	.003	0.47	n.s.
Total Test B on Last Letter, Q2	26.96	--	0.44	0.07	.12	7.22	0.01

Summary

The major findings of this study are:

1. The null hypothesis that no significant change in writing skills occurred, as measured by the McGraw-Hill Test, was rejected. One hundred ninety-five students in six sections of GENAD 3113 comprised the population for this experiment. Students completed Form A of the McGraw-Hill Skills System Writing Test during the third week of the semester. They completed Form B of the test the fifteenth week of the semester. The means were significantly different at the .01 level of probability indicating a definite improvement in students' writing skills. Since Forms A and B of the McGraw-Hill Test contained three sections each, additional analyses were conducted to explain further the differences in test scores. Section 1 of the tests, Language Mechanics, showed the greatest difference in mean scores indicating that students improved greatly in language mechanic skills.

2. The null hypothesis that no significant change in attitude would occur concerning the study of business communication is accepted. Students were given bi-polar semantic differential questionnaires as pre- and post-tests during the period of instruction. A slight improvement in opinion occurred, but additional analyses conducted with the t-test showed no significant difference between means.

3. The research hypothesis which stated that instructors could assess writing abilities of students is accepted. Through the use of a writing characteristics checklist, instructors were able to evaluate students' writing skills. An analysis of their evaluations indicated a significant improvement in letter writing skills of students during the period of instruction.

4. The research hypothesis which stated that instructors could assess personal development of students cannot be accepted. Instructors used a developmental checklist to describe students at the end of the period of instruction. Scores tended to group around the mean. A regression analysis showed no significant relationship between personal development and other parts of the experiment. Since personal development was assessed by instructors only once; no t-test was conducted.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The results of the foregoing experiment provide evidence for the following conclusions:

1. The language mechanic skills of students in the written communication courses were greatly improved by the current method of teaching. The McGraw-Hill Skills System Test, Forms A and B, proved an effective means of evaluating student performance.

2. The bi-polar semantic differential test did not prove that any significant change in attitude on the part of the students concerning the importance of studying business communication occurred.

✓3. The writing characteristics checklist was an effective instrument for judging writing abilities of students. Instructors were able to quantify certain characteristics of letters students handed in. This quantification allowed instructors to indicate positive changes in several writing skills.

4. Personal development in students was difficult for instructors to assess. The instructors indicated a reluctance to state the amount of development that occurred in students based on their knowledge of students and the amount of time spent with them. The amount of time an instructor spends with a student during a semester does not allow an in-depth analysis of character improvement. Instructors performed the difficult task exceedingly well. It was concluded, however, that personal

development showed little correlation with other testing instruments.

On the basis of data collected from 195 university students enrolled in written communication at Oklahoma State University, Stillwater, Oklahoma, and who served as subjects for an experimental study on the present method of teaching the written communication course, the following recommendations are made:

1. An experiment should be designed in which the individually prescribed instruction method and traditional instruction methods are compared.
2. An experiment should be designed where the traditional analysis of variance could be conducted, namely, treatments and replications.
3. A sampling of additional variables, such as background, age, and sex of students being tested, should be conducted.
4. Students should be given points which would be averaged in their course grade for spending two class periods on a similar research project. This recommendation is made because some students saw little value in the experiment and were reluctant to spend two class periods taking tests for which they received no credit.
5. Additional days for testing should be set up in order to test students who are absent during the two designated testing periods.
6. Future researchers should not ask for regular class time to conduct experiments. Instructors were asked to relinquish two class periods when they are already limited in the number of hours they spend with students.
7. Future researchers should prescribe individual treatments in English fundamentals and principles of writing for students making low scores on the pre-tests.

8. A diagnostic sheet should be prepared for every student to accompany the communication textbook indicating where additional study on areas of weaknesses might be beneficial.

9. Instructors of the written communication course should continually search for improved techniques and methods of teaching and should use class time to conduct research in an effort to improve further their individual method of teaching.

BIBLIOGRAPHY

- Albers, Henry N. Organized Action: Decision-Making Communication and Leadership. New York: John Wiley & Sons, Inc. 1965.
- Allred, Hilda F. and Joseph F. Clark. "Written Communication Problems and Priorities." The Journal of Business Communication, 15:2, 1978, pp. 31-35.
- Almone, Adam. "Predicting Message Effect in Written Business Communications: The Need for Theoretical Formulations." Journal of Business Communications, 8:2, 1971, pp. 28-32.
- Amyx, Jack. "An Experiment to Determine the Effects of the Length of Homework Problems on the Achievement and Attitudes of College Accounting Students." (unpublished Doctoral Dissertation, Oklahoma State University, 1972.)
- A Report by an Ad Hoc Committee of the ABCA. "Student Evaluation of the Basic Course in Business Communication." Journal of Business Communication, 12:4, 1975, p. 23.
- Bale, John T. and Harold A. Coonrad. "Simulation and Business Communication." The Journal of Business Communication, 7:3, 1970, pp. 5-12.
- Barnard, Chester. The Functions of the Executive. Cambridge: Harvard University Press, 1938, p. 226.
- Bartz, Albert E. Basic Statistical Concepts in Education and the Behavioral Sciences. Minneapolis, Minnesota: Burgess Publishing Co., 1976, p. 156.
- Belohlov, James A. and Paul O. Popp. "Communication: A View From the Inside of Business." The Journal of Business Communication, 11:4, 1978, pp. 53-60.
- Bennett, James C. "The Communication Needs of Business Executives." The Journal of Business Communication, 8:3, 1971, pp. 9-11.
- Berger, Charles R. "The Covering Law Perspective as a Theoretical Basis for the Study of Human Communication." Communication Quarterly, Vol. 25, Winter, 1977, pp. 7-18.

- Berger, Charles R. and Richard J. Calabrese. "Some Explorations in Initial Interaction and Beyond: Toward a Developmental Theory of Interpersonal Communication." Human Communication Research, Vol. 1, Winter, 1975, pp. 99-112.
- Berlo, David K. Human Communication: The Basic Proposition. East Lansing, Michigan: Mimiography, Michigan State University, 1970.
- Berlo, David K. The Process of Communication. New York: Holt, Rinehart and Winston, 1960.
- Bird, Monroe M. "Gains and Losses From An Open Line Program as Perceived by By-Passed Managers: A Case Study." The Journal of Business Communication, 16:2, 1976, pp. 325-329.
- Boyd, William P. and Thomas H. Inman. "A Historical Development of Business Communication." NBEA Yearbook, No. 14, 1976, pp. 123-140.
- Brenner, Marshall H. and Norman B. Sigband. "Organizational Communication--An Analysis Based on Empirical Data." The Journal of Business Communication, 16:2, 1976, pp. 323-325.
- Bromage, Mary C. "The Management of Communication." SAM Advanced Management Journal, April, 1973, pp. 42-46.
- Bullard, Dwight. "Current Trends in Teaching Business Communication: A Report of Practices in Member Schools of the American Association of Collegiate Schools of Business." The Journal of Business Communication, 9:1, 1972, pp. 27-35.
- Campbell, Donald T. and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand-McNally College Publishing Company, 1966.
- Cherry, Colin. Studies in Communication. London: Martin Secker and Warburg, 1955, p. 45.
- Chickering, Arthur. "Student Development and the Curriculum: A Look at the Learner." Education and Identity. New York: Oxford University Press, 1968.
- Cushman, Donald P. "The Rules Perspective as a Theoretical Basis for the Study of Human Communication." Communication Quarterly, Vol. 25, Winter, 1977, pp. 30-45.
- Cushman, Donald P. and B. Thomas Florence. "The Development of Interpersonal Communication Theory." Today's Speech, Vol. 22, Fall, 1974, pp. 11-16.
- Dance, Frank E. "A Helical Model of Communication." In K. K. Sereno and C. D. Mortensen (eds.), Foundations of Communication Theory, New York: Harper & Row, Publishers, 1970, pp. 103-107.

- Decker, Robert Lee. "A Study of Problems in Measurement and Interpretation of Employee Attitudes." Washington, D.C. American Psychological Association, 69:16, 1974, pp. 56-113.
- Devlin, Frank J. Business Communication. Homewood, Illinois: Richard D. Irwin, Inc., 1968.
- Downie, N. M. Fundamentals of Measurement. New York: Oxford University Press, 1958.
- Drucker, Peter F. The Practice of Management. New York: Harper and Row, 1954.
- Edgeworth, E. T. "What the College Graduate Thinks of His Education." Collegiate News and Views, May, 1971, pp. 7-11.
- ✓ "Educating Tomorrow's Business Executives." Harvard Business Review, November, 1968, p. 2.
- Foltz, Roy G. "Communication: Not An Act, A Necessity." Personnel, Vol. 49, May, 1972, pp. 60-64.
- Gerbner, George. "On Defining Communication: Still Another View." Journal of Communication, Vol. XVI, June, 1968, pp. 99-103.
- ✓ Gerfen, Richard C. "The Status of Business Writing in American Schools of Business--An Historical Perspective." The ABWA Bulletin, Vol. 25, March, 1961, p. 3.
- Good, Carter V. (ed.). Dictionary of Education, 3rd ed. New York: McGraw-Hill Book Co., 1973.
- Good, Carter V. Introduction to Educational Research, 2nd ed. New York: Appleton-Century-Crofts, 1963.
- Gordon, Robert A. and James E. Howell. Higher Education for Business. New York: Columbia University Press, 1959.
- ✓ Hailstone, T. J., E. E. Roberts and John Steinbruegee. "Personnel Managers Evaluate a College Business Program." Collegiate News and Views, May, 1955, pp. 7-11.
- Hanneman, Gerhard J. "The Study of Human Communication." In G. J. Hanneman and W. J. McEwen (eds.), Communication and Behavior, Reading, Massachusetts: Addison-Wesley Publishing Company, 1975, pp. 21-46.
- Hardner, William V. Communication and Organizational Behavior. Homewood, Illinois: Richard D. Irwin, Inc., 1969.
- ✓ Hartman, Larry Donald. "An Experimental Study of Collegiate Business Students' Attitudes and Writing Skills Resulting from Individually Prescribed Remedial Treatments . . ." (Ed.D. dissertation, Stillwater: Oklahoma State University, 1973).

- Hawes, Leonard C. "Alternative Theoretical Bases: Toward a Presuppositional Critique." Communication Quarterly, Vol. 25, Winter, 1977, pp. 63-68.
- Hay, Robert D. "A Brief History of Internal Organization Communication Through the 1940's." The Journal of Business Communication, 11:4, 1978, pp. 6-11.
- Himstreet, William C. and Wayne M. Baty. Business Communications--Principles and Methods, 4th ed. Belmont: Wadsworth Publishing Company, Inc., 1973.
- Huegli, Jon M. and Harvey D. Tschirgi. "An Investigation of Communication Skills Application and Effectiveness at the Entry Job Level." The Journal of Business Communication, 12:1, 1973, pp. 25-29.
- James, Don L. and Ronald L. Decker. "Does Business Student Preparation Satisfy Personnel Officers?" Collegiate News and Views, Vol. XXVII, Spring, 1974, pp. 26-28.
- Kephart, William, J. McNulty and E. J. McGrath. Liberal Education and Business. New York: Columbia University Press, 1963.
- Kerlinger, Fred N. and Elazar J. Pedhazur. Multiple Regression in Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1973.
- Krippendorff, Klaus. "Values, Modes and Domains of Inquiry into Communication." Journal of Communication, Vol. XIX, June, 1969, pp. 105-133.
- LeNoir, Blanchard. "Current Status of Business Communication Courses Related to Needs of Selected Business Establishments in Texas." (Ed.D. dissertation, College Station: Texas A. and M. University, 1976.)
- Lesikar, Raymond V. Business Communication: Theory & Application. Homewood, Illinois: Richard D. Irwin, Inc., 1968.
- Lesikar, Raymond V. Report Writing for Business. Homewood, Illinois: Richard D. Irwin, Inc., 1972, p. 1.
- Lewis, Philip V. "Communication Competency and Collegiate Schools of Business." Collegiate News and Views, Winter, 1975-76, pp. 15-16.
- Lewis, Philip V. Organizational Communications: The Essence of Effective Management. Columbus, Ohio: Grid, Inc., 1975.
- Lindgren, Bernard W. Statistical Theory. New York: McMillan Co., 1968.
- Malouf, Charles A. "Evaluation of the Business Curriculum at San Fernando Valley State College." (unpublished master's thesis, August, 1967.)

- Miller, Gerald R. "On Defining Communication: Another Stab." Journal of Communication, Vol. XVI, June, 1966, pp. 88-89.
- Monge, Peter R. "Theory Construction in the Study of Communication: The System Paradim." The Journal of Communication, Vol. XXIII, March, 1973, pp. 5-16.
- Monge, Peter R. "The Systems Perspective as a Theoretical Basis for the Study of Human Communication." Communication Quarterly, Vol. 25, Winter, 1977, pp. 19-29.
- Montgomery, Donald E. "How to Get Your Message Across." Supervisory Management, 20:2, February, 1975, pp. 2-10.
- Morison, Samuel Eliot. The Oxford History of the American People. New York: Oxford University Press, 1965, p. 534.
- Murphy, Herta A. and Charles E. Peck. "Content and Trends of Basic College Business Writing Courses that Include Business Letter Writing." The ABWA Bulletin, Vol. 27, October, 1962, p. 11.
- Nemec, Richard. "Internal Communications--A Scary Science." Public Relations Journal, December, 1973, pp. 6-8, 27-28.
- Osgood, Charles E., George J. Suci and Percy H. Tannenbaum. The Measurement of Meaning. Illinois: University of Illinois Press, 1957.
- Osgood, C. and T. Sebeals. "Psycholinguistics: A Survey of Theory and Research Problems." Journal of Abstract and Social Psychology, Vol. XX, 1967, pp. 68-69.
- Pearce, W. Barnett. "Metatheoretical Concerns in Communication." Communication Quarterly, Vol. 25, Winter, 1977, pp. 3-6.
- Pearce, W. Barnett. "Consensual Rules in Interpersonal Communication: A Reply to Cushman and Whiting." The Journal of Communication, Vol. XXIII, June, 1973, pp. 160-168.
- Pearce, W. Barnett. "The Coordinated Management of Meaning: A Rules-Based Theory of Interpersonal Communication." Explorations in Interpersonal Communication, in G. R. Miller (ed.), Sage Publications, Beverly Hills, California, 1976, pp. 17-35.
- ✓ Pierson, Frank C. et al. The Education of American Businessmen. New York: McGraw-Hill Book Co., 1959.
- Pietri, Paul H. "Organizational Communication: The Pioneers." The Journal of Business Communication, 11:4, 1974, pp. 3-5.
- Rainey, Bill G. "Professors and Executives Appraise Business Communication Education." The Journal of Business Communication, 9:4, Spring, 1972, pp. 19-23.

- Raygor, Alton V. (ed.). McGraw-Hill Basic Skills System Writing Test, Forms A and B. Michigan: The University of Michigan Press, 1970.
- Redding, W. Charles and George Sanborn. Business and Industrial Communication. New York: Harper and Row, 1964.
- Russon, Allien R. and S. J. Wanous. Philosophy and Psychology of Teaching Typewriting. 2nd ed. Cincinnati: Southwestern Publishing Co., 1973.
- Schramm, Wilbur. "How Communication Works." In Wilbur Schramm (ed.), The Process and Effects of Mass Communication, Urbana, Illinois: University of Illinois Press, 1954.
- Schramm, Wilbur. "Information Theory and Mass Communication." Dimensions of Communication, in L. Richardson (ed.), New York: Appleton-Century-Crofts, 1971, pp. 172-191.
- Schramm, Wilbur and H. Roberts. The Process and Effects of Mass Communication. Urbana, Illinois: University of Illinois Press, 1971.
- Seibert, Donald V. "The Great Challenge of Business: Managing to the Potential of People." The Delta Pi Epsilon Journal, 20:3, 1978, pp. 58-60.
- Simonds, Rollin H. "College Courses Executives Say They Use." The ABWA Bulletin, Vol 27, December, 1961, p. 15.
- Terry, Mollie Brown. "An Experimental Study to Determine the Effects of Training in Listening Skills . . ." (Ph.D. dissertation, Atlanta: Georgia State University, 1976.)
- Thayer, L. "On Theory-Building in Communication: Some Conceptual Problems." Journal of Communication, 13:1, 1970, pp. 1-27.
- Towner, L. W. "Reliability Coefficients Obtained under Varying Degrees of Deviation from Theoretically Perfect Conditions." Educational and Psychological Measurement, New York: McMillan Co., 1956, p. 346.
- Vincent, Clarence E. "Personnel Executives Examine the College Graduate." Collegiate News and Views, March, 1966, pp. 12-14.
- Van Voorhis, Kenneth R. "Organizational Communication: Advances Made During the Period From World War II Through the 1950s." The Journal of Business Communication, 11:4, 1974, pp. 11-17.
- Weeks, Francis W. "Surveys of Former Students." The ABWA Bulletin, Vol. 25, March, 1971, p. 26.
- Wenburg, John R. and William W. Wilmot. The Personal Communication Process. New York: John Wiley & Sons, Inc. 1973.

APPENDICES

APPENDIX A

WRITTEN COMMUNICATION (GENAD 3113)

LETTER WRITING ASSIGNMENTS

GENERAL PROCEDURES

1. GENAD 3113 is a writing laboratory. The work consists of 16 tasks (see next page). Three of the 16 are theory and application tests. Thirteen of the 16 tasks are letter writing assignments. You will be given the case problem when you are ready to write the letter.
2. All tasks must be completed during a class period and in the room formally scheduled for the course. No facilities are available for completing tasks at other times or places.
3. No formal lectures will be given. Class time will be devoted to short informal critiques on common writing problems, to task completion, and to individual instruction and consultation as time permits.
4. The tasks must be completed in the sequence indicated on the task sheet. The section of the chapter applicable to a letter writing assignment is a homework assignment to be thoroughly and thoughtfully studied before the letter is written in class.
5. All letters must be written in class with books closed. For all letters, except test letters, you may refer to the basic objectives and selected objectives while writing if you desire. The objectives for each assignment will be given to you as a study guide.
6. Test letters must be written in class with books closed and without reference to the statement of objectives.

The test letter for Test 1 (Task 1-B) will be one of the types written for either Task 2, Task 3, Task 4, or Task 5. The test letter for Task 11-A will be one of the types written for either Task 6, Task 7, Task 8, Task 9, or Task 10. The test letter for Test 3 (Task 16-B) will be one of the types written for either Task 12, Task 13, Task 14, or Task 15.

7. Only one letter may be written in a class period. The time required for case analysis, planning the message, rapid writing for coherence, editing, and writing final copy precludes any attempt to write more than one letter in one period.
8. All letters to be evaluated (the final draft of your letter) must be written in ink on 8-1/2 by 11, white, unruled, typing paper. They should be identified in the upper right quadrant with your name and number (number to be assigned).
9. You must complete the course during the current semester. Should you be unable to do so, you must drop the course before the deadline for dropping courses in order to avoid a failing grade. Hardship cases resulting from extended illness or accident will be considered according to their individual merits.

TASK SHEET--GENAD 3113

Written Communication

Note: Tasks must be completed in sequence.

TASK 1-A Theory Test Chapters 1, 2, 3, and 4

TASK 2 Write Direct Inquiry Letter (pp. 95-102)

TASK 3 Write Acknowledgment with Sales Possibilities (pp. 102-115)

TASK 4 Write Credit Approval Letter (pp. 131-137)

TASK 5 Write Adjustment Approval Letter (pp. 137-148)

TASK 1-B Write Test Letter from Chapter 5. This test letter cannot be written until Tasks 2, 3, 4, and 5 have been completed.

TASK 6 Write Refusing Request Letter (pp. 217-223)

TASK 7 Write Refusing Adjustment Letter (pp. 224-230)

TASK 8 Write Credit Refusal Letter (pp. 231-234)

TASK 9 Write Acknowledgment of Incomplete or Indefinite Order (pp. 234-241)

TASK 10 Write Declining Order Letter (pp. 241-251)

TASK 11-A Write Test Letter from Chapter 7

TASK 11-B Theory Test Chapter 5 and 7

TASK 12 Write Special Request Letter (pp. 384-391)

TASK 13 Write Persuasive Request Letter (pp. 391-394)

TASK 14 Write Persuasive Collection Letter (pp. 408-433)

TASK 15 Write Letter of Application for Employment (pp. 350-373)

TASK 16-A Theory Test Chapter 9 and 10

TASK 16-B Write a Test Letter from either Chapters 9, 10, 11, or 12

APPENDIX B

CHARACTERISTICS OF A GOOD LETTER AND CHECK LIST

CHARACTERISTICS OF A GOOD LETTER

Student _____

<u>CHARACTERISTICS</u>	<u>Best</u>	<u>Better</u>	<u>Average</u>	<u>Poor</u>	<u>Poorest</u>
Message Justified	5	4	3	2	1
Ideas in Proper Sequence	5	4	3	2	1
Writing Coherent	5	4	3	2	1
Message Easy to Read and Understand	5	4	3	2	1
Writing Has Variety	5	4	3	2	1
Tone Positive	5	4	3	2	1
Writing Concise	5	4	3	2	1
Emphasis and Sub- ordination Used Properly	5	4	3	2	1
Grammar, Spelling, Punctuation Acceptable	5	4	3	2	1
Style Inconspicuous	5	4	3	2	1

Total Points Possible 50

Student's Score _____

CHARACTERISTICS OF A GOOD LETTER

Check List

Message Justified

1. Decisions fair
2. Conclusions logical
3. Information factual

Ideas in Proper Sequence

1. Beginning properly introduces the message
2. Middle moves sensibly from part to part
3. Ending provides logical summary and parting words
4. Suggested outline followed
5. Complete information is given
6. Relevant information given
7. Purpose clearly stated

Writing Coherent

1. Uses sentences that grow naturally from preceding sentence
2. Uses link words and transition sentences to keep reader on proper mental track

Message Easy to Read and Understand

1. Uses common words and short sentences
2. Uses correctly placed modifiers
3. Uses few prepositional phrases
4. Uses no conditional clauses and phrases (no hedging)

Writing has Variety

1. Uses variety in word choice
2. Uses variety in sentence length
3. Uses variety in sentence structure

Tone Positive

1. Confident
2. Courteous
3. Reader-Centered
4. Friendly
5. Natural
6. Sincere

Writing Concise

1. Uses enough words to cover subject convincingly
2. Uses enough words to assure courtesy
3. Avoids a distracting style
4. Omits platitudes and off-the-subject statements

Emphasis and Subordination Used Properly

1. Conveys estimate of importance of ideas
2. Uses various means to emphasize an idea

Grammar, Spelling, and Punctuation Acceptable

1. Subject and verb agreement
2. Words spelled correctly
3. Pronoun reference clear (definite antecedent)
4. People as subjects (rather than ideas)
5. Punctuation marks correctly used

Style Inconspicuous

1. Writes to express, not impress
2. Uses no trite expressions or business jargon

APPENDIX C

CHARACTERISTICS OF STUDENT DEVELOPMENT
AND CHECK LIST

CHARACTERISTICS OF STUDENT DEVELOPMENT

Student _____

<u>CHARACTERISTICS</u>	<u>Best</u>	<u>Better</u>	<u>Average</u>	<u>Poor</u>	<u>Poorest</u>
Developing Autonomy	_____ 5	_____ 4	_____ 3	_____ 2	_____ 1
Establishing Identity	_____ 5	_____ 4	_____ 3	_____ 2	_____ 1
Developing Intellectual Competence	_____ 5	_____ 4	_____ 3	_____ 2	_____ 1
Developing Integrity	_____ 5	_____ 4	_____ 3	_____ 2	_____ 1
Developing Purpose	_____ 5	_____ 4	_____ 3	_____ 2	_____ 1
Developing Human Relations	_____ 5	_____ 4	_____ 3	_____ 2	_____ 1

Total Points Possible _____ 30

Student's Score _____

CHARACTERISTICS OF STUDENT DEVELOPMENT

Check List

Developing Autonomy

1. Ability to work and cope without seeking help
2. Ability to work under pressure of time
3. Ability to organize and begin a task

Establishing Identity

1. Developing confidence in one's ability to perform successfully what one sets out to do

Intellectual Competence

1. Inquiring mind
2. Imagination
3. Making decisions - ability to apply reason and practicality in solution of problems

Developing Integrity

1. Behavior, guided by a set of beliefs, shows some internal consistency
2. Recognizes and accepts interdependence with others
3. Internalized values
4. Congruence

Developing Purpose

1. Vocational plans and intentions
2. Avocational and recreational interests
3. General life-style matters

Human Relations

1. Developing mature interpersonal relationships, characterized by greater trust, independence, and individuality
2. Developing increased tolerance

APPENDIX D

BI-POLAR ATTITUDINAL SURVEY AND CHECK LIST

THE STUDY OF BUSINESS COMMUNICATION

The purpose of this questionnaire is to measure your feelings about the importance of studying business communication. On the next page is a scale with numbered lines and words by each line. The words at the ends of the scales are opposite in meaning. Please rate the concept listed at the top of the page of the scale. There is no "right" or "wrong" answer. Please mark the concept according to the way you feel about it.

Here is how you are to use these scales:

If you feel that the concept at the top of the page is very closely related to one or the other end of the scale, you should place a check-mark in one of the following ways:

fair $\frac{X}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: $\frac{\quad}{0}$: $\frac{\quad}{1}$: $\frac{\quad}{2}$: $\frac{\quad}{3}$ unfair

OR

fair $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: $\frac{\quad}{0}$: $\frac{\quad}{1}$: $\frac{\quad}{2}$: $\frac{X}{3}$ unfair

If you feel that the concept is related to one or the other end of the scale (but not extremely), you should place your check-mark in one of the following ways:

strong $\frac{\quad}{3}$: $\frac{X}{2}$: $\frac{\quad}{1}$: $\frac{\quad}{0}$: $\frac{\quad}{1}$: $\frac{\quad}{2}$: $\frac{\quad}{3}$ weak

OR

strong $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: $\frac{\quad}{0}$: $\frac{\quad}{1}$: $\frac{X}{2}$: $\frac{\quad}{3}$ weak

If the concept seems slightly related to one side as opposed to the other side (but is not really neutral), then you should check in one of the following ways:

active $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{X}{1}$: $\frac{\quad}{0}$: $\frac{\quad}{1}$: $\frac{\quad}{2}$: $\frac{\quad}{3}$ passive

OR

active $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: $\frac{\quad}{0}$: $\frac{X}{1}$: $\frac{\quad}{2}$: $\frac{\quad}{3}$ passive

If you consider the concept to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your check-mark in the middle space:

safe $\frac{\quad}{3}$: $\frac{\quad}{2}$: $\frac{\quad}{1}$: $\frac{X}{0}$: $\frac{\quad}{1}$: $\frac{\quad}{2}$: $\frac{\quad}{3}$ dangerous

IMPORTANT: (1) Be sure you check every scale--do not omit any.
(2) Never put more than one check-mark on a single scale.

Name _____

Section _____

CONCEPT: THE STUDY OF BUSINESS COMMUNICATION

Remember the purpose of this questionnaire is to measure your feelings about the importance of studying business communication.

commonplace	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	unique
difficult	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	easy
good	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	bad
haphazard	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	systematic
hazy	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	clear
interesting	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	dull
meaningful	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	meaningless
necessary	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	unnecessary
pleasant	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	unpleasant
uninformative	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	informative
unrewarding	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	rewarding
unscholarly	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	scholarly
vague	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	precise
worthless	$\frac{\quad}{3}$:	$\frac{\quad}{2}$:	$\frac{\quad}{1}$:	$\frac{\quad}{0}$:	$\frac{\quad}{1}$:	$\frac{\quad}{2}$:	$\frac{\quad}{3}$	valuable

THE STUDY OF BUSINESS COMMUNICATION

(KEY)

commonplace	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	unique
	1		2		3		4		5		6		7					
difficult	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	easy
	7		6		5		4		3		2		1					
good	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	bad
	7		6		5		4		3		2		1					
haphazard	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	systematic
	1		2		3		4		5		6		7					
hazy	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	clear
	1		2		3		4		5		6		7					
interesting	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	dull
	7		6		5		4		3		2		1					
meaningful	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	meaningless
	7		6		5		4		3		2		1					
necessary	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	unnecessary
	7		6		5		4		3		2		1					
pleasant	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	unpleasant
	7		6		5		4		3		2		1					
simple	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	complex
	1		2		3		4		5		6		7					
uninformative	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	informative
	1		2		3		4		5		6		7					
unrewarding	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	rewarding
	1		2		3		4		5		6		7					
unscholarly	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	scholarly
	1		2		3		4		5		6		7					
vague	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	precise
	1		2		3		4		5		6		7					
worthless	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	:	<u> </u>	valuable
	1		2		3		4		5		6		7					

APPENDIX E
STATISTICAL DATA

STATISTICAL DATA

1. t-test

$$t = \frac{(\bar{X} - \bar{Y})}{\sqrt{\left(\frac{1}{N_X} + \frac{1}{N_Y}\right) \frac{\Sigma(X_1 - \bar{X})^2 + \Sigma(Y_1 - \bar{Y})^2}{N_X + N_Y - 2}}}$$

2. Regression:

a. simple regression

$$Y = \beta_0 + \beta_1 X + \epsilon$$

$$\beta_0 = \bar{Y} - \beta_1 \bar{X}$$

$$\beta_1 = \frac{\Sigma XY - [(\Sigma X)(\Sigma Y)]/N}{\Sigma X^2 - (\Sigma X)^2/N}$$

b. multiple regression

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

$$R^2 = \frac{S S \text{ Reg. /df}}{S S \text{ Total /df}}$$

$$F = \frac{R^2/K}{(1 - R^2) / (N - K - 1)}$$

K = number of independent variables

VITA²

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Candidate for the Degree of

Doctor of Education

Thesis: AN EXPERIMENTAL STUDY TO DETERMINE THE EFFECTS OF INDIVIDUALLY PRESCRIBED INSTRUCTION ON ACHIEVEMENT IN, AND ATTITUDES TOWARD A WRITTEN COMMUNICATION COURSE

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