



Basic concepts in general education essential to adjustment in business administration for undergraduate students
by Louis William Veraldi

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of Doctor of Education
Montana State University
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Abstract:

This study developed from the belief that there was a need to examine general education in the business curriculum to determine what competencies, abilities and understandings are essential for the student graduating in business. Two procedures were used: (1) a review of literature in business curriculum and general education, and (2) a survey of business graduates and employers of business graduates to determine their opinions as to effectiveness of present curriculum and to obtain their recommendations for improvement of curriculum.

The samples were chosen from 138 employers of business graduates and 189 business graduates from Montana State University and Eastern Montana College for the years 1963 through 1968 to determine their opinions of college training and need for curriculum improvement. Of the 138 employers, data were gathered from 96, and of the 189 college graduates, data were gathered from 93.

The review of literature pointed out the need for curriculum revision and also revealed contemporary issues which have implication for curriculum planning. These issues are: (1) the rapid increase in knowledge in all fields, (2) the rapid obsolescence of knowledge making it necessary to educate people to cope with change, (3) the growing need for social responsibility by business management and the concept that a community is not merely a place to which business looks for profits but is a place to which it owes obligations in areas such as environmental pollution control and taxation, and (4) the increasing international scope of business which creates a whole new set of problems such as a need for international law, international patent system, and concern for conditions in countries in which investments are made.

A major conclusion based on the recommendations from the open-end questions included in the questionnaires is that there is need for an increase in general education requirements in business training especially in the areas of oral and written communication, courses dealing with human relations, courses in logic, mathematics, and problem solving. A second conclusion is that there is a need for a business curriculum that is relevant to business practices. Business programs need to be revised to include greater involvement by both teachers and students with the business community.

BASIC CONCEPTS IN GENERAL EDUCATION ESSENTIAL
TO ADJUSTMENT IN BUSINESS ADMINISTRATION
FOR UNDERGRADUATE STUDENTS

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ABSTRACT

This study developed from the belief that there was a need to examine general education in the business curriculum to determine what competencies, abilities and understandings are essential for the student graduating in business. Two procedures were used: (1) a review of literature in business curriculum and general education, and (2) a survey of business graduates and employers of business graduates to determine their opinions as to effectiveness of present curriculum and to obtain their recommendations for improvement of curriculum.

The samples were chosen from 138 employers of business graduates and 189 business graduates from Montana State University and Eastern Montana College for the years 1963 through 1968 to determine their opinions of college training and need for curriculum improvement. Of the 138 employers, data were gathered from 96, and of the 189 college graduates, data were gathered from 93.

The review of literature pointed out the need for curriculum revision and also revealed contemporary issues which have implication for curriculum planning. These issues are: (1) the rapid increase in knowledge in all fields, (2) the rapid obsolescence of knowledge making it necessary to educate people to cope with change, (3) the growing need for social responsibility by business management and the concept that a community is not merely a place to which business looks for profits but is a place to which it owes obligations in areas such as environmental pollution control and taxation, and (4) the increasing international scope of business which creates a whole new set of problems such as a need for international law, international patent system, and concern for conditions in countries in which investments are made.

A major conclusion based on the recommendations from the open-end questions included in the questionnaires is that there is need for an increase in general education requirements in business training especially in the areas of oral and written communication, courses dealing with human relations, courses in logic, mathematics, and problem solving. A second conclusion is that there is a need for a business curriculum that is relevant to business practices. Business programs need to be revised to include greater involvement by both teachers and students with the business community.

CHAPTER I

INTRODUCTION

The rise in business enrollments in the colleges has been spectacular. There has been an increasing emphasis on preparation for a wide variety of careers in business. "In 1919-20 undergraduate degrees awarded in schools and departments of business accounted for only 3 per cent of the total . . . and in 1949-50, with the returning veterans, they rose to a peak of 72,000 or 17 per cent of the total."¹ The increasing emphasis on preparation for a wide variety of careers in business poses the problem of determining if the graduating students in business are receiving sufficient exposure to general background or basic tool subjects. Pierson warns of the weakness of business graduates in general education in the following statement found in the Carnegie Report of 1959:

The vast majority of students receiving undergraduate degrees from these institutions today have had little or no work in any of the humanities outside English, in college mathematics, in any of the sciences beyond a single one-year course, or in the social sciences outside economics or history . . . The result is that almost all of the students studying for careers in business are not getting anything approaching a solid foundation for their later work.²

¹Frank C. Pierson and others, The Education of American Businessmen (New York: McGraw-Hill Book Company, Inc., 1959), pp. 7-8.

²Ibid., p. xii.

This criticism has aided the changing curriculum and teaching practices, but as reemphasized by DeCarlo and Robinson³ in 1966 the greatest need for research in business education is a rigorous examination in the curriculum itself both in its construction and its evaluation.⁷

The study of the curriculum for business increases in importance because it has become so large a part of our total educational program. This increase has brought about the creation of new institutions and new programs and has placed the United States in the position of leadership. Other countries are attempting to use our programs as patterns. Numerous persons have seriously challenged the quality of our programs and also the directions taken. With so large an education problem there will undoubtedly be many approaches to its solution. There are certainly many approaches that will prove satisfactory in preparing students in business. The important point to remember is to avoid poorer ways. There must be some common foundation necessary to the training of all business students.

A student training for a career in business has need of two kinds of knowledge: general and technical. There is no sharp line of demarcation between these two fields of knowledge. Rather, there is a

³Charles R. DeCarlo, Ormshee W. Robinson, Education in Business and Industry (New York: The Center for Applied Research in Education, 1966), p. 99.

grey area where the two overlap in a semi-technical area, such as mathematics and communications. However, for the purposes of this study courses not taught by the Business Department will be considered in the general studies field. This study will explore the need for the broad general knowledge of disciplines that will give the student an understanding of the present and future political, economic and social environment, and the semitechnical knowledge that will make available to him such tools as mathematics, statistics, behavioral science, communication skills, and economics. The overall objective will be to determine the kinds of competencies, abilities and understandings in general education that are most desirable for the graduating business student. What competencies, abilities and understandings are most worth transmitting?

One problem in the training of students in business is to determine the kind and amount of general studies they should have. The curriculum should not be a fragmentation of information, but one that will give the student an opportunity to relate what he has learned before and to apply what he has learned to his area of business specialization. The competencies, abilities and understandings obtained from the general studies are basic for a better comprehension in the field of business training. There are several contemporary issues which have a direct bearing on the problem in the preparing of students in business.

First, and probably foremost, is the task of coping with the rapidly increasing store of knowledge. Knowledge in every field is doubling and re-doubling with increased rapidity. Norris, President of Albion College, in a speech delivered before the Detroit Association of Phi Beta Kappa, states:

Other evidence for the explosion of knowledge is commonly offered. Some say the knowledge available at the time of Christ doubled by 1900, again in 1950, once more in 1960, and perhaps a fourth time by today. There are 100,000 journals being printed by scientists alone. Ninety per cent of all the scientists in history are still alive.⁴

A second issue in the training of business students is the problem of rapid obsolescence of knowledge. "The professional engineer today, for example, has what is called a 'half life' of only 10 years . . . that half of what an engineer has learned when he received his degree will be obsolete in 10 years."⁵ This same fact of rapid obsolescence is true in other professions. Therefore, it becomes necessary to educate people to cope with change. "It is a compelling fact of life that we must commit ourselves to being students all our lives. A continuing education,

⁴Louis W. Norris, "It's the Idea of the Thing, "Vital Speeches of the Day, Vol. XXXIII, No. 15, 1967, pp. 469-470.

⁵William W. Brickman, Stanley Bahrer, Automation, Education, Human Values, (New York: School and Society Books, 1966), p. 244.

training and retraining, is our primary response to the challenges of automation and technological change."⁶

The invention and development of the computer also added to this difficulty of rapid obsolescence and has been an important factor in this rapid change. Burck, writing on "The Boundless Age of the Computer" states, "It has profoundly altered the techniques of science . . . above all, it is radically changing business production methods and the art and science of management."⁷ Bloy cautions that it is essential to find ways to meet the challenge of rapid obsolescence and states the problem in the following manner:

We have to discover ways of making students more sophisticated in their approach to technology to help them find ways to use technology according to some conscious criteria rather than to be used by it, to help them gain some "authority" over the fact of technology . . . We can only control what we understand.⁸

As Robert Oppenheimer, one of the great architects of this technological era said about the rapidity of change:

One thing that is new is the prevalence of newness, the changing scale and scope of change itself, so that the world

⁶Ibid., p. 244.

⁷Gilbert Burck, "The Boundless Age of the Computer, "Fortune, Vol. LXIX, No. 101, March, 1964, p. 101.

⁸Brickman and Bahrer, op. cit., , p.342.

alters as we walk it, so that years of man's life measure not some small growth of rearrangement or moderation of what we learn in childhood, but a great upheaval.⁹

This upheaval is one of the most challenging prospects for curriculum planning at this time.

A third issue which causes concern and is pertinent to this study is a growing awareness of the need for social responsibility by business management.

Private enterprise owes its existence to society which created and supports it. Its purpose is to supply society with goods and services . . . for which society pays it a profit . . .

Therefore, whenever the interests of private enterprise are felt to clash with what is good for society, private enterprise will be in danger. Whenever a human institution is not in harmony with the overriding cause of human progress history will in the outcome condemn it . . . Its end and final cause must be man's well being and progress.¹⁰

John Maurice Clark wrote, "We must learn this working meaning of the truth that a community is not merely something to which one looks for benefits . . . but is also something to which one owes obligation."¹¹

⁹Robert Oppenheimer, cited by Ivan L. Henriquez, "Social Progress--An Obligation of Management," "The American Association of Collegiate Schools of Business, Vol. IV, No. 3, April, 1968, p. 11.

¹⁰Ibid., p. 9.

¹¹Ibid.

Air and water pollution, highway safety, and the problems of the cities are certainly contemporary problems at least partially created by business and for which business must assume some responsibility to correct. Social problems must be considered in curriculum planning for business students.

A fourth contemporary issue which has direct implications for curriculum planning for business students is the growing international scope of business. "Capital outflows by United States firms for investment in Western Europe expanded from a yearly average of \$850 million in 1960-61 to 1.8 billion in 1966."¹² This growth creates a whole new set of problems. There is a need for international business law, an international patent system, freer flow of technology internationally, business responsibility for the betterment of social and economic conditions in countries where they invest and reap profits.

"The malaise of our age is that our power increases faster than our ability to understand it and use it well."¹³ As our world becomes more complex business becomes more involved with the abstract--laws, relationships, attitudes, ethics. The utility of many abstract forces

¹²Effects of United States Foreign Investment Controls on Western Europe, "International Economic Review, May, 1968, p. 1.

¹³Emmanuel G. Mesthen, "Controlling Man's Brainchild," The Rotarian, December, 1966, p. 29.

affecting business and the impact of business upon the community depend upon some system that can combine ideas and relationships into meaningful and practical forms. It therefore becomes the duty of the educational institutions to provide students with educational experiences which will give them the background necessary to cope with the rapid increase of knowledge, the speed with which knowledge becomes obsolete, the social responsibility necessary for those in the field of business, and the importance of the international scope of business. The remaining years of this century will be a period when man decides whether his inventions will dominate or serve him, destroy or sustain him.

Statement of the Problem

This writer has been concerned with the appropriate curricular offerings in the general studies for the undergraduate student majoring in business. This concern has been shared by many other business educators. The extensive criticisms of the narrow vocational specialization, the relative newness, and the tremendous growth in enrollments of the collegiate business programs has led this investigator to believe that there is a need for a study to determine what competencies, abilities, and understandings are essential to the undergraduate student in business.

The study concerns itself with the following questions:

1. What kinds of competencies, abilities and understandings are essential for the student entering the undergraduate program in business?
2. What are recognized colleges and universities doing in curriculum revision at present?
3. How do college business graduates now working in the field of business evaluate the preparation which they received?
4. How do employers of college trained business students evaluate the graduates they now have employed?
5. What criticisms and suggestions do business student graduates and employers offer to improve present programs?
6. What modifications should be made in the present business curriculum?

Procedures

In order to determine the kinds of competencies, abilities and understandings that are essential to the business graduate, the following procedures were used.

Literature pertaining to both general and business education was reviewed in order to determine (1) the aims of general education, (2) the present direction of business education, and (3) the problems involved in curriculum planning. Additional literature was studied to give the writer a better understanding of contemporary issues which should be the concern of both educators and business people. The

curriculum must provide the student with experiences that will offer direction to his individual citizenship as well as social responsibility in a society which permits his existence.

A second procedure was the study of curricula for general education of colleges and universities recognized as leaders in the field of business. Personal communication with department heads and deans of these schools was made. This was done because various curricula experimentations have already taken place at these institutions. These schools had large staffs and were well funded so that it was possible for them to experiment with their programs.

A survey conducted of college graduates employed in business to ascertain the contribution of present college training to selected competencies, abilities and understandings was made. Employers of college trained business personnel were contacted to collect information of weaknesses and strengths of college business graduates. Personal interviews with businessmen were made to validate the findings of the surveys conducted.

Conclusions drawn upon the basis of the information obtained will be used to reevaluate the general education requirements for undergraduate students majoring in general business at Eastern Montana College.

Delimitations

This study was limited to four groups: (1) employers at the national level who employ students graduating in business programs, (2) employers within the state of Montana who employ students graduating in business programs, (3) Montana State University graduates in the Department of Commerce for the years 1963-68 excluding those in business education, and (4) Eastern Montana College graduates in business education for the years 1963-68.

Definition of Terms

The following definitions have been included in this study to assist the reader in making accurate interpretation of specific terms used.

Business Education. The preparation in specific teaching fields in business as opposed to preparation for job opportunities in business.

Department of Commerce. The Department of Commerce at Montana State University provides programs leading to Bachelor of Science degrees in accounting and business education. When reference is made to the Department of Commerce in this paper it will exclude the program in business education.

General Education. Refers to "those phases of learning which should be a common experience of all men and women; education gained

through dealing with the personal and social problems with which we are all confronted."¹⁴

General Business. "Provides the student with information and competencies which are needed by all, in managing personal business affairs and in using services of the business world."¹⁵

¹⁴Carter V. Good (ed.), Dictionary of Education, McGraw-Hill Book Company, Inc., New York, 1959, p. 515.

¹⁵American Vocational Association, Inc., Definition of Terms in Vocational Technical and Practical Arts Education (Washington, D. C.: American Vocational Association, Inc.), p. 5.

CHAPTER II

NATURE OF GENERAL EDUCATION FOR THE UNDERGRADUATE COLLEGE STUDENT

The philosophy from which general education has developed can be traced back to the ancient Greeks and Romans. The classical definition of education of the Greeks and Romans meant the forming of a child into a harmonious, well-balanced adult. Such an adult was ideally a perfect balance of moral, intellectual, and physical components. He would be sober, wise, courageous, temperate, possessed of pleasing manners, conscious of his civic and social obligations, fluent in expressing himself, and physically well developed. While the core of his education was centered around language study--grammar, rhetoric, literature--it also included music, philosophy, mathematics, gymnastics. He was to emerge from the education as a representative of the classic ideal--mens sana in corpore sano--a sound mind in a sound body. So powerful has this view of education been that after 2,000 years, many still consider it valid. The idea that schools exist to mold an individual into a well developed and harmonious adult reflects the classic aim. This classic aim has influenced American education.

European and American education has also been influenced by the Hebrew or Jewish concept and the more recent concept of the behavioristic psychologists. The Jewish belief held that education was a moral enterprise. The Jewish goal was creating an individual who

not only knew what was right, but who did what was right. This idea of the moral individual as a goal of education was transmitted to Western Civilization through Christianity and the Protestant Reformation.

A more recent theory of education is that of the twentieth century behavioristic psychologists. They have attempted to put human behavior and education on a rigidly scientific basis. Their assumption has been that education is "conditioning," and results can be controlled by rewards and punishment.

The classical, the Jewish, and the behavioristic concepts of education are open to debate. Anthropologists and sociologists have formulated a definition of education which is generally accepted. All people have a culture which consists of their learned behavior. Education is the passing on of this culture. It includes knowledge of both tangibles and intangibles--tools, clothing, shelter, language, beliefs, aspirations, attitudes, and religion. In other words--education is the transmission of knowledge, skills, and values of a culture.

Adler defined education broadly as "a process which aims at the improvement or betterment of men, in themselves and in relations to society."¹ Whitehead stated, "Wisdom is the fruit of a balanced

Mortimer J. Adler, "Labor, Leisure, and Liberal Education," Toward the Liberally Educated Executive (New York: The New American Library of World Literature, Inc. 1960), pp. 72-84.

development. It is this balanced growth of individuality which should be the aim of education to secure."² President Horn of the University of Rhode Island recently reminded us of the scope of education:

A truly liberal education is the product of a lifetime of learning, study, reflection. Even then few individuals attain it. The best the college can do is to lay the foundation for a liberal education, to inculcate the habits of mind, breadth of interest, and enlargement of spirit which, when continued and enriched during the later years--and there will be more of these later years for most of us--can result in a true liberal education.³

Education takes a lifetime, however college should help an individual gain the foundation for pursuing this liberal or general education.

General Education Defined

A definition of "general education" should be made at this point because it is a broad term and sometimes only vaguely understood. For the purpose of this study, courses not taught by the Business Department will be considered in the "general education" field. The terms "liberal" and "general" are widely used in reference to education and have come to be almost synonymous in meaning. Traditionally, "liberal education"

²Alfred North Whitehead, "The Aims of Education," Ibid., pp. 50-52.

³Francis H. Horn, "A Lifetime of Learning," Ibid., pp. 14-15.

has drawn from subjects and disciplines in the arts and science area.. General education recognizes the need for selection of courses most worthwhile for the student who can spend only a limited part of his time on general studies. It is best conceived in terms of competencies, abilities, and understandings developed within the individual which are not directly vocational in nature. Thus such education should develop the breadth of learning necessary to reinforce the narrow depth of specialization.

In a culture as many-faceted as that found in America, there is a tendency to educate toward a variety of ends, many of which seem inconsistent with one another. The American culture has many goals. The problem is that multiple goals do not direct an activity in one direction. Just as there appears to be a controversy over values in the American culture, there is also a controversy over which knowledge is most important. The whole range and character of American culture--varied and vast and changing--needs to be borne in mind as one considers the specific problems and potentialities of general education. The contemporary struggle over values is itself a call for honest reappraisal of educational aims and objectives.

The problem of "translating values into curriculum"⁴ according to

⁴Daniel Bell, The Reforming of General Education, (New York: Columbia University Press, 1966), p. 1.

Bell is complicated by our culture's conflicting goals:

Like all other colleges, Columbia is bounded by the American culture and entwined in that culture's paradoxical assumptions: a desire for cultivation along with a utilitarian purpose to education; a populist spirit in the classroom (are students ever deferential to professors?) and a respect for learning; a training for citizenship, yet a skepticism about laws; a deference to humanitas and an emphasis on the acquisition of technique and training for the purposes of a career. To call attention to these antinomies is not necessarily to mock them; rather, it is to point up the difficulties that any educator faces when, in translating values into curriculum, he seeks to realize the purposes of American society. One knows from logic, if not from experience, that one cannot maximize two functions at the same time, though American society with its Benthamine temper, persists in seeking the greatest good for the greatest number.⁵

General education includes an understanding of man's environment, his society, and the historical background of his civilization. It is a study of past and present cultures as expressed in literature and the arts, and should provide a broad background to reinforce the constrictive track of specialization. General education in the United States has its origin in the humanistic education of ancient Greece and Rome.

History of General Education in the United States

During the period from World War I on through World War II and into the fifties, many American colleges developed general education

⁵Ibid., p. 1.

programs. The establishment of orientation courses and the introduction of the course in Contemporary Civilization at Columbia College of Columbia University in 1919 marked the beginning of the general education movement in the United States. This was the start of a gradual and quiet revolution in undergraduate instruction in colleges throughout the country. The reasons for the change according to Bell were: (1) the rejection of the German tradition of the University following World War I, (2) the abandonment of sterile classicism such as the Latin entrance requirement, and (3) the changing character of the student body as more children of immigrants enrolled.⁶ The original idea was to inculcate the humanistic rather than a professional orientation. During the period of 1919 to 1960 general education had three broad aims as characterized by Bell:

1. to provide a "common learning";
2. to give the student a comprehensive understanding of the Western tradition;
3. to combat intellectual fragmentation with interdisciplinary courses.⁷

Columbia, Harvard, and the University of Chicago have provided

⁶Ibid., pp. 18-19.

⁷Ibid., p. 282.

three basic models of general education which hundreds of other colleges have adopted.⁸ Columbia College of Columbia University was a pioneer in the field of general education. Its program was embodied in the idea of three broad courses which evolved over a period of years. These courses were Contemporary Civilization, the Humanities, and the Sciences. It was hoped that this curriculum could be "coextensive with life."⁹ These courses were required of all students.

From 1940 to 1965 the College of the University of Chicago engaged in the most thorough experiment in general education of any college in the United States.¹⁰ The Chicago plan sought to draw together disciplines in three fields--humanities, social sciences, and the natural sciences--and to consider problems which they by their nature, could only be understood by applying concepts from different disciplines. It was also an attempt to break the traditional pattern of 8-4-4 in American education. Its president, Robert M. Hutchins, proposed combining the last two years of secondary school with the first two years of college and to form a new college devoted entirely to general education with a completely prescribed curriculum.

⁸Ibid., p. 2.

⁹Baker Brownell, The College and the Community. (New York: Harper & Brothers, 1952), p. 183.

¹⁰Bell, op. cit., p. 26.

Bell, who taught general education courses at Chicago during the forties, writes whimsically of the value of these courses at that time:

The courses, as I can testify from personal experience were extra-ordinary intellectual adventures for the teaching staff; and perhaps this was its prize, if unintended, virtue, for what a teacher finds exciting he can communicate best to his students. Whether in the end the courses had the intellectual unity or theoretical clarity claimed for them is moot.¹¹

The movement toward general education received great impetus with the publication of the Harvard report in 1945 entitled General Education in a Free Society. This report came to be known as the Redbook. In many places it became the bible of general education. Its purpose was to formulate a complete educational philosophy for America. The necessary movement to general education, according to this report, was a result of the change in character of the high school. In 1870, the baseline chosen by the authors, the function of the high school was to prepare children of the well-to-do for college.¹² In 1945 when the Redbook was published it contained the following statement: "Except for a small minority, the high school has . . . ceased to be a preparatory school in the old sense of the word."¹³ The high schools of 1945, the Redbook

¹¹Ibid., p. 32.

¹²Ibid., p. 39.

¹³Ibid., p. 40.

contended, has failed to provide "a common learning" for all Americans.¹⁴

The overall theme set forth in the Harvard report was the "heritage of Western Civilization."¹⁵ The program proposed was radically different from what had existed at Harvard up to this time. It proposed that each student take the same lower-level humanities courses, the same lower-level social science courses, and one of two lower-level natural science courses. In addition, each student would take three upper-level general education courses. The Redbook proposals were never actually adopted at Harvard even though the book was widely read and discussed.

Harvard has listed its aims of general education as follows: (1) to teach the student to think effectively, (2) to communicate thought, (3) to make relevant judgments, and (4) to discriminate among values.¹⁶

The late Baker Brownell, formerly a professor of philosophy at Northwestern University, wrote in 1959 what he felt the primary purposes of general education should be: (1) to integrate the student's

¹⁴Ibid., p. 39.

¹⁵Ibid., p. 43.

¹⁶Hugh S. Brown and Lewis B. Mayhew, American Higher Education, (New York: The Center for Applied Research in Education, Inc., 1965), p. 11.

learning by studying relationships between various fields of interest, (2) to acquaint the student with the frontier problems of modern interest, (3) to help him express himself effectively in modern problems, and (4) to help him find an adequate relationship with the world.¹⁷

The first of these four purposes--to integrate the student's learning between various fields--Brownell felt was necessary in order to give the student a feeling of "the wholeness of the world."¹⁸ To give this, there should be a continuity across different fields of learning. The subject matter of true knowledge, he felt, no longer followed departmental classifications. The division between physics and chemistry, for instance, had become an arbitrary line. Once each required different skills and ways of thinking, and now they require knowledge of each other. The inter-relationship is true of other fields as well, as Brownell observed, "The relation of sciences not only to one another, but to modern social and appreciative life is clearly one of the critical problems of this day."¹⁹

The second purpose stated by Brownell was that a college education should acquaint people with contemporary world interests and

¹⁷Brownell, op. cit., p. 184.

¹⁸Ibid., p. 186.

¹⁹Ibid., p. 187.

situations and expressed the feeling that the student should have knowledge of the human community, its current problems, and trends of thought. "Though information alone is not an educational ideal," he said, "there are matters of information without which an adequate response to the active world is hardly possible."²⁰ The educated person should have some knowledge, for instance, of art, music, conservation, the scientific cosmos, and the social consequences of technology; in short, of human responses to a complex world.

The third purpose of the general education courses--to help the student to express himself as a significant factor in contemporary problems--involved effective thinking and communication of this thought. In this Brownell held that learning should not merely be a receptive process, but also a reaction to this new knowledge. Thus, an educated individual should be able to express himself--to react responsibly and imaginatively to material presented to him.

The fourth aim of general education stated by Brownell--to help the individual find an adequate relationship with the world--entailed orienting the student to the world by integrating his knowledge so that he could function effectively as an individual. His education should give him a sense of urgency of social problems, and the relation of facts

²⁰Ibid., p. 187.

to the human situation. Education should make significant the wholeness and interdependence of the different aspects of life to the individual. It should help him find his own personal identity and to understand the identity of others.

In 1944 the American Council on Education published A Design for General Education. In the Council's judgment general education should lead the student to be concerned with the health of himself and others; to develop communication skills; to work for emotional and social adjustment; to enable him to make satisfactory family and marital adjustment; to do his part in dealing with American and international social, economic and political problems; to understand natural phenomena, and use scientific methods in the solution of his problems; to find self-expression in literature, music, and the arts; to understand the meaning and value of life; to choose a vocation that would enable him to make a contribution to society. This Council listed the following ten objectives for general education:

1. To improve and maintain his own health and take his share of responsibility for protecting the health of others;
2. To communicate through his own language in writing and speaking at the level of expression adequate to the needs of educated people;
3. To attain a sound emotional and social adjustment through the enjoyment of a wide range of social

relationships and the experience of working co-operatively with others;

4. To think through the problems and to gain the basic orientation that will better enable him to make a satisfactory family and marital adjustment;
5. To do his part as an active and intelligent citizen in dealing with the interrelated social, economic, and political problems of American life and in solving the problems of postwar international reconstruction;
6. To act in the light of an understanding of the natural phenomena in his environment in its implications for human society and human welfare, to use scientific methods in the solution of his problems, and to employ useful nonverbal methods of thought and communications;
7. To find self-expression in literature and to share through literature man's experience and his motivating ideas and ideals;
8. To find a means of self-expression in music and in the various visual arts and crafts, and to understand and appreciate art and music as reflections both of individual experience and of social patterns and movements;
9. To practice clear and integrated thinking about the meaning and value of life;
10. To choose a vocation that will make optimum use of his talents and enable him to make an appropriate contribution to the needs of society.²¹

Fifteen years later, in 1959, the University of South Florida formulated its aims of general education. Though the aims were more

²¹Brown and Mayhew, op. cit., p. 8.

briefly stated, they were similar to those listed by the American Council on Education in 1944. The University of South Florida listed its aims of general education as follows:

The degree programs of the University are designed to promote the following general aims for all students:

1. The necessary skills in writing, speaking, reading and listening;
2. Self-reliance through the ability to think clearly;
3. An understanding of oneself and one's relationship to others;
4. Growing convictions based on the search for truth;
5. An understanding and appreciation of our cultural, social, scientific and spiritual heritage;
6. An intelligent approach to local, national, and world problems leading to responsible and responsive citizenship and leadership in life;
7. Some practical understanding of another language;
8. Professional competence based on high ethical standards in preparation not alone for the immediate job but for a lifetime of responsible leadership in professional activities;
9. Healthful development of the body.²²

²²Accent on Learning, (Tampa: The University of South Florida, 1959), cited by Hugh S. Brown and Lewis B. Mayhew, American Higher Education (New York: The Center for Applied Research in Education, Inc., 1965), p. 35.

The general aims listed above are typical of those stated in many college catalogs. These aims were formulated during the 1940's and 1950's when proposals for reform of curriculum spread through many colleges. This curriculum reform was aimed at combating overspecialization at the undergraduate level. The goal was to give the student a unifying overview--that is a relevance of a particular course to the student and to other courses. This was the most important trend in higher education during this period. It came to be known as the general education movement.

One of the most important results of this movement has been the transformation of precollegiate schooling during the past forty years. Barzun, Columbia's provost, explained this in a speech at a convocation at Hofstra University in 1963. This speech received nationwide attention. Speaking of the transformation which has taken place in the high school, Professor Barzun declared that the good high school now teaches what the students formerly learned in college:

The good high school now gives the historical surveys, the introductions to social science, the great books, that formed the substance of general education. What is more, the Advanced Placement System has managed to fill in the old vacuum of the eleventh and twelfth grades with real work, so that more and more freshmen--even without Advanced Placement--find the first year of college feeble and repetitious. They've had the calculus, they've had a grown-up course in American history, they've read Homer and Tolstoy. College holds for them no further revelations; it no longer marks the passage from pupil

to student, from make-believe exercises to real thought . . .²³

In this same speech, Barzun explained that the colleges are being changed by the pressures from the more advanced curriculum of the high school and by specialization in the graduate school:

If we stand off and look at the silhouette of the American college--I speak of the solid ones, not the shaky imitations--what we see is the thinning and flattening out of its once distinctive curriculum under pressure from above and below; the high school taking away the lower years, the graduate and professional schools the upper.²⁴

Because of this change in high school curriculum, because of the trend to postpone specialization until graduate school and for various other reasons, colleges are once again undergoing change and the general education program has been in difficulty in many colleges in recent years.²⁵

Present Trends in General Education

The trend in general education at present is to draw away from

²³From a speech by Jacques Barzun entitled "College to University--and After," delivered at Hofstra University, December 12, 1963, reprinted in The American Scholar XXXIII, No. 2 (Spring 1964), pp. 212-20.

²⁴Ibid., pp. 212-20.

²⁵Bell, op. cit., p. 54.

rigidly constructed programs for all students and to move to a more flexible and personal approach which takes the individual student's past accomplishments and fields of interest into consideration. This has come about partly because of the greater maturity of many entering freshmen, and partly because of the intellectual and institutional difficulties encountered by many colleges in their general education programs.

Recently Columbia, Chicago, Harvard and other colleges have in varying degrees been calling their programs in general education into question. Bell feels that the hopes of interdisciplinary integration of the curriculum, so high twenty years ago, have not materialized, and gives the following reasons: (1) disciplines have become more intensive and specialized, (2) there has been a multiplication of new knowledge in each discipline, (3) and there has been a lack of effort to define unifying conceptual structures.²⁶

In 1966, Bell wrote of the difficulties of general education experienced at many institutions, with special emphasis on the experiences at Columbia, Harvard, and Chicago. Of Columbia he said:

²⁶Daniel Bell, "The Scholar Cornered," The American Scholar, XXXVII (Summer, 1968), pp. 401-6. See Appendix A, p. 203, for excerpts from this article.

Beginning with the class that entered in 1954, Columbia College abandoned the prevailing "maturity credit" system, which had allowed a student to take a general degree, and instead required all students to complete a "major" or "concentration" in one department . . . While the trends were evident before the introduction of the change, the major system, by encouraging students . . . to begin their majors in their sophomore or even freshman years, has fractured the "unity" of the lower college, with its emphasis on a common-core program.²⁷

Writing of the program at Harvard, Bell stated, "The general education program at Harvard, in the words of a recent review committee, has been eroded."²⁸ Of Chicago, Bell wrote, "The College of the University of Chicago is in the throes of readjustment that may lead to the almost complete reversal of general education as practiced there for twenty years."²⁹

This disenchantment of many colleges with the idea of general education has been caused by various problems. The main problems according to Bell are:

1. It has been difficult to recruit teachers to teach general education courses.
2. The expansion of knowledge in all fields has made it impossible to integrate courses.

²⁷Bell, The Reforming of General Education, op. cit., pp. 197-198.

²⁸Ibid., p. 183.

²⁹Ibid., p. 190.

3. The increase in enrollments has compounded the problem.
4. There has been a shift in the center of gravity from the undergraduate to the graduate school, especially during the past ten years.
5. The high school now teaches much in the general education field.
6. There has been a shift of interest in Western Civilization to an interest in many other cultures such as that of South East Asia and Africa.³⁰

This is a period of intense change in our society. "Whirl is king, having driven out Zeus," Bell declares of our modern culture. He continues, "Fixity is deposed. Today we are at the point of breaking up all fixed points of reference in formal genres."³¹ The computer is claimed to be more revolutionary than the wheel, the printing press, the steam engine, the electric motor, or atomic energy. No other single item of capital goods has changed the basic terms of human activity in so short a time.³²

Robert M. Hutchins, president of the University of Chicago during its years of organizing and experimenting with the general education

³⁰Ibid., pp. 275-189.

³¹Maxwell H. Goldberg, "And See It Whole," Automation, Education, and Human Values (New York: School and Society Books, 1966), p. 342.

³²Ibid., p. 343.

program, and at present head of California's Center for the Study of Democratic Institutions, shares Bell's pessimism about the present trend away from general education in American colleges and universities. In Hutchins's new book, The Learning Society, published in 1968, he deplores the present form of schooling as "nonhuman, inhuman and antihuman." Hutchins believes that the goal of United States society, and thus of its educational system is at present technological progress. He believes that Americans have failed to distinguish between training and education. Hutchins does see hope, however, for the twenty-first century, when technology will give men time to learn and men will be educated not to fit into a system, but to discover the richness of life.³³

Bell feels that the way to cope with the increasing flood of knowledge is to teach the student "the principles of a discipline and to show him how basic concepts can be reorganized so as to assimilate the new discoveries in a field."³⁴ This can best be done, he feels, by showing the relationships in knowledge:

The fundamental truism, perhaps, is that knowledge is relational. Knowledge is the clarification of the structure of relationships. The purpose of education is to teach students how to understand these relationships. That is the changeless

³³"A New Life of the Mind," Time, 92:5, August 2, 1968, p. 50.

³⁴Bell, The American Scholar, op. cit., p. 405.

element within the perceptual and conceptual flux; that is the eye of the hurricane of knowledge.³⁵

Despite the pessimism of educators over the present difficulties of general education programs, they see general education as a way to cope with rapid change in the future. Hutchins states, "The more technological the society is, the more rapidly it will change, and the less valuable ad hoc instruction will become. It now seems safe to say the most practical education is the most theoretical one."³⁶

Francis Keppel, Assistant Secretary of Education during the Johnson administration, warns of the dangers in neglecting general education, "Our time demands that we raise the broad educational level of all our people, that we deny to no one education's passport to the future. General education is the foundation of all learning. It can be neglected only at our peril."³⁷

Bell believes that in the coming day and age, the distinctive function of the college must be to teach modes of conceptualization, explanation, and verification of knowledge. A distinctive function of the college is to deal with the grounds of knowledge, which makes important not what

³⁵Ibid., p. 406.

³⁶Time, loc. cit.

³⁷Goldberg, op. cit., p. 344.

one knows but how one knows. Knowledge must be presented with an awareness of its contingency and of the conceptual frame that guides its organization. All knowledge is liberal when it is committed to continuing inquiry.³⁸

Today educators are addressing themselves to the problems of achieving the best liberal education possible under the imperfect conditions of American society. Encouraging self-education seems to be one of the major trends today. At present schools are retreating from rigidly constructed general education programs. There is now a more flexible approach based on individual differences in background and abilities of students. The president of Hampshire College, Franklin Patterson, states Hampshire's goal for its students, "Living fully and well in a society of intense change, immense opportunity and great hazards."³⁹ At Hampshire students are allowed to proceed at their own pace through a three-phase divisional sequence. At Swarthmore students are given credit for off-campus learning and off-campus practical work under certain conditions. Independent study in interdisciplinary fields is encouraged.⁴⁰ Harvard and Radcliffe are expanding their options for

³⁸Bell, The Reforming of General Education, op. cit., p. 8.

³⁹"In Search of Liberal Education," Saturday Review, LI July 20, 1968, p. 50.

⁴⁰Ibid., p. 51.

general education. Beyond freshman English, which many students now complete in high school, students may write in the academic field that interests them. Some write an autobiography exploring the relation between personal experience and the generalizing process.⁴¹ These are a few of the broadening variety of options being tried in general education today.

Summary

The concept of general education can be traced to the ancient Greeks and Romans who believed that schools existed to mold the individual into a well developed and harmonious adult. Its purpose is to develop breadth of learning to reinforce the narrow depth of specialization. Franklin Paterson, president of Hampshire College, envisions the educated generalist to be "a man like Benjamin Franklin who has the curiosity, confidence, and capacity to put his mind and hands to many things, who becomes his own teacher and remains a life-long student."⁴²

The years from 1919 to 1960 marked the period of development of the general education movement in the United States. It was developed

⁴¹"General Education after 20 Years," School and Society, XCIV December 24, 1966, p. 472.

⁴²"In Search of Liberal Education," op. cit., p. 51.

to combat over-specialization, to provide a "common learning," and to give the student a comprehensive understanding of Western tradition. Columbia University, University of Chicago, and Harvard were leaders in the general education movement and many schools throughout the United States have modeled their programs from these three. The landmark courses of general education were the course in Contemporary Civilization established at Columbia in 1919, the courses at the University of Chicago which sought to draw together concepts from the humanities, social science and the natural sciences; and the Heritage of Western Civilization courses taught at Harvard.

Recently these programs have undergone change. This change has been brought about by (1) rapid expansion of knowledge in all fields making a "common learning" impossible and also making it impossible to integrate interdisciplinary courses, (2) the taking over by the high school of much of the learning previously taught in general education courses in college, and (3) rapidly increasing enrollments which have made it difficult to find enough skilled teachers to teach these courses.

At present schools are retreating from inflexible general education programs. There is now a more relaxed approach based on individual differences in background and abilities of students, and a general tendency to encourage self-education through independent study and off-campus learning. Just which courses are most worthwhile for the

student majoring in business who can spend only a limited amount of time on general education is one of the concerns of this study. A brief history of higher education for business in the United States will be presented next.

CHAPTER III

BRIEF HISTORY OF HIGHER EDUCATION FOR BUSINESS IN THE UNITED STATES

Higher education for business in the United States is largely a development of the twentieth century. Academic business education has been more highly developed in the United States than anywhere else in the world. It has developed because of the need for trained administrative people and people trained in business skills in an industrial society.

The first collegiate school of business in this country was established in 1881 at the University of Pennsylvania. A substantial gift from Joseph Wharton enabled the school to be founded, and the school is still known as the Wharton School. In 1898 the University of Chicago established its College of Commerce and Politics, and the University of California followed with its College of Commerce the same year.

Between 1900 and 1914, twenty-five universities established business schools or programs. Among these were Dartmouth's Tuck School (1900) and the Harvard Business School (1908). Thirty-seven more schools of business were established during World I years, including Columbia's in 1916. During the post World War I period "a veritable craze for business education swept over the country."¹ From 1919 to

¹Robert J. Senkier, Revising a Business Curriculum--the Columbia Experience. (Columbia University: Graduate School of Business, 1961), p. 6.

1924, 117 institutions set up programs for business training, and by 1928 there were 400 such institutions.

The time between the two world wars was a period of rapid expansion in a number of business schools and student enrollments in these schools. Almost every important public university in the United States established a school of business. This rapid growth led to increased course offerings without adequate planning or trained faculty. Pierson described the haphazard situation of the early 1920's:

The sharp increase in the number of new schools and the rapid expansion in enrollments occurred before a solid basis for academic work could be developed. Courses were added before adequate textbook materials were available. New subdivisions were opened up within fields like accounting and marketing, not so much because of any well-developed educational plan, but because more students were crowding in and something had to be done with them. Faculty members brought in to teach basic courses in fields like finance and factory management were permitted to offer advanced courses of an even more specialized sort. New branches of the curriculum began to emerge, like real estate, public utility operations, brokerage, retailing, advertising, and credit practices, some of which were to be accorded status as separate major departments. The instructors in most of these subjects had to rely heavily on personal experience and scattered sources of information and teaching materials. Those who had gone to graduate school, of course, had taken their advanced degree in fields other than business. A considerable measure of improvisation and trial and error was therefore inescapable.²

²Pierson, op. cit., p. 43.

The early collegiate business school had a difficult time winning academic status and developing a clear cut role. The quickest and easiest way for a business school to attract students was to offer courses in specific trade and business skills. This tended, however, to isolate them from the rest of the academic community, and as more students with poor scholastic records were granted admission, business schools declined in prestige.

Two comprehensive studies of business schools were made during the 1930's. Both were critical of prevailing business education practices. One was written by Bossard and Dewhurst of the Wharton School in 1931. The other study was by Dean Marshall of the business school of the University of Chicago. Both studies advised a reexamination of the purposes and direction of business schools.

Though the trend in business education in the period between 1918 and 1941 brought criticism from the academic community, certain elements of strength appeared which proved to be important. These elements form the outline for broadening business training:

1. Closer ties with certain subjects outside business
2. More precise definition of the central core of business studies
3. Greater emphasis on company-wide management policies

4. Intensive analysis of the decision-making process in a variety of business situation.³

Most of the business schools of this time tried to give the students some liberal arts background. Schools which had previously taught trade skills and office procedures broadened their course requirements to give more balanced training. Some of the well-known schools started concentrating their business training at the graduate level, leaving undergraduate students time to pursue liberal arts. Among these were Columbia, Harvard, University of Chicago and Dartmouth.

By the late forties, business schools were an important segment of most universities. Enrollments had a spectacular rise immediately after World War II and this trend has continued to the present time.

General Education and Business Training

During the late fifties two important studies were made of business school programs. One was financed by the Ford Foundation. The results of this study, Higher Education for Business by Robert A. Gordon and James E. Howell, was published by the Columbia University Press in 1959. The other study was conducted under the auspices of the

³Ibid., p. 44.

Carnegie Corporation of New York. The Education of the American Businessman by Frank E. Pierson and Others, was published by McGraw-Hill also in 1959.

These studies were undertaken because of the uncertainty and lack of direction of the business schools of this period. Enrollments had increased sharply. The role of the businessman in American society had become that of a leader not only in economic output but also as a shaper of opinions and policies that were to affect the welfare of the American public and even international relations. The business community was looking to the colleges to train these leaders. Business educators were debating among themselves and with their critics how this training could best be done. They were being pulled in different directions by two basic needs--the need to train men to have breadth, perspective, and flexibility of mind to cope with a business environment growing in complexity and changing rapidly and the need to train specialists who could master the technical problems of the period.

The study by Gordon and Howell and the study by Pierson agreed that specialization and general education were equally important for the business student. They both concluded a broad background of knowledge was important for a specialist in business. As this study deals with general education requirements for business students, the reviews of Gordon and Howell's findings and those of Pierson are limited to the area

of general education. A comparison of the general education recommendations of the two studies follows.

Gordon and Howell recommend that at least half of the undergraduate program for business students be in the non-professional area. They also recommended that sixty semester hours of this be specified in some detail rather than to be left to the student's choice. These specific recommendations are summarized by courses and credits in Table 1.⁴

TABLE 1: SUGGESTED MINIMUM GENERAL EDUCATION PROGRAM FOR UNDERGRADUATE BUSINESS STUDENTS

Subject	Semester Courses	Semester Units or Hours
Humanities and fine arts	8-9	24-27
English language and literature	4-5	12-15
Humanities and fine arts electives	4	12
Natural sciences and mathematics	4-8	12-24
Mathematics	2-4	6-12
Natural sciences	2-4	6-12
Behavioral--social sciences	8	24
Behavioral sciences	2	6
Economics--elementary	2	6
Other social sciences	4	12
Total general education component	20-25	60-75

SOURCE: Gordon and Howell, Higher Education for Business, p. 173. This table is numbered to correspond with other tables in this study.

⁴Robert A. Gordon and James H. Howell, Higher Education for Business, (New York City: Columbia University Press, 1959), p. 173.

Gordon and Howell⁵ also emphasized that these courses be college level, and students coming to college deficient in any of these areas would need to take longer than average to secure a degree in order to make up deficiencies in high school work. To correct deficiencies courses should be taken without credit. They also stressed that some room be left for flexibility, for experimentation, and for adjustment to local conditions.

In the other study, Pierson⁶ stressed that general education courses should be increased to 50 to 55 per cent of the undergraduate credits. He also felt that the humanities and science departments should make their course work more relevant to the business student's interests. He recommended that the different departments should be asked to cooperate with the business schools to make sure that at least some of the special interests of the business students were met:

Every branch of the social sciences contains a wealth of ideas and materials which are germane to the problems business administrators will face in the courses of their careers, but the number of departments of history, political science, psychology, and sociology which offer courses touching on such problems is disturbingly small.⁷

⁵Ibid., p. 160.

⁶Pierson, op. cit., p. 196.

⁷Ibid., p. 194.

Pierson⁸ was more specific in his course listings than Gordon and Howell were. His recommendations for business students include the general education courses as shown in Table 2:

TABLE 2: SUGGESTED UNDERGRADUATE CURRICULUM

Required subjects and limited-choice electives	Number of semester hours
General foundation subjects:	
Humanities	
English literature and composition	9
One or two other humanities (e.g., either in foreign language or in philosophy, etc.)	6
Advanced elective in one of above	3 or 6
Mathematics-Science	
College algebra-trigonometry-geometry	6
Calculus and finite mathematics	6
Laboratory science (physics, chemistry, etc.)	6
Advanced elective in one of above	3 or 6
Social Sciences (excluding economics)	
History	6
Political science	6
Behavioral science (psychology, sociology, etc.)	6
Advanced elective in one of above	3
Total semester hours outside business and economics	60-66

SOURCE: Pierson, The Education of American Businessmen, p. 227. This table is numbered to correspond with the other tables in this study.

⁸Ibid., p. 227.

Pierson⁹ concurred with Gordon and Howell that there should be no rigid pattern set up for all schools, but rather that variation within broad limits be encouraged. He also felt that there should be room for flexibility within the program of each school to meet the needs and interests of individual students.

Comparison of General Education Requirements in Colleges and Universities Selected Throughout the United States

As previously stated, recommendations in the study made by Pierson and the other by Gordon and Howell were completed in 1959. A comparison of various schools will follow to see what the present general education requirements for business students are, and to see how they correspond to the recommendations made in the studies ten years ago.

In 1959, Pierson¹⁰ noted that in the great majority of business schools, less than 45 semester credit hours in general education courses were required for graduation. Distribution of these credits as found by Pierson were as follows:

⁹Ibid., p. 228.

¹⁰Ibid., p. 175.

TABLE 3: REQUIRED COURSES OUTSIDE BUSINESS AND ECONOMICS

Nonbusiness and Economic Courses	Range of semester hours required
English and composition	9-12
Other humanities	3- 6
Science	3- 6
Mathematics (or business mathematics)	3- 6
History (or civilization course)	6
Social science (or integrated course)	6- 9
Other "arts and science" electives	<u>3- 9</u>
Approximate total	33-54

SOURCE: Pierson, The Education of American Businessmen, p. 175. This table is numbered to correspond with other tables in this study.

The tables in the section which follows show credit hours in general education required at present from a random selection of colleges and universities.¹¹ The criteria used in selecting schools for this comparison were:

1. The schools were chosen from various geographic sections of the United States.
2. State institutions were used.
3. The schools chosen offer business courses.

¹¹See Appendix B.

4. Ten schools were selected from each of the four geographic areas making a total of forty schools.

Any slight inaccuracies in these tables were due to the difficulty in interpreting some of the college catalogs that were used.

The tables indicate that there has been some increase in general education requirements throughout the United States since 1959 when Pierson reported that on the average less than 45 semester credit hours in general education courses were required for graduation.

The average for the group of colleges represented in the tables was approximately 50 semester credit hours of required general education courses. Breaking down this average to the four sections of the United States represented in the tables, it was found that the colleges from the western states had the lowest general education requirements--an average of 41 semester credits. These figures, however, are somewhat misleading. Washington State University appeared to have the lowest requirements--31 semester credits. This college allows 21 elective credits which could not be counted as general education electives as they are not restricted to general education courses. Yet in all probability many students do choose general education courses to complete the required number of electives.

The colleges selected from the midwestern states ranked third of the four groups in general education requirements with 49.5 semester

TABLE 4:: COMPARISON OF GENERAL EDUCATION REQUIREMENTS IN TEN SCHOOLS LOCATED IN THE VARIOUS WESTERN STATES

	Arizona		Colorado		New Mexico		Oregon		Washington	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
SOCIAL SCIENCES (History, Political Science, Economics)	3	8	9	15	15	9	27	12	6	15
NATURAL SCIENCES (Physical Science, Chemistry, Biology, Math)	15	8	9	15	17	12	17-21	12	12	15
HUMANITIES (Art, Philosophy, Music, Literature)	13	8	9	15	9	12	12	12	6	15
RHETORIC (Composition, Speech)	6	6	9	9	4	6	12	9	3	8
PSYCHOLOGY	3	3	3	6	3	--	--	--	--	5
HEALTH SCIENCE AND PHYSICAL EDUCATION ACTIVITY	2	3	9	--	2	4	6	9	4	6
ELECTIVES	6	4	3	--	--	--	--	9	--	--
GENERAL EDUCATION REQUIREMENTS	45	40	51	60	51	43	74-78	63	31	64
CREDITS REQUIRED FOR GRADUATION	125	126	186*	186*	132	128	192*	186*	124	192*
Percentage Comparison of General Education with Total Graduation Requirements	36	31.7	27.4	32.3	38.6	33.6	38.5 to 40.6	33.9	25	33.3

*quarter hours, others semester hours.

(a) Northern Arizona University, (b) Arizona State University, (c) Colorado State College (d) Western State College of Colorado, (e) New Mexico State University, (f) Eastern New Mexico University, (g) Southern Oregon College, (h) Portland State College, (i) Washington State University, (j) Eastern Washington State College.

TABLE 5: COMPARISON OF GENERAL EDUCATION REQUIREMENTS IN TEN SCHOOLS LOCATED IN THE MID-WESTERN STATES

	Illinois		Kansas		Minnesota		Missouri		Oklahoma	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
SOCIAL SCIENCES (History, Political Science, Economics)	12	22	10	11	12	18-20	9	13	8-9	9
NATURAL SCIENCES (Physical Science, Chemistry, Biology, Math)	12	22	13	8	12	12	7-8	6-9	19	13
HUMANITIES (Art, Philosophy, Music, Literature)	14	22	8	9	20	15-18	9	9	9	6
RHETORIC (Composition, Speech)	6	18	8	9	4	12	8	9-12	6	8
PSYCHOLOGY	--	--	3	3	--	--	--	--	--	--
HEALTH SCIENCE AND PHYSICAL EDUCATION ACTIVITY	3	6	4-6	4	2	5	4	8	2	6
ELECTIVES	5	--	--	--	14	--	--	6	--	8
GENERAL EDUCATION REQUIREMENTS	52	90	46-48	44	64	62-67	37-38	51-57	44-45	50
CREDITS REQUIRED FOR GRADUATION	128	192*	124	124	192*	192*	124	125	136	124
Percentage Comparison of General Education with Total Graduation Requirements	40.6	46.9	37.1 to 38.7	35.5	33.3	32.3 to 34.9	29.8 to 30.6	40.8 to 45.6	32.4 to 33.1	40.3

*quarter hours, others semester hours.

(a) Illinois State University, (b) Southern Illinois University, (c) Kansas State College of Pittsburg, (d) Fort Hays Kansas State College, (e) Moorhead State College, (f) Bemidji State College, (g) Southwest Missouri State College, (h) Central Missouri State College, (i) Oklahoma State University, (j) Central State College.

TABLE 6: COMPARISON OF GENERAL EDUCATION REQUIREMENTS IN TEN SCHOOLS LOCATED IN THE SOUTHERN STATES

	Arkansas		Mississippi		Texas		Florida		Tennessee	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
SOCIAL SCIENCES (History, Political Science, Economics)	15	12	24	24	15	15	21	9	27	21
NATURAL SCIENCES (Physical Science, Chemistry, Biology, Math)	9	11	16	12	10	33	15	22	35-36	21
HUMANITIES (Art, Philosophy, Music, Literature)	10	8	20	12	6	13	12	15	9	15
RHETORIC (Composition, Speech)	6	6	16	6	9	9	12	9	9	12
PSYCHOLOGY	--	--	--	3	3	--	--	--	--	9
HEALTH SCIENCE AND PHYSICAL EDUCATION ACTIVITY	7	7	6	6	4	4	--	6	6	9
ELECTIVES	--	--	--	--	--	--	--	--	--	--
GENERAL EDUCATION REQUIREMENTS	47	44	82	63	47	74	60	61	86-87	87
CREDITS REQUIRED FOR GRADUATION	124	124	192*	128	137	120	135	192*	196*	199*
Percentage Comparison of General Education with Total Graduation Requirements	37.9	35.5	42.7	49.2	34.3	61.6	44.4	31.8	44.3	43.7

*quarter hours, others semester hours.

(a) Arkansas State University, (b) Southern State College, (c) University of Southern Mississippi, (d) Mississippi State University, (e) Texas A & M University, (f) East Texas State University, (g) Florida State, (h) University of Florida, (i) University of Tennessee, (j) East Tennessee State University.

TABLE 7: COMPARISON OF GENERAL EDUCATION REQUIREMENTS IN TEN SCHOOLS LOCATED IN THE EASTERN STATES

	Connecticut		Penna.		Ohio		W. Va.		Michigan	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
SOCIAL SCIENCES (History, Political Science, Economics)	9	18	15	15	25	18	18	15	23	12
NATURAL SCIENCES (Physical Science, Chemistry, Biology, Math)	12-14	12	6	11-13	19-20	6	9	15-17	12	17-18
HUMANITIES (Art, Philosophy, Music, Literature)	15	12	24	8	0-3	--	3	9	12	11-12
RHETORIC (Composition, Speech)	6	8	9	8	12-15	12	9	9	9	8-12
PSYCHOLOGY	3	3	--	3	--	--	6	3	4	--
HEALTH SCIENCE AND PHYSICAL EDUCATION ACTIVITY	2 sem.	4	4	4	3	1	2	3	2	4
ELECTIVES	--	3	--	--	--	--	15	--	--	--
GENERAL EDUCATION REQUIREMENTS	45-47	60	58	49-51	59-66	42	65	54-56	62	52-56
CREDITS REQUIRED FOR GRADUATION	120	128	133	124	192*	128	128	128	182*	124
Percentage Comparison of General Education with Total Graduation Requirements	39.1	46.9	43.6	41.1	30.7	34.4	50.8	42.2	34.1	41.2
					to			to		to
					34.4			43.8		45.1

*quarter hours, others semester hours.

(a) University of Connecticut, (b) Central Connecticut State College, (c) The Pennsylvania State University, (d) Indiana University of Pennsylvania, (e) Kent State University, (f) University of Akron, (g) West Liberty State College, (h) West Virginia University, (i) Michigan State University, (j) Eastern Michigan University.

hours. The colleges from the eastern states were second highest with an average of 52 semester credits, and the colleges from the southern states ranked the highest with an average of 55 semester credits. This would indicate that there has been a gradual increase from the average of 45 found by Pierson in 1959 in the general education requirements for business students throughout the United States. However colleges in general do not meet Pierson's¹² recommendations made in 1959 of 60 to 66 semester hours in general education courses. One of the schools selected, East Texas State University, requires 74 general education credits out of a total of 120 or 61.6 per cent of the total which is higher than Pierson's recommendation. Mississippi State University requires 63 general education credits out of a total of 128 for graduation or 49.2 per cent.

Summary

Higher education for business in the United States has grown because of a need for trained administrative people and people trained in business skills. There were few collegiate schools of business before 1900, but since that time both the number of schools and the enrollments

¹²Ibid., p. 227.

in these schools have increased. There was a spectacular increase in enrollments following World War II. At present business schools and departments are a large segment of higher education.

Because of this rapid expansion, course work did not develop along any studied plan, but through trial and error. Often in the early schools, vocational skills were a large part of the training. Because of this, business schools often lacked prestige in the academic community. There have also been conflicting opinions over training technical specialists or people with broad general background to be the business leaders.

In 1959 two important studies were published. One was sponsored by the Ford Foundation. The results of this study were published in the book, Higher Education for Business by Gordon and Howell. The other study sponsored by the Carnegie Corporation, was published as The Education of American Businessmen by Pierson. Both of these studies advised against excessive specialization. A random sampling of general education requirements of forty colleges throughout the United States would indicate that most collegiate schools of business have increased requirements since 1959, but they still do not meet the minimums established by Pierson or Gordon and Howell.

CHAPTER IV

CONSTRUCTION AND ADMINISTRATION OF QUESTIONNAIRE

The survey of literature in Chapter 3 supports the comment made in 1966 by DeCarlo and Robinson¹ that the need for a rigorous examination of the construction and evaluation of business curriculums is paramount. DeCarlo and Robinson proposed that groups such as students involved in the business programs, management from the business world and faculty from the colleges be called upon to evaluate and improve curriculums.

The investigator decided to conduct a survey to evaluate the general education background of college trained business employees using the suggestions of DeCarlo and Robinson as a guide. Two questionnaires were constructed. One was designed to obtain the opinions of employers of college business graduates as to the general competencies, abilities and understandings of their college trained employees. The second questionnaire was developed to ascertain the opinions of the college business graduates on the degree to which their own abilities, competencies and understandings were developed through general education courses during college.

¹DeCarlo and Robinson, loc. cit.

Construction of Questionnaire

The categories in general education to be included in the questionnaire were selected using the objectives of general education set forth by the American Council on Education in A Design for General Education² as a guide. The recommendations of Gordon and Howell³ pertaining to general education in the undergraduate business curriculum were also used in selecting the competencies and abilities that were basic to successful employment. The following 11 items were finally chosen: (1) competence in oral communication, (2) competence in written communication, (3) competence in finding information, (4) competence in solving problems, (5) ability to think creatively, (6) understanding of people, (7) understanding of society, (8) understanding of societies other than our own, (9) understanding of physical environment, (10) appreciation of the arts, and (11) a satisfying personal philosophy.

Several subdivisions under each of these 11 main categories were then inserted to further clarify and pinpoint various abilities. These subdivisions were selected after consulting with colleagues who teach

²Brown and Mayhew, loc. cit.

³Gordon and Howell, op. cit., pp. 147-175.

the various disciplines and from a review of textbooks and other literature. This increased the number of items in the questionnaires to a total of 36. The questionnaires included space for respondents to add other abilities, competencies and understandings which they might believe were important. This was done as a check on the survey to insure that no important category had been overlooked.

Directions for Answering the Questionnaire

The respondents were requested to evaluate business graduates as to each of the thirty-six categories by using a numerical scale of one to five. Interpretation was made on the following basis: (1) five--consistently superior, (2) four--sometimes superior, (3) three--consistently satisfactory, (4) two--usually acceptable, and (5) one--consistently unsatisfactory. The numbers were used to make it possible to compute averages and compile results on a statistical basis. It was expected that employers answering the questionnaire might find it difficult to use the numerical scale to answer the portions of the survey which dealt with personal philosophy and appreciation of the arts. To provide for this, the questionnaires sent to the employers listed two additional statements: (1) "no opportunity to observe," and (2) "do not believe this is important." Questionnaires sent to business graduates included space for listing courses which they believed had developed

various competencies and also included in this statement: "competence gained outside of college." This was done to enable the graduate who believed he was competent in an area, but did not feel that his college training could be credited with this competency, to express his opinion.

The questionnaires also included open-end questions which allowed respondents greater freedom in expressing opinions as to weaknesses and strengths of college training and to make suggestions for improving curriculums. The open-end questions will be treated in detail in Chapters 6 and 7. Copies of the questionnaires used in the survey have been placed in Appendix C, page 212.

The questionnaires were constructed to determine if business graduates had gained from general education certain competencies, abilities and understandings which were essential to successful employment; to discover weaknesses and strengths of present general education programs; and to obtain suggestions of ways to improve curricula for business students.

A questionnaire was constructed and was then tested by administering it to a group of business students in graduate work at Montana State University and by circulating it among members of the Curriculum Committee at Eastern Montana College. Both groups made suggestions which were used to revise the original questionnaire and thus make it a more valid instrument.

Administration of Questionnaire

The questionnaires, together with a covering letter,⁴ were sent to the four groups involved in the study. The groups chosen for the survey to obtain data were: (1) 100 selected employers located throughout the country, (2) 38 selected employers located within the state of Montana, (3) a group of 140 graduates from the Commerce Department at Montana State University for the years 1963 through 1968, and (4) a group of 49 graduates from the Business Department at Eastern Montana College for the years 1963 through 1968.

In selecting employers for this study, the fact that they employed people who had obtained college degrees in business was the primary consideration. The 100 employers chosen throughout the country were selected at random from the College Placement Annual.⁵ The College Placement Annual was used because it lists companies that are recognized leaders in their fields, it indicates names of personnel officers who should be competent in supplying the type of information needed, it is current and it describes the type of college graduates the particular

⁴Appendix C.

⁵College Placement Annual 1968, A publication of the Eight Regional Placement Associations of Canada and the United States (Bethlehem: College Placement Council, Inc., 1968).

company recruits.

The second group of employers was selected from within the state of Montana. The greater share of these were located within the Billings area. This limitation to the Billings area was made so that the investigator could: (1) gather additional information from personal interviews, (2) have these employers also complete the questionnaire sent to national employers, and (3) make a comparison of these results with those of the employers on the national level.

One hundred-forty Montana State University and 49 Eastern Montana College graduates were selected to complete the graduates' questionnaire. The two groups were selected because they were enrolled in different type business programs. The graduates from Montana State University were business administration oriented, while the graduates from Eastern Montana College were prepared to be business teachers at the secondary level. Both groups, however, had entered the field of business rather than the teaching profession. Minimum requirements for graduation for either program is 192 quarter credits. The core requirements of the two programs were about equal with Montana State University⁶ requiring 65 general education credits and Eastern Montana

⁶Montana, Montana State University, Bozeman, Montana, Bulletin 1968-1970, Volume XXIII, Number 2, July 1, 1968, p. 186.

College⁷ requiring 61 general education credits. An inspection of both programs shows that in addition to the general education core 15 to 20 credits in courses that are usually considered general education were required. Of the 192 credits for graduation in both institutions approximately 40 per cent were requirements in general education.

The business graduates from the years 1963 through 1968 were used as subjects for this study. The limit of six years was made for four reasons: (1) recency of education would be important in answering the survey; (2) recency of college training should enable graduates to recall any real knowledge and skill gaps in the program; (3) adequacy of preparation for employment could be evaluated; and (4) it was felt recent business graduates could better suggest improvements of curriculum.

The employers at the national level who were asked to complete the questionnaire were chosen from the College Placement Annual 1968. Names of companies recruiting graduates in business were checked in the book. These were numbered and the first 100 selected by chance were contacted. Returns were received from 71. Seven of these did not include the name of the company or the official completing the survey.

⁷Montana, Eastern Montana College, Billings, Montana Catalog 1968-1969, April 1968, p. 58.

For the purposes of this study, however, the seven unsigned questionnaires were included in the tabulations and in the statistical results. Seven additional employers did not complete the questionnaires but submitted letters stating their reasons.

Thirty-eight employers within the state of Montana were interviewed and considerable information was acquired from discussions with these employers. To find a sufficient number of employers hiring college graduates became a problem. This was further complicated by the problem of finding employers who hire college business graduates. It was decided to accept employers who had hired three or more business graduates during the past three years. In a few instances, three graduates had not been employed at any one time. Three of the employers interviewed had to be excluded from the survey because they did not meet the minimum requirements of having employed at least three college business graduates during the last three years. An additional three did not submit the completed questionnaire and were not used in the statistical compilations. Thirty-two local employers completed questionnaires and contributed additional information in the interviews.

Montana State University and Eastern Montana College business graduates from the years 1963 through 1968 were selected to complete the four groups. The card files of the alumni offices at both institutions were used as sources for selecting graduates. The names and addresses

of 140 Montana State University business graduates and 49 Eastern Montana College business graduates were obtained. A considerable number of these addresses were listed under parents' home address, and these were used with the hope that the questionnaires would be forwarded and thus aid in the size of the sample. Several military addresses were also acquired through the families of the graduates. There were no responses from those mailed to military addresses.

Response to the Questionnaires

The response to the questionnaires sent to the employers and graduates is shown in Table 8.

TABLE 8: NUMBER OF EMPLOYERS AND GRADUATES CONTACTED AND NUMBER RESPONDING TO QUESTIONNAIRE

Groups Surveyed	Number of questionnaires sent	Number of responses received	Number valid for statistical purposes
National Employers	100	71	64
Local Employers	38	35	32
Montana State University Graduates	140	61	61
Eastern Montana College Graduates	49	32	32
Totals	327	199	189

Sixty-one questionnaires were returned from the Montana State

University graduates and 32 were returned from the Eastern Montana College graduates. A review of the 61 respondents from Montana State University graduates disclosed the following information. Two of the graduates had completed master's degrees, and three others had a second bachelor's degree. Eight were graduated in 1963, eight in 1964, fifteen in 1965, fourteen in 1966, nine in 1967, and seven in 1968. Of the 61 graduates responding only one was a woman. Positions held by the graduates were as follows:

27 Accounting	1 Administrative Assistant
9 Sales and Marketing	1 Financial Director
5 Internal Revenue Service	1 Assistant Controller
4 Management	1 Distribution Analyst
2 Banking	1 Fiscal Assistant
1 Insurance and Investments	1 Assistant State Budget Director
1 Warehouseman	1 Business Trainee
1 Computer Operator	1 Printing Estimator
1 Purchasing Agent	1 Secretary
1 Claims Representative	

A similar review of the Eastern Montana College graduates produced the following results. Four were graduated in 1963, four in 1964, five in 1965, three in 1966, eight in 1967, and seven in 1968. Of the 32 graduates responding four were women. Positions held by Eastern Montana College graduates were:

11 Sales and Marketing	1 Secretary
6 Management	1 Buyer
4 Accounting	1 Ranching and Tax Work
4 Insurance and	1 Credit Manager
Investments	1 Business Trainee
1 Personnel Officer	1 Purchasing

The results of the survey are discussed fully in Chapters 5, 6, and 7. The statistical results of the 36 items in the questionnaires are found in Chapter 5. Answers submitted by the employers to the open-end questions are discussed in Chapter 6, and the answers by the two graduate groups to the open-end questions are found in Chapter 7. The statistical results of the 36 items in the questionnaires will be presented next.

CHAPTER V

RATINGS OF BUSINESS GRADUATES BY EMPLOYERS AND GRADUATES

There were eleven major categories in the questionnaires concerned with general education for business graduates. The categories pertain to: (1) competence in oral communications, (2) competence in written communications, (3) competence in finding information, (4) competence in solving problems, (5) ability to think creatively, (6) understanding of people, (7) understanding of society, (8) understanding of societies other than our own, (9) understanding of physical environment, (10) appreciation of the arts, and (11) a satisfying personal philosophy. Each of these eleven major divisions was divided into several subdivisions; a total of thirty-six subdivisions was made. The respondents were given a choice of five ratings for each of the thirty-six categories. The ratings ranged from the highest--consistently superior, through sometimes superior, consistently satisfactory, usually acceptable, and consistently unsatisfactory. Questionnaires sent to employers included two additional ratings which permitted the employer to check the appropriate square if he had had no opportunity to observe a particular ability or if he believed that the item was not important. Questionnaires sent to Montana State University and Eastern Montana College graduates allowed space for them to indicate courses which developed competence in each category. If the graduate believed the competency was gained

outside the college experience, he could check the appropriate square to indicate this. Copies of the questionnaires are to be found in Appendix C, page 212. The questionnaires also included open-end questions which are treated separately in Chapters 6 and 7.

Numerical values were given to the ratings in the subdivisions on the following basis: five points for a rating of "consistently superior," four points for "sometimes superior," three points for "consistently satisfactory," two points for "usually acceptable," and one point for "consistently unsatisfactory."

Procedures Used in Treating the Questionnaire Returns

The first step in treating questionnaire returns was the tabulation of responses for each category and conversion of these numbers to percentages. The mean ratings were then computed for each group surveyed. These percentages and mean ratings are presented in a series of tables in this chapter. The college courses listed by the graduates were also tabulated, and the tabulations converted to percentages. This information is discussed in reference to each of the thirty-six categories.

Computation of t-score values of mean ratings in the measured competencies to determine whether there was a significant difference among the four groups surveyed at the .05 level of significance was made.

Mean ratings of the employers at the national level were compared with mean ratings of the employers at the local level. Mean ratings of the employers at the national level were compared with mean ratings of the Montana State University graduates. Mean ratings of the employers at the national level were compared with mean ratings of the Eastern Montana College graduates. Mean ratings of the Montana State University graduates were compared with mean ratings of the Eastern Montana College graduates. In none of these tests was t significant at the .05 level. Results of the t-score calculations and the formula can be found in Appendix D, page 232.

Compilation of Ratings in Questionnaire

PART I. Competence in Oral Communication.

Five items were listed in the questionnaire under competence in oral communication. These were: (1) diction, (2) correct use of language, (3) fluency of speech, (4) effective participation in group discussions, and (5) ability to "think on one's feet." The computations of the mean ratings are presented in Table 9 and the conversion of responses to percentages are found in Table 10.

Mean ratings of the five items included in the division of oral communication are presented in Table 9. The mean ratings for employers

and graduates denoted that the college business graduate is "consistently satisfactory" in diction, correct use of language, fluency of speech, effective participation in group discussion, and ability to "think on one's feet." The mean ratings for all four groups were relatively close. Of the four groups, the mean ratings for the local employers were the highest with a range of 3.28 to 3.50. The three remaining groups had mean ratings that were surprisingly similar.

TABLE 9: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON COMPETENCIES OF BUSINESS GRADUATES IN ORAL COMMUNICATION

Competencies in Oral Communication	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Diction	3.19	3.43	3.15	3.16
Correct Use of language	3.17	3.50	3.17	3.16
Fluency of Speech	3.20	3.50	3.05	3.19
Effective participation in group discussion	3.27	3.34	3.23	3.30
Ability to "think on one's feet"	3.19	3.28	3.30	3.48

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

Item 1: Diction. The responses in Table 10 indicate that the four groups surveyed believe that the college business graduate is slightly above the rating "consistently satisfactory" in his competence in diction. The four groups--local employers (87%), Eastern Montana College

TABLE 10: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES ON COMPETENCIES OF BUSINESS GRADUATES IN ORAL COMMUNICATION

Competencies in Oral Communication	Ratings by Percentages*			
	National Employers	Local Employers	M.S. U. Graduates	E.M.C. Graduates
Diction				
5 consistently superior	.0625*	.1562	.0491	.0625
4 sometimes superior	.2968	.2812	.2786	.1250
3 consistently satisfactory	.4062	.4375	.3278	.6562
2 usually acceptable	.2343	.0937	.1803	.0937
1 consistently unsatisfactory	--	.0312	.0327	--
0 no answer	--	--	.0163	--
Correct use of language				
5 consistently superior	.0781	.2500	.0655	.0312
4 sometimes superior	.2343	.2500	.2622	.1875
3 consistently satisfactory	.4687	.2812	.3442	.6562
2 usually acceptable	.2187	.1875	.1475	.0937
1 consistently unsatisfactory	--	.0312	.0491	--
0 no answer	--	--	.0163	--
Fluency of speech				
5 consistently superior	.0625	.2187	--	.0312
4 sometimes superior	.2812	.2500	.2950	.2187
3 consistently satisfactory	.4531	.3437	.3114	.6250
2 usually acceptable	.2031	.1875	.2295	.0937
1 consistently unsatisfactory	--	--	.0491	--
0 no answer	--	--	.0163	--

TABLE 10. (Continued)

Competencies in Oral Communication	Ratings by Percentages			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Effective participation in group discussion				
5 consistently superior	.0468	.0625	.0327	.0937
4 sometimes superior	.3125	.3750	.3114	.2500
3 consistently satisfactory	.3593	.4062	.4098	.4687
2 usually acceptable	.2500	.1562	.1311	.0937
1 consistently unsatisfactory	--	--	.0163	--
0 no answer	--	--	.0327	--
Ability to "think on one's feet"				
5 consistently superior	.0781	.1250	.0655	.0937
4 sometimes superior	.2812	.2812	.2459	.2812
3 consistently satisfactory	.3906	.3750	.3278	.4062
2 usually acceptable	.2187	.1875	.1147	.0625
1 consistently unsatisfactory	.0156	.0312	.0163	--
0 no answer	.0156	--	.0819	--

*Percentages translated from decimal form as 6.25%.

graduates (84%), employers contacted at the national level (77%), and Montana State University graduates (66%)--believe that the graduate is "consistently satisfactory" or higher. A number of Montana State University (11%) and Eastern Montana College (6%) graduates asserted that they gained this training outside college. Several of the local employers (3%) felt that business graduates were "consistently unsatisfactory" in diction, and this was also indicated by a few Montana State

University graduates (3%).

College courses listed by the Montana State University and Eastern Montana College graduates which provide competence in diction were mainly offerings in Speech (49%) and English (45%). Other courses were listed infrequently and were not considered significant.

Item 2. Correct Use of Language. According to the data in Table 10, the business graduate is rated "consistently satisfactory" or better in the correct use of language by the four groups answering. Numerous Eastern Montana College graduates (87%), local employers (78%), employers at the national level (77%), and Montana State University graduates (67%), felt that the business graduate is "consistently satisfactory" or better. A large number (25%) of the local employers rated the graduate "consistently superior" in his ability to use the language correctly. Some Montana State University (11%) and Eastern Montana College (3%) graduates were convinced that they gained this competence outside college and used high school English and high school in general as an example.

According to the graduates responding, the college training responsible for competency in correct use of language was gained primarily in courses in English (61%) and in Speech (31%).

Item 3: Fluency of Speech. The data in Table 10 clearly indicates that the college business graduates are "consistently satisfactory" in fluency of speech. All four rating groups reported a large percentage of graduates "consistently satisfactory" or higher. More Eastern Montana College graduates (87%) rated graduates "consistently satisfactory" or higher than did local employers (81%), employers at the national level (80%), or Montana State University graduates (61%). Of the Montana State University graduates answering, a small number (5%) believed that they were "consistently unsatisfactory." Ten per cent of the Montana State University and 3 per cent of the Eastern Montana College graduates believed that fluency of speech was gained outside their college experience. Again, as was disclosed in the category on correct use of language, high school English and high school in general were credited as the main outside source in developing fluency in speech.

Course offerings at college which were most helpful in developing fluency of speech, according to the Montana State University and Eastern Montana College graduates, were Speech (59%) and English (34%).

Item 4: Effective Participation in Group Discussions. According to the per cent shown in Table 10, the college business graduates are well above the rating of "consistently satisfactory" in effective participation in group discussions. The local employers indicated that they

believe that a large number (38%) of the graduates are "sometimes superior" in effective participation in group discussions. The local employers (84%), Eastern Montana College graduates (81%), Montana State University graduates (75%), and employers at the national level (72%), rated a sizable number of business graduates at the "consistently satisfactory" level or higher in their ability to participate in group discussions. A negligible number of Eastern Montana College graduates (3%) and Montana State University graduates (2%) indicated that they were "consistently unsatisfactory" in this ability. Six per cent of the Montana State University and 6 per cent of the Eastern Montana College graduates believed that effective participation in group discussions was a competence that they had gained outside college with employment as an example.

The courses selected by the Montana State University and Eastern Montana College graduates as most helpful in developing competency in effective participation in group discussions disclosed a varied preference. College courses reported most frequently were Speech (26%), English (16%), Seminar in Commerce (6%), Special Topics in Commerce (6%), Salesmanship (6%), Accounting (4%), Principles of Management (4%), Methods in Business Education (4%), History (4%), and offerings in Social Science. Extra curricular activities, according to 5 per cent of the respondents, provided experiences which helped them participate

effectively in group discussions.

Item 5: Ability to "think on one's feet." Data given in Table 10 indicate that all four groups responding rated business graduates well above the "consistently satisfactory" level in ability to "think on one's feet." Local employers (78%), Eastern Montana College graduates (78%), employers at the national level (75%), and Montana State University graduates (64%) judged business graduates "consistently satisfactory" or better. An appreciable number of Eastern Montana College (16%) and Montana State University (15%) graduates were convinced the ability to "think on one's feet" was achieved outside college. Employment was credited by graduates as the predominant outside source.

Montana State University and Eastern Montana College graduates listed a number of college courses which aided the graduate in acquiring the ability to "think on his feet." The courses given most frequently were: English (22%), Speech (19%), Salesmanship (11%), Seminar in Commerce (8%), Accounting (5%), Technical Writing (5%), Special Topics in Commerce (4%), Methods in Business Education (3%), Principles of Management (2%), Marketing (2%), Merchandising (2%), Distributive Education (2%), and Student Teaching (2%). Several (6%) believed that extracurricular activities play an important part in helping people to "think on their feet."

From the responses of both employers and graduates, it is apparent that the competence of business graduates in oral communications is "consistently satisfactory." In general, English and Speech were the college courses most responsible for this competence.

PART II. Competence in Written Communication.

The items included under competence in written communication were: (1) clarity of thought, (2) ability to organize and express ideas, and (3) correctness of grammar. The results of the mean ratings of the four groups of raters are presented in Table 11. Respondents' ratings were converted to percentages and are shown in Table 12 in decimal form.

The mean ratings for the four groups in competence in written communications are presented in Table 11. Three of the four groups reporting, local employers, Eastern Montana College graduates, Montana State University graduates indicated, as shown by data in Table 11, that the college business graduate is "consistently satisfactory" or higher in his ability to express himself with clarity, to organize and express ideas, and to use grammar correctly.

Montana State University graduates reported the highest mean ratings for all three competencies in written communication, with mean ratings of 3.27, 3.41, and 3.47. The ratings of national employers

TABLE 11: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON COMPETENCIES OF BUSINESS GRADUATES IN WRITTEN COMMUNICATION

Competencies in Written Communication	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Clarity of thought	2.94	3.15	3.41	3.29
Ability to organize and express ideas	2.81	3.25	3.47	3.25
Correctness of grammar	2.80	3.09	3.27	3.07

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

indicate that they believe that the graduates are "usually satisfactory" in all three categories as these mean ratings of 2.80, 2.81 and 2.94 are at the "usually satisfactory" rating level.

Item 1: Clarity of Thought. Data in Table 12 reveal some comparisons on the ratings on clarity of thought that prove interesting. Both graduate groups, Eastern Montana College (84%) and Montana State University (82%), gave most responses in the "consistently satisfactory" or higher ratings. Local employers (72%) and employers contacted nationally (64%) placed many of the graduates in the "consistently satisfactory" levels or higher in clarity of thought. Employers at the national level, however, acknowledge that many (36%) of the graduates are "usually acceptable" in this ability. A large number of Montana State

TABLE 12: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES ON COMPETENCIES OF BUSINESS GRADUATES IN WRITTEN COMMUNICATION

Competencies in Written Communication	Ratings by Percentages*			
	National Employers	Local Employers	M.S.U. Gradu- ates	E.M.C. Gradu- ates
Clarity of thought				
5 consistently superior	.0625*	.0937	.0491	.0312
4 sometimes superior	.1718	.2812	.3934	.3437
3 consistently satisfactory	.4062	.3437	.3770	.4687
2 usually acceptable	.3593	.2500	.0819	.1250
1 consistently unsatisfactory	--	.0312	.0163	--
0 no answer	--	--	--	--
Ability to organize and express ideas				
5 consistently superior	.0625	.1562	.0819	.0625
4 sometimes superior	.1406	.2187	.4098	.1875
3 consistently satisfactory	.3437	.3750	.3278	.6562
2 usually acceptable	.4375	.2187	.0983	.0625
1 consistently unsatisfactory	.0156	.0312	.0163	--
0 no answer	--	--	--	--
Correctness of grammar				
5 consistently superior	.0625	.1875	.0163	.0625
4 sometimes superior	.1093	.1562	.3770	.1875
3 consistently satisfactory	.3096	.3437	.3770	.4375
2 usually acceptable	.4375	.2187	.1311	.2500
1 consistently unsatisfactory	--	.0625	.0163	--
0 no answer	--	--	--	--

*Percentages translated from decimal form as 6.25%.

University graduates (39%) believe that the training they received would place them in the "sometimes superior" bracket. Some of the graduates from Montana State University (8%) and Eastern Montana College (3%) thought that the ability to express themselves clearly was gained outside college.

English (42%), Business Communications (24%), Technical Writing (19%) and Speech (8%) were the college courses listed by Montana State University and Eastern Montana College graduates which they felt provided for development of the ability to think clearly.

Item 2: Ability to Organize and Express Ideas. Data listed in Table 12 indicate that three of the four groups, Eastern Montana College graduates (91%), Montana State University graduates (82%), and local employers (75%), placed the business graduates high in the "consistently satisfactory" level in the ability to organize and express ideas. Only 55% of the employers at the national level rated business graduates at the "consistently satisfactory" level or higher in the ability to organize and express ideas. A considerable number (44%) of the employers at the national level rated the business graduates "usually acceptable" in the ability to organize and express ideas. Several of the graduates of Montana State University (7%) and Eastern Montana College (3%) contend that they gained this ability by experiences other than college; high school

and employment were the experiences most frequently noted.

The college courses which provided the ability to organize and express ideas as surmised by Montana State University and Eastern Montana College graduates were: English (38%), Business Communications (22%), Technical Writing (20%) and Speech (10%).

Item 3: Correctness of Grammar. According to data in Table 12, three of the four groups--Montana State University graduates (77%), Eastern Montana College graduates (69%), and local employers (69%)--rated the business graduates "consistently satisfactory" or higher in their use of correct grammar, while fewer of the employers at the national level (56%) gave ratings of "consistently satisfactory" or better. Forty-four per cent of the employers at the national level asserted that the business graduate is "usually acceptable" in his ability to use grammar correctly. Several of the Montana State University (8%) and Eastern Montana College (6%) graduates held that correctness of grammar was learned outside college. According to indications by these graduates, it would appear that high school training was responsible for this ability when it was learned outside college.

Montana State University and Eastern Montana College graduates were of the opinion that the college courses most responsible for developing correctness of grammar were: English (51%), Technical

Writing (17%), Business Communications (16%) and Speech (6%). An appreciable number of graduates (6%) credited high school English classes for this skill.

From the responses pertaining to written communication in the questionnaire it was apparent that employers and graduates feel that college business graduates are competent in written communication. Courses which the graduates believed most influenced this competence were English, Business Communications, Technical Writing and Speech.

PART:III. Competence in Finding Information.

Three items were included under competence in finding information: these were: (1) ability to follow printed instructions, (2) ability to locate information quickly, and (3) ability to apply information. Mean ratings of these competencies are presented in Table 13. Summaries were made of the per cent of raters at each rating level. These percentages are set forth in Table 14.

The data in Table 13 show that the business graduates received mean ratings in competence in finding information between "consistently satisfactory" and "sometimes superior" by all four groups surveyed. Local employers reported the highest overall mean ratings (3.40, 3.62 and 3.75 out of a possible 5) on the three abilities: following printed instructions, locating information and applying information used to

TABLE 13: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON COMPETENCE OF BUSINESS GRADUATES IN FINDING INFORMATION

Competence in Finding Information	Mean Ratings*			
	National Employers	Local Employers	M.S.U. Graduates	E.M.C. Graduates
Ability to follow printed instructions	3.42	3.62	3.69	3.70
Ability to locate information quickly	3.29	3.75	3.32	3.46
Ability to apply information	3.16	3.40	3.25	3.35

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

characterize competency in finding information.

Item 1: Ability to Follow Printed Instructions. The data in Table 14 revealed that a convincing number of the four groups--local employers (94%), Eastern Montana College graduates (91%), employers contacted nationally (81%) and Montana State University graduates (79%)--rated the business graduates "consistently satisfactory" or higher in their ability to follow printed instructions. Two groups, Eastern Montana College graduates (50%) and local employers (44%), rated a large number of business graduates "sometimes superior." An appreciable number of Montana State University (12%) graduates thought that they had gained this ability not in college, but rather in work experiences and in military service.

TABLE 14: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES OF COMPETENCE OF BUSINESS GRADUATES IN FINDING INFORMATION

Competence in Finding Information	Ratings by Percentages*			
	National Employers	Local Employers	M.S.U. Graduates	E.M.C. Graduates
Ability to follow printed instructions				
5 consistently superior	.1406*	.1250	.1475	.1250
4 sometimes superior	.3281	.4375	.3606	.5000
3 consistently satisfactory	.3437	.3750	.2786	.2812
2 usually acceptable	.1875	.0625	.0655	.0625
1 consistently unsatisfactory	--	--	--	--
0 no answer	--	--	.0327	--
Ability to locate information quickly				
5 consistently superior	.1406	.2500	.0819	.0937
4 sometimes superior	.2343	.3750	.2950	.3125
3 consistently satisfactory	.3437	.2500	.3442	.4687
2 usually acceptable	.2343	.1250	.1147	.0625
1 consistently unsatisfactory	--	--	--	--
0 no answer	--	--	.0491	--
Ability to apply information				
5 consistently superior	.0625	.0937	.0327	.0625
4 sometimes superior	.2656	.4062	.3278	.3125
3 consistently satisfactory	.4218	.3125	.3770	.3750
2 usually acceptable	.2343	.1875	.1639	.1250
1 consistently unsatisfactory	--	--	--	--
0 no answer	--	--	.0327	.0312

*Percentages translated from decimal form as 14.06%.

Montana State University and Eastern Montana College graduates selected a wide number of college offerings which they felt developed the ability to follow printed instructions. The courses listed most frequently were: English (23%), Income Tax Accounting (17%), Technical Writing (10%), Business Communications (5%), Introduction to Data Processing (5%), Auditing (3%) and literature (3%). Registration (5%), term papers (5%), and tests (3%) were also cited by a number of graduates as specific aids in developing this ability.

Item 2: Ability to Locate Information Quickly. A high per cent of raters, as shown in Table 14, place business graduates in all four groups well above "consistently satisfactory" in their ability to locate information quickly. This indicates rather clearly the general confidence in this ability as a very functional skill. Local employers (88%) gave a greater number of responses in the "consistently satisfactory" or higher categories than did Eastern Montana College graduates (87%), Montana State University graduates (72%) or employers contacted at the national level (72%). A large number (25%) of the local employers indicated that they believe the business graduate is "consistently superior" in this ability. Several employers at the national level (5%) felt that they did not have an opportunity to observe the graduate in this situation. A number of Montana State University (8%) and Eastern

Montana College (6%) graduates indicated that they had gained this ability outside college. Employment and military service were listed by several graduates as contributing to this ability.

The Montana State University and Eastern Montana College graduates credited the following college courses as helpful in developing the ability to locate materials quickly: English (36%), Technical Writing (12%), History (9%), Business Law (8%), Income Tax Accounting (5%), Business Communications (4%), and Sociology (4%). Graduates also credited term papers (18%) without course designation as a factor in developing the ability to locate materials quickly.

Item 3: Ability to Apply Information. The data in Table 14 point out that all four groups were of the opinion that business graduates rank well above the "consistently satisfactory" rating in ability to apply information. Local employers (81%) recorded a greater percentage than did employers at the national level (75%), Eastern Montana College graduates (75%), or Montana State University graduates (75%) in the "consistently satisfactory" or higher ratings. Forty-one per cent of the local employers rated the business graduate as "sometimes superior" in his ability to apply information. Some of the Eastern Montana College (9%) and Montana State University (7%) graduates indicated that this ability was gained outside college from experiences such as employment and military service.

The Montana State University and Eastern Montana College graduates listed many college courses which they believe helped them develop the ability to apply information. Business courses were recorded most frequently. These were: Accounting (16%) and Income Tax Accounting (16%). Other courses to which they attributed this ability were: Technical Writing (14%), English (11%), History (9%), and Economics (7%). A significant number (10%) of graduates listed writing term papers as a major factor in developing the ability to apply information.

According to the mean ratings given the business graduates in their ability to find and apply information, both the employers and graduates believe the graduates are more than adequately prepared. A summary look at the courses mentioned as helpful would indicate that English and related subjects were considered most responsible for developing this competency. Courses in business were also given much credit.

PART IV. Competence in Solving Problems.

The four items included under competence in solving problems were: (1) ability to analyze problem situations, (2) ability to evaluate and interpret facts, (3) ability to arrive at satisfactory decisions, and (4) an understanding of probability, correlation, and sampling as needed in business. Mean ratings resulting from tabulation frequencies are

presented in Table 15. The per cent of raters giving each rating are listed as to percentages in Table 16.

TABLE 15: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON COMPETENCE OF BUSINESS GRADUATES IN SOLVING PROBLEMS

Competence in Solving Problems	Mean Ratings*			
	National Employers	Local Employers	M.S. U. Graduates	E.M. C. Graduates
Ability to analyze problem situations	3.25	3.46	3.50	3.27
Ability to evaluate and interpret facts	3.27	3.46	3.42	3.27
Ability to arrive at satisfactory decisions	2.92	3.06	3.50	3.43
An understanding of probability, correlation, and sampling as needed in business	2.64	3.25	3.12	2.86

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

On the basis of the data in Table 15, the graduates from Montana State University had the best overall mean ratings of the four groups surveyed in competence in solving problems. Mean ratings for the Montana State University graduates and local employers would place the business graduates between "consistently satisfactory" and "sometimes superior." National employers and Eastern Montana College graduates indicated that the business graduates are "usually acceptable" in their understanding of

probability, correlation, and sampling as needed in business. The national employers also noted that the business graduates are "usually acceptable" in their ability to arrive at satisfactory decisions.

Item 1: Ability to Analyze Problem Situations. The four groups of raters reported a high percentage of responses at the "consistently satisfactory" level or higher in ability to analyze problem situations as is evidenced by data given in Table 16. Local employers (81%), Montana State University graduates (80%), employers at the national level (78%), and Eastern Montana College graduates (78%) all recorded a sizable number of responses at the "consistently satisfactory" level or higher. Local employers (16%), and Montana State University graduates (15%) registered a notable number of responses in the "consistently superior" rating. A number of Eastern Montana College (9%) and Montana State University (7%) graduates maintained that the ability to analyze problem situations was gained outside college.

College courses which the Montana State University and Eastern Montana College graduates considered advantageous in developing the ability to analyze problem situations were: Accounting (37%), Mathematics (15%), Principles of Management (9%), Psychology (4%), Economics (3%), Auditing (2%) and Business Law (2%).

TABLE 16: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES OF COMPETENCE OF BUSINESS GRADUATES IN SOLVING PROBLEMS

Competence in Solving Problems	Ratings by Percentages *			
	National Employers	Local Employers	M.S.U. Graduates	E.M.C. Graduates
Ability to analyze problem situations				
5 consistently superior	.0937 *	.1562	.1475	.0625
4 sometimes superior	.2812	.3437	.2950	.2500
3 consistently satisfactory	.4062	.3125	.3606	.4687
2 usually acceptable	.2187	.1875	.0983	.1250
1 consistently unsatisfactory	--	--	.0163	--
0 no answer	--	--	.0163	--
Ability to evaluate and interpret facts				
5 consistently superior	.0625	.0937	.1311	.0625
4 sometimes superior	.3281	.4062	.2783	.2812
3 consistently satisfactory	.4218	.3750	.3606	.4062
2 usually acceptable	.1875	.1250	.0983	.1562
1 consistently unsatisfactory	--	--	.0327	--
0 no answer	--	--	.0491	--
Ability to arrive at satisfactory decisions				
5 consistently superior	.0312	.0625	.1311	.0625
4 sometimes superior	.2031	.2500	.3278	.3437
3 consistently satisfactory	.4375	.3437	.3606	.5000
2 usually acceptable	.2666	.3125	.0655	--
1 consistently unsatisfactory	.0156	--	.0327	.0312
0 no answer	.0312	.0312	.0491	--

TABLE 16. (Continued)

Competence in Solving Problems	Ratings by Percentages			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
An understanding of probability, correlation, and sampling as needed in business				
5 consistently superior	.0156	.1250	.0655	.0625
4 sometimes superior	.1250	.2500	.1803	.2500
3 consistently satisfactory	.3593	.3437	.4098	.2812
2 usually acceptable	.4062	.2500	.1147	.1250
1 consistently unsatisfactory	.0468	--	.0491	.1875
0 no answer	--	--	.0819	--

*Percentages translated from decimal form as 9, 37%.

Item 2: Ability to Evaluate and Interpret Facts. According to the data in Table 16, the two groups, local employers (87%) and employers at the national level (81%) recorded a larger number of responses in the "consistently satisfactory" level or higher than did either of the two graduate groups. The business graduates of Montana State University (77%) and Eastern Montana College (75%) rated themselves at the "consistently satisfactory" level or higher in their ability to evaluate and interpret facts. Nine per cent of the Eastern Montana College and 5 per cent of the Montana State University graduates maintained that they had achieved this ability outside college.

The college courses singled out by Montana State University and

Eastern Montana College graduates which were considered helpful in aiding them in evaluating and interpreting facts were: Accounting (44%), Mathematics (15%), Business Law (9%), Income Tax Accounting (7%), Principles of Management (4%), Business Finance (4%), Economics (4%) and English (3%).

Item 3: Ability to Arrive at Satisfactory Decisions. Data given in Table 16 reveal that all four groups, Eastern Montana College (91%), Montana State University (82%), employers contacted nationally (67%), and local employers (66%), rated many of the business graduates "consistently satisfactory" or higher in the ability to arrive at satisfactory decisions. Local employers (31%) and employers at the national level (27%) recorded much higher responses at the "usually acceptable" level than did the graduates responding. A limited number of Eastern Montana College (6%) and Montana State University (3%) graduates asserted that they had gained the ability to arrive at satisfactory decisions outside college. Employment and military service were listed by several of the graduates as providing this competency.

A high percentage of Montana State University and Eastern Montana College graduates indicated that college business courses provided training that would aid them in decision making. Accounting (44%), Mathematics (15%), Business Law (6%), Income Tax Accounting (6%), Economics (6%), Principles of Management (5%), and Business Finance (5%)

were the college courses listed most frequently.

Item 4: An Understanding of Probability, Correlation, and Sampling as Needed in Business. The data in Table 16 would allow for some generalizations on the part of the investigator. Local employers (72%), Montana State University graduates (66%), Eastern Montana College graduates (59%), and employers contacted nationally (50%) all gave an appreciable number of responses at the "consistently satisfactory" level or higher. That the ratings of employers on the local level and of Montana State University graduates were consistently higher than those of employers on the national level and of Eastern Montana College graduates could be because of differences between the sizes of the companies involved and between programs of the graduates responding.

The preponderance of business administration programs have a minimum mathematics requirement of College Algebra and Statistics. This, however, is not the situation in many of the business education programs. Of the two graduate groups reporting, only the Montana State University graduates in business administration indicated the belief that they were adequately prepared for an understanding of probability, correlation, and sampling, as needed in business. The Eastern Montana College graduates in business education had not been required to study College Algebra and Statistics, and their responses would corroborate

this. A larger number of Eastern Montana College graduates (19%) believed that they were "consistently unsatisfactory" than did Montana State University graduates (5%).

The comparison of the employers at the national level, who recorded the fewest number of responses at the "consistently satisfactory" level and higher, and the local employers, who indicated the second highest number of graduates at the "consistently satisfactory" level or higher, is partially clarified by the different needs of the companies. The companies surveyed at the national level were large corporations constantly involved in research and collection of statistical data needed to determine major policy. On the other hand, local firms surveyed were small, and their need for sophisticated statistics is not critical.

A significant number of the Eastern Montana College (9%) and of the Montana State University (8%) graduates indicated that this competence was gained outside college but did not indicate the source. Eight per cent of the Montana State University graduates did not respond to this item, and 3 per cent of both employer groups answered that they had not opportunity to observe the graduate under appropriate circumstances.

The college courses chosen by the graduates as providing an understanding of probability, correlation, and sampling as needed in business were primarily offerings in Statistics (56%), and in Mathematics (13%).

Student Evaluation (4%), Auditing (3%), Salesmanship (3%), Marketing (3%), Accounting (3%), Education (3%), and Psychology (3%) were also listed in appreciable numbers.

Employers and graduates rated the business graduates "consistently satisfactory" or better in ability to analyze problems, evaluate and interpret facts, and in ability to arrive at satisfactory decisions. Business graduates, however, rated themselves lower than employers in their understanding of probability, correlation and sampling as needed in business. The graduates attributed the development of these abilities primarily to college training.

PART V. Ability to Think Creatively.

The items included under the ability to think creatively were: (1) ability to formulate new ideas applicable to business, (2) ability to apply new ideas, and (3) flexibility of thinking to meet changing situations. Mean ratings were calculated and are presented in Table 17. Responses were tabulated to percentages at each rating level. Those results are found in Table 18.

The mean ratings in Table 17 indicate that local employers, Montana State University graduates, and Eastern Montana College graduates rated business graduates between "consistently satisfactory" and "sometimes superior" in ability to formulate new ideas applicable to

TABLE 17: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON ABILITY OF BUSINESS GRADUATES TO THINK CREATIVELY

Ability to Think Creatively	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Ability to formulate new ideas applicable to business	2.98	3.17	3.17	3.06
Ability to apply new ideas	3.22	3.25	3.12	3.33
Flexibility of thinking to meet changing situations	3.41	3.50	3.24	3.50

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

business, ability to apply new ideas and flexibility of thinking to meet changing situations. Mean ratings for the employers contacted nationally rated the business graduates well above the "consistently satisfactory" level in ability to apply new ideas and flexibility of thinking to meet changing situations, but rated them only "usually acceptable" in ability to formulate new ideas applicable to business. The mean ratings of the four groups place the overall responses of the local employers highest and those of the employers contacted nationally lowest.

Item 1: Ability to Formulate New Ideas Applicable to Business.

According to the data presented in Table 18, each of the four groups recorded a majority of their responses in the "consistently satisfactory" level or higher on the ability of the business graduate to formulate new

TABLE 18: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES ON ABILITY OF BUSINESS GRADUATES TO THINK CREATIVELY

Ability to Think Creatively	Ratings by Percentage *			
	National Employers	Local Employers	M.S.U. Graduates	E.M.C. Graduates
Ability to formulate new ideas applicable to business				
5 consistently superior	.0156 *	.1250	.0327	.0937
4 sometimes superior	.2968	.1875	.2459	.2187
3 consistently satisfactory	.2968	.3750	.2459	.4062
2 usually acceptable	.2812	.1562	.1311	.1875
1 consistently unsatisfactory	.0312	.0625	.0327	.0312
0 no answer	--	--	.1639	.0625
Ability to apply new ideas				
5 consistently superior	.0468	.0937	.0327	.0625
4 sometimes superior	.3125	.3750	.1967	.2500
3 consistently satisfactory	.4531	.1875	.3278	.4375
2 usually acceptable	.1875	.3125	.0819	.0937
1 consistently unsatisfactory	--	--	.0491	--
0 no answer	--	.0312	.1803	.0625
Flexibility of thinking to meet changing situations				
5 consistently superior	.0937	.1562	.0327	.1562
4 sometimes superior	.4281	.3750	.2295	.1562
3 consistently satisfactory	.2812	.2187	.2295	.4375
2 usually acceptable	.2031	.1562	.0819	.0625
1 consistently unsatisfactory	--	.0312	.0327	--
0 no answer	--	--	.1639	.0312

*Percentages translated from decimal form as 1.56%.

ideas applicable to business. Eastern Montana College graduates (71%), local employers (69%), employers contacted nationally (61%), and Montana State University graduates (52%) had a majority of responses at the "consistently satisfactory" level or higher. The lower percentage of Montana State University graduate responses can be explained by the large number (16%) failing to answer this item and the additional (15%) number who indicated that this competency was gained outside college. Six per cent of the Eastern Montana College graduates also failed to answer this item.

College courses in business were considered the most valuable source in providing the ability to formulate new ideas and constituted the substance of the responses given by the Montana State University and Eastern Montana College graduates surveyed. Marketing (32%), Principles of Management (20%), Salesmanship (12%), and Merchandising (9%) were the college courses listed most frequently as sources.

Item 2: Ability to Apply New Ideas. The data in Table 18 show that the four groups reporting placed a large number of business graduates at the "consistently satisfactory" level or higher in their ability to apply new ideas. Of the four groups responding, more employers contacted nationally (81%) rated business graduates at the "consistently satisfactory" level or higher than did Eastern Montana College graduates

(75%), local employers (66%), or Montana State University graduates (56%). A large number of Montana State University graduates (18%) did not answer this item. Thirteen per cent of the Montana State University and 9 per cent of the Eastern Montana College graduates contend that they had gained the ability to apply new ideas in experiences outside college.

A summary look at the college courses submitted by the graduates points heavily to the offerings in business training as a means of providing the ability to apply new ideas. Marketing (24%), Principles of Management (16%), Salesmanship (14%), Merchandising (8%), Accounting (8%), English (6%), Business Communications (4%) and Auditing (4%) were the college courses most often listed by the Montana State University and Eastern Montana College graduates.

Item 3: Flexibility of Thinking to Meet Changing Situations. Data in Table 18 show that 43 per cent of the national employers and 38 per cent of the local employers rated the business graduates "sometimes superior" in their flexibility of thinking to meet changing situations. A sizable number of Eastern Montana College graduates (75%) judged themselves as "consistently satisfactory" or higher. An appreciable number of Montana State University graduates (48%) indicated that they were "consistently satisfactory" or higher, but in all three items under

ability to think creatively, a large number of Montana State University graduates (16%) failed to respond to this category. A large number of Montana State University (23%) and Eastern Montana College (16%) graduates maintained that they had gained flexibility of thinking to meet changing situations outside college.

College courses listed most frequently by the Montana State University and Eastern Montana College graduates which accounted for the flexibility of thinking to meet changing situations were: Marketing (25%), Principles of Management (16%), Salesmanship (14%), Introduction to Data Processing (10%), Merchandising (8%), Special Topics in Commerce (3%), Economics (3%), Student Teaching (3%) and Psychology (3%).

The ratings by the employers and graduates surveyed would indicate the business graduate is "consistently satisfactory" in his ability to think creatively. The college courses which were listed by the Montana State University and Eastern Montana College graduates as providing this ability were heavily weighted with business subjects.

PART VI. Understanding of People.

Two items were listed under the main topic understanding of people. These were: (1) ability to work effectively with others and (2) handling difficult people. Mean ratings for the items were computed for the groups surveyed and are presented in Table 19. Percentages of raters indicating

each rating level appear in Table 20.

TABLE 19: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON THE ABILITY OF BUSINESS GRADUATES TO UNDERSTAND PEOPLE

Understanding of People	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Gradu- ates	E. M. C. Gradu- ates
Ability to work effectively with others	3.16	3.25	3.67	3.58
Handling difficult people	2.87	3.13	3.50	3.65

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

A study of the mean ratings in Table 19 shows that all four groups believed that the business graduate is "consistently satisfactory" or higher in his ability to work effectively with others. Of those responding, the Montana State University (3.67) and Eastern Montana College (3.58) graduates' mean ratings suggest that the performance of the business graduate is frequently superior in working with others.

Eastern Montana College graduates, Montana State University graduates and local employer responses indicated that the business graduate is "consistently satisfactory" or better in handling people in difficult situations. The Eastern Montana College (3.65) and Montana State University (3.50) graduates again rated the business graduate more favorably than did either of the employer groups. The mean ratings of

national employers show that business graduates are "usually acceptable" in their ability to handle people under difficult situations.

TABLE 20: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES OF BUSINESS GRADUATES IN UNDERSTANDING OF PEOPLE

Understanding of People	Ratings by Percentages*			
	National Employers	Local Employers	M. S. U. Gradu- ates	E. M. C. Gradu- ates
Ability to work effectively with others				
5 consistently superior	.0781*	.0937	.1311	.1562
4 sometimes superior	.2656	.3125	.3114	.2812
3 consistently satisfactory	.3906	.3125	.1967	.5000
2 usually acceptable	.2656	.2500	.0327	.0312
1 consistently unsatisfactory	--	--	--	--
0 no answer	--	.0312	.1147	--
Handling difficult people				
5 consistently superior	.0156	.0937	.0819	.1562
4 sometimes superior	.1718	.2500	.2459	.2812
3 consistently satisfactory	.4687	.2812	.1803	.3125
2 usually acceptable	.3593	.3125	.0491	.0625
1 consistently unsatisfactory	--	--	.0327	--
0 no answer	--	--	.1803	.0312

*Percentages translated from decimal form as 7.81%.

Item 1: Ability to Work Effectively With Others. According to the data in Table 20, a significant number of Eastern Montana College (16%) and Montana State University (13%) graduates believed that they were "consistently superior" in the ability to work effectively with others.

Thirty-one per cent of the Montana State University graduates and a similar percentage of local employers thought that the business graduate is "sometimes superior," while 50 per cent of the Eastern Montana College graduates believed the business graduate is "consistently satisfactory." A number of Montana State University graduates (11%) did not answer this item, and a perceptible number (18%) declared that they gained the ability to work effectively with others outside college.

Courses mentioned as helpful in developing the ability to work effectively with others by the Montana State University and Eastern Montana College graduates were: Psychology (36%), Principles of Management (18%), Sociology (6%), Marketing (5%), Salesmanship (5%), Special Topics in Commerce (3%), Drama (3%), and Speech (3%). An appreciable number (17%) of graduates felt that employment provided the ability to work effectively with others.

Item 2: Handling Difficult People. A large number of Eastern Montana College graduates (16%) believed that they were "consistently superior" in the ability to handle people under difficult circumstances as indicated by the data in Table 20. Eastern Montana College graduates (28%), Montana State University graduates (25%) and local employers (25%) had numerous responses in the "sometimes superior" category. Many of the employers contacted nationally (47%) believed that business

graduates were "consistently satisfactory," but a large number (36%) believed instead that the graduates were only "usually acceptable." Eighteen per cent of the Montana State University and 3 per cent of the Eastern Montana College graduates failed to respond to this item. A large number of Montana State University (23%) and Eastern Montana College (16%) graduates indicated that they had gained this experience outside college. Employment was the outside experience most frequently credited.

The college courses listed most frequently by Montana State University and Eastern Montana College graduates as helpful in handling people under difficult circumstances were: Psychology (37%), Salesmanship (17%), Principles of Management (15%), Marketing (5%), Student Teaching (3%), Special Topics in Commerce (3%), and Sociology (3%). Extracurricular activities (7%) and work experiences (19%) were credited by a number of respondents for the ability to handle difficult people.

The reports and ratings of the groups surveyed indicate rather clearly that the business graduate is well above average in his understanding of people. Psychology courses were credited most frequently as the source for the development of this ability. Many graduates believed that this ability was gained outside college.

PART VII. Understanding of Society.

The three items included in understanding of society were: (1) ability to approach controversial problems with objectivity, (2) ability to see reasons for social movements, and (3) understanding of government. The mean ratings were calculated and are presented in Table 21. Responses were converted to percentages, and the results are found in Table 22.

TABLE 21: MEAN RATINGS OF EMPLOYERS AND GRADUATES OF BUSINESS GRADUATES' UNDERSTANDING OF SOCIETY

Understanding of Society	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Ability to approach controversial problems with objectivity	3.07	3.16	3.30	3.33
Ability to see reasons for social movements	3.13	3.30	2.81	2.90
Understanding of government--structure, economics, laws as they affect business and the individual	3.00	3.16	3.56	3.41

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

Results indicated, as shown by the mean ratings in Table 21, the four groups believe that the business graduate is "consistently satisfactory" or better in his ability to approach controversial problems with

objectivity. The two groups of employers rated the business graduate as "consistently satisfactory" in his understanding of social movements, but mean ratings of the business graduates reporting suggested that they considered themselves only "usually acceptable." The mean ratings when considered for all four groups would hold that business graduates are "consistently satisfactory" or better in their understanding of government, its structure, economics, and laws as they affect business and the individual.

Item 1. Ability to Approach Controversial Problems With Objectivity. The data in Table 22 reveal that a large percentage of the employers and graduates surveyed believe that the business graduates were able to approach controversial problems with objectivity. All four groups, Eastern Montana College graduates (91%), Montana State University graduates (76%), local employers (75%) and national employers (67%), ranked the business graduate "consistently satisfactory" or higher. Some of the Montana State University (10%) and Eastern Montana College (6%) graduates stated that experiences outside of college were most helpful in approaching controversial problems with objectivity.

The college courses listed most frequently by the Montana State University and Eastern Montana College graduates as providing an objective approach to controversial problems were numerous. Those

TABLE 22: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES OF THE BUSINESS GRADUATES' UNDERSTANDING OF SOCIETY

Understanding of Society	Ratings by Percentages*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Ability to approach controversial problems with objectivity				
5 consistently superior	.0312*	.0937	.0983	.0625
4 sometimes superior	.2656	.1875	.1967	.2187
3 consistently satisfactory	.3750	.4687	.4426	.6250
2 usually acceptable	.2343	.2187	.1311	.0312
1 consistently unsatisfactory	.0156	--	--	--
0 no answer	.0312	--	.0327	--
Ability to see reasons for social movements				
5 consistently superior	.0312	.0312	.0327	.0312
4 sometimes superior	.3437	.1875	.0983	.1875
3 consistently satisfactory	.3281	.4375	.4098	.4687
2 usually acceptable	.2031	.2187	.2131	.2187
1 consistently unsatisfactory	.0156	--	.0491	.0625
0 no answer	.0156	.0312	.0491	--
Understanding of government--structure, economics, laws as they affect business and the individual				
5 consistently superior	.0468	.1250	.1311	.1250
4 sometimes superior	.2031	.2500	.3422	.2500
3 consistently satisfactory	.4531	.2812	.3770	.5000
2 usually acceptable	.2031	.2812	.0819	.0937
1 consistently unsatisfactory	.0468	.0312	--	--
0 no answer	--	--	.0491	--

*Percentages translated from decimal form as 3.12%.

listed most often were: Sociology (33%), Philosophy (8%), History of Western Civilization (7%), History (7%), Psychology (7%), Economics (5%), Current World Problems (3%), Social Problems (3%) and Music (3%).

Item 2: Ability to See Reasons for Social Movements. According to the survey results shown in Table 22, the majority of the business graduates are able to understand the reasons for social movements. Of the four groups surveyed, more employers contacted nationally (70%) reported business graduates at the "consistently satisfactory" level or higher than did Eastern Montana College graduates (69%), local employers (66%), or Montana State University graduates (54%). Nine per cent of the local employers and 6 per cent of the employers contacted nationally did not believe that they had had an opportunity to make valid observations. Fifteen per cent of the Montana State University and 3 per cent of the Eastern Montana College graduates indicated that they had gained this experience outside college.

Montana State University and Eastern Montana College graduates credited college courses taken in the Social Sciences (55%) for their basic ability to see reasons for social movements. The college courses considered most helpful were: Sociology (34%), History (10%), Psychology (8%), Anthropology (5%), Social Problems (5%), History of Western

Civilization (5%), Minority Groups (4%), Humanities (4%) and Economics (4%).

Item 3: Understanding of Government -- Structure, Economics, Laws as They Affect Business and the Individual. The data in Table 22 indicate that employers and graduates responding believe that the business graduate is knowledgeable about the functioning of government. The two graduate groups, Eastern Montana College (87%) and Montana State University (85%), rated themselves more frequently at the "consistently satisfactory" level or higher than did either the employers contacted nationally (70%) or locally (66%). A significant number of Montana State University graduates (34%) felt that they were "sometimes superior" in their understanding of government.

The three college courses listed most often by the Montana State University and Eastern Montana College graduates as those they considered most helpful in understanding government functions were: Economics (35%), Business Law (25%) and American National Government (15%). Additional courses that were listed less frequently were: History (4%), Sociology (4%), Income Tax Accounting (3%) and Democratic Traditions of America (3%).

From the ratings given by employers and graduates surveyed, the business graduate is "consistently satisfactory" in his understanding of

society. There was; however, one item that both graduate groups rated themselves as "usually acceptable." This was in their ability to see reasons for social movements. Courses credited most frequently by graduates for giving them understanding of society were Sociology, Economics and History.

PART VIII. Understanding of Societies Other Than Our Own.

The two categories included in understanding societies other than our own were: (1) sensitivity to values and traditions of other cultures, and (2) general understanding of world economic problems. The results of mean ratings of the four groups are shown in Table 23. Ratings for these understandings were converted to percentages and these percentages are shown in Table 24.

TABLE 23: MEAN RATINGS OF EMPLOYERS AND GRADUATES ON BUSINESS GRADUATES' ABILITY TO UNDERSTAND SOCIETIES OTHER THAN OUR OWN

Understanding Societies Other Than Our Own	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Gradu- ates	E. M. C. Gradu- ates
Sensitivity to values and tra- ditions of other cultures	2.78	3.16	3.21	2.87
General understanding of world problems	2.78	3.13	3.23	2.81

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory

The mean ratings, as shown in Table 23, indicate that Montana State University graduates and local employers believe that Business graduates are "consistently satisfactory" in their sensitivity to values and traditions of other cultures. Eastern Montana College graduates and employers contacted nationally did not share the same opinion, but considered the business graduates "usually acceptable" in this understanding. The same results were reported in general understanding of world economic problems. Montana State University graduates and local employers rated the business graduates "consistently satisfactory," while Eastern Montana College graduates and national employers believe them to be "usually acceptable."

Item 1: Sensitivity to Values and Traditions of Other Cultures.

Data in Table 24 indicate that Eastern Montana College (69%) and Montana State University (66%) graduates recorded a larger number of responses in "consistently satisfactory" category or higher than did either local employers (50%) or national employers (50%) in understanding of values and traditions of other cultures. Many local employers (25%) and employers contacted nationally (21%) noted that they had had no opportunity to observe the graduate under appropriate circumstances. Thirteen per cent of the Eastern Montana College graduates indicated that they believe they were "consistently unsatisfactory" in understanding values and

TABLE 24: RATINGS OF EMPLOYERS AND GRADUATES BY PERCENTAGES ON BUSINESS GRADUATES' ABILITY TO UNDERSTAND SOCIETIES OTHER THAN OUR OWN

Understanding Societies Other Than Our Own	Ratings by Percentages*			
	National Employers	Local Employers	M. S. U. Gradu- ates	E. M. C. Gradu- ates
Sensitivity to values and tra- ditions of other cultures				
5 consistently superior	.0312*	.1250	.0819	.0937
4 sometimes superior	.1562	.1250	.2295	.0937
3 consistently satisfactory	.3125	.2500	.3442	.5000
2 usually acceptable	.2187	.2500	.1803	.1562
1 consistently unsatisfactory	.0625	--	.0163	.1250
0 no answer	--	--	.0655	--
General understanding of world economic problems				
5 consistently superior	.0468	.1250	.1311	.0625
4 sometimes superior	.1250	.1875	.1803	.1875
3 consistently satisfactory	.3437	.2812	.3770	.3437
2 usually acceptable	.2500	.3125	.2295	.3125
1 consistently unsatisfactory	.0781	--	--	.0625
0 no answer	--	--	.0491	--

*Percentages translated from decimal form as 3.12%

traditions of other cultures. A number of Montana State University (8%) and Eastern Montana College (3%) graduates expressed the feeling that this understanding was gained outside college.

The Montana State University and Eastern Montana College graduates pointed out that sensitivity to values and traditions of other cultures was gained in offerings outside the business field. The courses listed

most frequently were: Sociology (28%), History (20%), Anthropology (10%), Economics (10%), Philosophy (4%), Humanities (4%), Social Problems (3%), Minority Groups (3%), Geography (3%), Economic Geography (3%), and Literature (2%).

Item 2: General Understanding of World Economic Problems. An inspection of the data in Table 24 indicates that Montana State University graduates (69%) recorded a higher number of responses in the "consistently satisfactory" category or higher than did either Eastern Montana College (60%), local employers (60%), or employers contacted at the national level (52%). A significant number of Montana State University graduates (13%) felt that they had a superior understanding of world economic problems, and were supported by 13 per cent of the local employers responding in a similar manner. Eight per cent of the national employers maintained that business graduates were "consistently unsatisfactory" in this capacity. This, too, was concurred in by 6 per cent of the Eastern Montana College graduates responding. A number of employers contacted nationally (14%) and locally (9%) disclosed that they had no opportunity to observe business graduates under suitable circumstances.

The college courses which Montana State University and Eastern Montana College graduates believed were most helpful in providing for a

general understanding of world economic problems were: Economics (51%), Geography (11%), Economic Geography (11%), History (6%), and World Geography (3%).

The employers and graduates rated business graduates about average in their understanding of societies other than our own. The courses which the graduates believed were most helpful in gaining this understanding were Economics, Sociology and History.

PART IX. Understanding of Physical Environment.

The three categories dealing with understanding of physical environment were: (1) sufficient background in the physical and biological world so as to understand one's self, and also see the need to live intelligently in one's surroundings; (2) a general understanding of technology, and (3) application of conservation in the wise use of natural resources. The mean ratings of the four groups are shown in Table 25. Ratings for these understandings were converted to percentages and are shown on Table 26.

The mean ratings in Table 25 reveal that of the four groups surveyed only local employers believed that the business graduate is "consistently satisfactory" or higher in the three categories pertaining to understanding of physical environment. The mean ratings for the Montana State University graduates in the category, "sufficient

TABLE 25: MEAN RATINGS OF EMPLOYERS AND GRADUATES OF BUSINESS GRADUATES' UNDERSTANDING OF PHYSICAL ENVIRONMENT

Understanding of Physical Environment	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Sufficient background of the physical and biological world	2.86	3.10	3.05	2.97
A general understanding of technology	2.89	3.30	2.70	2.57
Application of conservation in the wise use of our natural resources	2.95	3.14	2.92	2.85

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory

background knowledge of the physical and biological world" was slightly above the "consistently satisfactory" level, but the two remaining categories were rated "usually acceptable." National employers and Eastern Montana College graduates had mean ratings in all three categories of "usually acceptable."

Item 1: Sufficient Background of the Physical and Biological World.

The percentages in Table 26 disclose some interesting results. Of the four groups, more of the Eastern Montana College graduates (69%) believed that they were "consistently satisfactory" or better in their knowledge of the physical and biological world than did the three remaining groups--local employers (60%), employers contacted nationally

TABLE 26: RATINGS OF EMPLOYERS AND GRADUATES OF THE
BUSINESS GRADUATES' UNDERSTANDING OF PHYSICAL
ENVIRONMENT

Understanding of Physical Environment	Ratings by Percentages*			
	National Employers	Local Employers	M.S. U. Gradu- ates	E.M.C. Gradu- ates
Sufficient background of the physical and biological world				
5 consistently superior	.0312*	.0937	.0491	.0312
4 sometimes superior	.1406	.2812	.1475	.2500
3 consistently satisfactory	.3906	.2187	.2950	.4062
2 usually acceptable	.3281	.3125	.2131	.2812
1 consistently unsatisfactory	--	--	--	.0312
0 no answer	--	.0312	.0655	--
A general understanding of technology				
5 consistently superior	.0781	.0937	.0491	.0625
4 sometimes superior	.1093	.1875	.0655	.1250
3 consistently satisfactory	.2500	.3125	.1967	.1562
2 usually acceptable	.2187	.2187	.2459	.3437
1 consistently unsatisfactory	.0625	.0625	.0491	.1250
0 no answer	--	--	.0819	--
Application of conservation in wise use of our natural resources				
5 consistently superior	.0312	--	.0327	.0625
4 sometimes superior	.1718	.2812	.1147	.0937
3 consistently satisfactory	.2031	.4062	.2950	.3437
2 usually acceptable	.2343	.1562	.1639	.3437
1 consistently unsatisfactory	.0625	--	.0327	--
0 no answer	--	--	.0655	.0625

*Percentages translated from decimal form as 3.12%.

(56%), and Montana State University graduates (48%). A number of national employers (11%) and local employers (6%) were unable to rate the graduates because they did not believe that they had had an opportunity to observe this competency. A large number of Montana State University graduates (23%) expressed the belief that they had gained knowledge of the physical and biological world outside their college experience.

College courses which provided the Montana State University and Eastern Montana College graduates with a sufficient background of the physical and biological world were selected from a number of college disciplines. The college courses selected most frequently were: Biology (24%), Sociology (14%), Psychology (13%), Chemistry (7%), Physical Science (6%), Economics (4%), Geography (4%) and Geology (4%).

Item 2. A General Understanding of Technology, Such as Dams, Power Plants, Highway Construction. An inspection of the data in Table 26 reveals that only local employers (59%) placed a majority of business graduates in the "consistently satisfactory" or higher level in their general understanding of technology. A number of employers contacted nationally (19%) and locally (13%) indicated that they had had no opportunity to observe the business graduates under suitable circumstances. Several of the Eastern Montana College (13%) and Montana State University (5%) graduates maintained that they are "consistently unsatisfactory"

in their understanding of technology; six per cent of both employer groups also believed that the business graduate was "consistently unsatisfactory." Nine per cent of the national employers contacted revealed the feeling that this understanding was not important to the business graduate. A large number of Montana State University (31%) and Eastern Montana College (16%) graduates believed that they had gained their general understanding of technology outside college.

The scarcity of college courses suggested as helpful in gaining a general understanding of technology by the Montana State University and Eastern Montana College graduates would support the high percentage of graduates maintaining that this competency was gained outside college. The courses listed most frequently by those responding were: Physical Science (18%), Geography (18%) and Economics (15%). Many other courses were listed infrequently and were not considered significant.

Item 3: Application of Conservation in the Wise Use of Natural Resources. The data presented in Table 26 show that only local employers (69%) reported a majority of business graduates in the "consistently satisfactory" category or higher in their ability to make wise use of natural resources. A number of employers contacted nationally (25%) and locally (16%) did not believe that they had had an opportunity to observe the business graduates under appropriate conditions.

A considerable number of Montana State University (30%) and Eastern Montana College (13%) graduates credited sources other than college for this competency.

Only a few courses helpful in application of conservation principles were listed by the Montana State University and Eastern Montana College graduates. Of those listed, the college courses reported most frequently were: Conservation (23%), Geography (23%), Economic Geography (11%) and Physical Science (11%).

The college business graduates were rated as only average in their understanding of physical environment. Many of the graduates did not list college courses which had helped them in this category. This would indicate that the business graduate does not gain a great deal of understanding of physical environment from college. Courses most frequently listed were Conservation, Physical Science and Geography.

PART X. Appreciation of the Arts.

The items included under appreciation of the arts were: (1) ability to sense and recognize quality of form in the sights and sounds about us, (2) appreciation of the things we touch, hear and see, and (3) ability to comprehend some of the most profound expressions of human experiences. The results of mean ratings of the four groups are shown in Table 27. Respondents' ratings were changed to the percentages and these

percentages are shown in Table 28.

TABLE 27: MEAN RATINGS BY EMPLOYERS AND GRADUATES OF BUSINESS GRADUATES' APPRECIATION OF THE ARTS

Appreciation of the Arts	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Gradu- ates	E. M. C. Gradu- ates
Ability to sense and recog- nize quality of form in the sights and sounds about us	2.76	3.45	2.50	2.66
Appreciation of the things we touch, hear and see	2.87	3.20	2.74	2.62
Ability to comprehend some of the most profound expressions of human experiences	2.77	3.07	2.68	2.59

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

The mean ratings as shown in Table 27, indicate that the local employers rated business graduates "consistently satisfactory" in the ability to sense and recognize quality of form in the sights and sounds about us, appreciation of the things we touch, hear and see, and ability to comprehend some of the most profound expressions of human experiences. National employers, Montana State University graduates, and Eastern Montana College graduates rated business graduates "usually acceptable" in the three categories.

TABLE 28: RATINGS OF EMPLOYERS AND GRADUATES OF BUSINESS GRADUATES' APPRECIATION OF THE ARTS

Appreciation of the Arts	Ratings by Percentages *			
	National Employers	Local Employers	M.S.U. Graduates	E.M.C. Graduates
Ability to sense and recognize quality of form in the sights and sounds about us				
5 consistently superior	.0468*	.1562	.0163	.0312
4 sometimes superior	.1093	.2500	.0819	.1875
3 consistently satisfactory	.2812	.1562	.2459	.2812
2 usually acceptable	.2187	.1562	.3278	.3125
1 consistently unsatisfactory	.0312	.0312	.0819	.1250
0 no answer	.0312	--	.0491	--
Appreciation of the things we touch, hear and see				
5 consistently superior	.0156	.0937	.0327	.0625
4 sometimes superior	.1718	.2500	.0983	.2187
3 consistently satisfactory	.2812	.1562	.1803	.2187
2 usually acceptable	.2343	.2187	.3278	.2500
1 consistently unsatisfactory	.0312	.0312	--	.0937
0 no answer	.0312	--	.0655	--
Ability to comprehend some of the most profound expressions of human experiences				
5 consistently superior	--	.1250	.0327	--
4 sometimes superior	.1406	.1250	.0327	.1562
3 consistently satisfactory	.2187	.2812	.3442	.2500
2 usually acceptable	.2812	.2500	.2950	.3125
1 consistently unsatisfactory	.0468	.0312	.0163	.0937
0 no answer	.0312	--	.0819	--

*Percentages translated from decimal form as 4.68%.

Item 1: Ability to Sense and Recognize Quality of Form in the Sights and Sounds About Us. Of the four groups reporting; a larger number of local employers (56%) replied in the "consistently satisfactory" level or higher on the ability of the business graduate to sense and recognize quality of form in the sights and sounds about us. The data in Table 28 indicate that local employers also placed a sizable number (16%) of their replies in the "consistently superior" category. An appreciable number of the Eastern Montana College (13%) and Montana State University (8%) graduates believed that they were "consistently unsatisfactory" in this respect. It should be noted that a large number of employers contacted nationally (25%) and locally (19%) indicated that they had had no opportunity to observe the business graduate under appropriate circumstances. Twenty per cent of the Montana State University and 6 per cent of the Eastern Montana College graduates felt that they had gained the ability to recognize quality of form in the sights and sounds about us outside their college experience.

The college courses proposed by the Montana State University and Eastern Montana College graduates as providing the ability to sense and recognize quality of form in the sights and sounds about us were selected most frequently from: Humanities (26%), Literature (15%), Art (10%), Music (6%), Music Appreciation (6%), History of Art (5%), Psychology (5%) and English (5%).

Item 2: Appreciation of the Things We Touch, Hear and See. Of the four groups reporting, local employers (50%) and Eastern Montana College graduates (50%) indicated a greater number of responses in the "consistently satisfactory" levels or higher than did either the employers contacted nationally (47%) or Montana State University (31%) graduates. It should be noted that a large number of Montana State University (30%) and Eastern Montana College (16%) graduates credited experiences outside of college as providing an appreciation for the things we touch, hear and see. A number of employers at the national level (22%) and local level (22%) admitted that they had had no opportunity to observe graduates under suitable circumstances. Nine per cent of the Eastern Montana College graduates felt "consistently unsatisfactory" in the appreciation of the things we touch, hear and see.

The college courses reported most frequently by the Montana State University and Eastern Montana College graduates which provided for an appreciation of the things we touch, hear and see were: Humanities (33%), Art (18%), Literature (15%) and English (8%).

Item 3: Ability to Comprehend Some of the Most Profound Expressions of Human Experiences. Of the four rating groups, only local employers reported a majority of responses (53%) at the "consistently satisfactory" level or higher in rating business graduates'

ability to comprehend some of the most profound expressions of human experiences. Table 28 further shows that Montana State University graduates (41%), Eastern Montana College graduates (41%) and employers contacted nationally (36%) recorded fewer responses at the "consistently satisfactory" level or higher. A large number of employers at the national (25%) and local (19%) levels did not believe they had had an opportunity to make a valid observation of the business graduate in this competency. A significant number of Eastern Montana College graduates (9%) believed that they were "consistently unsatisfactory" in this competency. Twenty per cent of the Montana State University and 16 per cent of the Eastern Montana College graduates felt that they had gained the ability to comprehend profound expressions of human experiences outside college. Eight per cent of the Montana State University graduates failed to respond to this category.

The college courses that were recorded most frequently by the Montana State University and Eastern Montana College graduates in providing the ability to comprehend some of the most profound expressions of human experiences were: Literature (39%), Humanities (18%), Music (9%), Art (5%), English (5%) and Psychology (5%).

Business graduates were given a "usually acceptable" rating in appreciation of the arts except by local employers who rated them as "consistently satisfactory." Courses most frequently given credit for

developing this ability were Humanities, Art and Literature.

PART XI. Satisfying Personal Philosophy.

The items included under a satisfying personal philosophy were:

(1) ability to evaluate critically one's own conduct and to live a consistent and meaningful life, (2) practice of clear and integrated thinking about the meaning and value of life, (3) a desire to achieve, but not at the expense of others, (4) an attempt to seek the most intelligent principles of behavior, and (5) a search for spiritual guidance. The results of mean ratings for the employers and graduates are presented in Table 29. The percentages of the responses for the four groups are presented in Table 30. in decimal form.

According to the data in Table 29, the only category with mean ratings of "consistently satisfactory" for all four groups surveyed was the ability to evaluate critically one's own conduct, and to live a consistent and meaningful life. The item concerning the business graduate's ability to practice clear and integrated thinking about the meaning and value of life received mean ratings of "usually acceptable" from the four groups. The mean ratings for three of the four groups--employers contacted nationally, Montana State University graduates, and Eastern Montana College graduates--indicates that the business graduate is "consistently satisfactory," while local employers rated the business

TABLE 29: MEAN RATINGS OF EMPLOYERS AND GRADUATES OF BUSINESS GRADUATES' SATISFYING PERSONAL PHILOSOPHY

Satisfying Personal Philosophy	Mean Ratings*			
	National Employers	Local Employers	M. S. U. Graduates	E. M. C. Graduates
Ability to evaluate critically one's own conduct, and to live a consistent and meaningful life	3.0	3.06	3.00	3.20
Practice clear and integrated thinking about the meaning and value of life	2.86	2.93	2.96	2.77
A desire to achieve but not at the expense of others	3.00	2.70	3.21	3.18
An attempt to seek the most intelligent principles of behavior	3.08	2.87	3.14	3.04
A search for spiritual guidance	2.43	2.90	2.48	2.50

*5 consistently superior, 4 sometimes superior, 3 consistently satisfactory, 2 usually acceptable, 1 consistently unsatisfactory.

graduate's performance "usually acceptable." The mean ratings for three of the four groups--Montana State University graduates, Eastern Montana College graduates, and national employers--indicates the business graduate is "consistently satisfactory," while local employers rated the business graduate "usually satisfactory" in his desire to achieve but not at the expense of others. Montana State University graduates, national employers, Eastern Montana College graduates indicated they considered business graduates "consistently satisfactory" in their attempt to seek the most intelligent principles of behavior, while local

TABLE 30: RATINGS OF EMPLOYERS AND GRADUATES OF BUSINESS GRADUATES' SATISFYING PERSONAL PHILOSOPHY

Satisfying Personal Philosophy	Ratings by Percentage *			
	National Employers	Local Employers	M.S.U. Gradu- ates	E.M.C. Gradu- ates
Ability to evaluate critically one's own conduct, and to live a consistent and meaningful life				
5 consistently superior	.0156*	.0625	.0163	.0937
4 sometimes superior	.0562	.2812	.1147	.1250
3 consistently satisfactory	.4375	.2812	.2459	.4062
2 usually acceptable	.2343	.3437	.1475	.1562
1 consistently unsatisfactory	.0156	--	--	--
0 no answer	.0312	--	.0491	--
Practice clear and integrated thinking about the meaning and value of life				
5 consistently superior	--	.0625	.0163	--
4 sometimes superior	.1406	.1250	.1311	.1250
3 consistently satisfactory	.4218	.4375	.1967	.1875
2 usually acceptable	.2187	.2500	.1803	.2500
1 consistently unsatisfactory	.0156	.0312	--	--
0 no answer	.0312	--	.0655	--
A desire to achieve but not at the expense of others				
5 consistently superior	.0468	.0312	.0491	.0625
4 sometimes superior	.1875	.1562	.1475	.1250
3 consistently satisfactory	.2812	.3437	.2131	.4062
2 usually acceptable	.3437	.3750	.0983	.0625
1 consistently unsatisfactory	.0156	.0625	.0163	.0312
0 no answer	.0312	--	.0819	--

TABLE 30. (Continued)

Satisfying Personal Philosophy	Ratings by Percentages			
	National Employers	Local Employers	M. S. U. Gradu- ates	E. M. C. Gradu- ates
An attempt to seek the most intelligent principles of behavior				
5 consistently superior	.0312	.1250	.0163	.0312
4 sometimes superior	.2500	.0937	.1967	.1250
3 consistently satisfactory	.2968	.2812	.1967	.3750
2 usually acceptable	.2500	.4687	.1475	.0937
1 consistently unsatisfactory	--	--	--	.0312
0 no answer	.0312	--	.0819	.0312
A search for spiritual guidance				
5 consistently superior	.0156	.0937	.0327	.0312
4 sometimes superior	.2187	.0625	.0491	.0312
3 consistently satisfactory	.2812	.2187	.0983	.1250
2 usually acceptable	.0312	.3125	.1803	.1875
1 consistently unsatisfactory	.1093	--	.0819	.0625
0 no answer	--	--	.1147	--

*Percentages translated from decimal form as 1.56%.

employers rated business graduates "usually acceptable." The mean ratings for all four groups denote that the business graduate is "usually acceptable" in his search for spiritual guidance.

Item 1: Ability to Evaluate Critically One's Own Conduct, and to Live a Consistent and Meaningful Life. Data reported in Table 30

indicated that three of the four groups, local employers (63%), Eastern Montana College graduates (63%), and employers contacted nationally (61%), recorded an appreciable number of responses at the "consistently satisfactory" level or higher in the ability of the business graduate to evaluate critically his own conduct and to live a consistent and meaningful life. A sizable number of Montana State University graduates (43%) indicated that this ability was gained outside college, and this reduced considerably the number of responses they placed at these levels.

Twenty-two per cent of the Eastern Montana College graduates also believed that this ability was learned elsewhere. Eleven per cent of the national employers revealed they felt inadequately prepared to rate the graduate because they lacked the opportunity to observe him under appropriate circumstances.

As was stated in the preceding paragraph, a large percentage of the graduates surveyed stated that the ability to evaluate critically one's own conduct and to live a consistent and meaningful life was gained in training outside of college. As a result, the number of courses helpful in this respect listed by the Montana State University and Eastern Montana College graduates was limited. The college courses submitted most frequently by the graduates were: Philosophy (31%), Psychology (23%), Literature (11%) and English (6%).

Item 2: Practice of Clear and Integrated Thinking About the Meaning and Value of Life. According to the data in Table 30, both the local employers (63%) and the employers contacted nationally (57%) reported a larger number of responses in the "consistently satisfactory" level or higher than did either the Montana State University (34%) or Eastern Montana College (31%) graduates. The large number of Eastern Montana College (44%) and Montana State University (41%) graduates who indicated that the understanding to practice clear and integrated thinking about the meaning and value of life was not achieved in college was the main reason for the lower percentages of their responses shown in the "consistently satisfactory" or higher ratings. A number of employers did not feel that they could answer this item because they had not had the opportunity to observe business graduates under suitable circumstances.

The number of courses listed by the graduates was meager due to the large percentage of graduates implying that the ability to practice clear and integrated thinking about the meaning and value of life was gained outside college. Of those reporting, 50 per cent credited offerings in Philosophy for this understanding. An additional 30 per cent felt that Psychology had been helpful.

Item 3: A Desire to Achieve, but not at the Expense of Others.

The data in Table 30 show that three of the four rating groups gave a

majority of responses in the "consistently satisfactory" level or higher in the business graduate's desire to achieve, but not at the expense of others. Of the four groups, Eastern Montana College graduates (59%), gave more responses at this level than did local employers (53%), national employers (52%), and Montana State University graduates (41%), at the "consistently satisfactory" level or higher. A large number of Montana State University graduates (39%) credited outside experiences for this understanding. This is the primary reason for the fewer responses of "consistently satisfactory" or higher. An additional 8 per cent of the Montana State University graduates did not answer this item. A large number of Eastern Montana College graduates (31%) maintained that this value was gained outside college.

The number of Montana State University and Eastern Montana College graduates who listed college courses they considered helpful in the development of a desire to achieve but not at the expense of others was scanty. The college courses listed most frequently by those responding were: Ethics (23%), Psychology (23%), Sociology (11%), and Humanities (11%).

Item 4: An Attempt to Seek the Most Intelligent Principles of Behavior. A review of the data listed in Table 30 indicates that a greater number of national employers (58%) rated business graduates

"consistently satisfactory" or higher in their attempt to seek the most intelligent principles of behavior than did Eastern Montana College graduates (53%), local employers (50%), and Montana State University graduates (41%). A significant number of Montana State University (36%) and Eastern Montana College (31%) graduates asserted that they had gained this understanding outside college. A number of national employers (13%) did not rate the business graduates as they felt that they had not had an adequate opportunity to observe graduates under appropriate circumstances.

Montana State University and Eastern Montana College graduates listed very few college courses as sources for providing an understanding of the most intelligent principles of behavior. The college courses listed most frequently by the graduates were: Philosophy (28%); Ethics (17%), and Psychology (17%).

Item 5: A Search for Spiritual Guidance. On the basis of the data in Table 30, national employers recorded a majority (52%) of ratings at the "consistently satisfactory" level or higher. A search for spiritual guidance, as indicated by a large number of Eastern Montana College (56%) and Montana State University (44%) graduates, was experienced outside college. A number of national employers (11%) believed that the business graduate was "consistently unsatisfactory" in this respect;

and this feeling was shared by 8 per cent of the Montana State University and 6 per cent of the Eastern Montana College graduates. A large number of employers contacted at the national level (33%) and local level (32%) had not had opportunity to observe the business graduates under appropriate circumstances.

Courses considered helpful in a search for spiritual guidance by Montana State University and Eastern Montana College graduates surveyed were scarce because of the high percentage of graduates who believed that a search for spiritual guidance was gained outside college. The few courses listed by the graduates were: Ethics, Philosophy, History, Literature, Humanities, History of Religion and Religion.

Business graduates were rated somewhat above average in their personal philosophy. A large number of these graduates believed that this philosophy was developed outside college. Those who credited college courses with developing a personal philosophy listed Philosophy and Ethics most frequently.

Summary

Questionnaires were sent to national and local employers and to two groups of college business graduates with the request that they rate college business graduates in the various areas in general education. The mean ratings of all four groups show that the business graduates

received the highest ratings in their ability to find information and their lowest rating in their appreciation of the arts. Each of the eleven categories is listed in the order of the averages of mean ratings in which the graduates were rated by themselves and by employers:

1. Competence in finding information
2. Understanding of people
3. Competence in oral communications
4. Ability to think creatively
5. Competence in solving problems
6. Understanding of society
7. Competence in written communication
8. Understanding of societies other than our own
9. Understanding of physical environment
10. Satisfying personal philosophy
11. Appreciation of the arts

A study of the mean ratings by each of the four groups show surprising similarities in the ratings by the two employer groups and in the ratings by the two college groups. Both national and local employers rated the business graduate highest in his ability to find information, second in oral communication, and third in the ability to think creatively. Both Montana State University and Eastern Montana College graduates rated themselves highest in understanding of people and second in finding information. Both graduate groups gave themselves the lowest rating in appreciation of the arts and second lowest in understanding of physical environment.

Graduates were asked to list college courses which they believed had helped them to develop these competencies. Courses listed most often in the total survey were English, Psychology, Economics, Sociology and Speech. Surprisingly, various business courses were listed often as a help in developing these assorted abilities though the categories were selected from outside the business area. Some graduates felt that they gained many of these competencies from sources other than college. Outside sources listed most often were pre-college schooling, employment and military service.

CHAPTER VI

EMPLOYERS' CHARACTERIZATIONS OF ADAPTATIONS OF THE BUSINESS GRADUATES TO THEIR EMPLOYMENT

The purpose of this study was not only to gain insights into present programs, but to obtain data from employers of the graduates that could prove enlightening in curriculum development. Three open-end questions were included in the survey sent to employers to allow the respondents greater freedom to elaborate on strengths and weaknesses of college trained business students and to make recommendations for curriculum improvement. Ninety-six employers returned completed questionnaires. Some did not answer every portion of the questionnaire while others listed more than one item in answer to some questions. The responses were counted, grouped as to similarity of idea, and percentages were compiled for each category. Selected representative statements relating to various categories were selected to illustrate the various ideas presented. An attempt was made to retain the statements of the employers as they were submitted. This was not always possible as occasionally it was necessary for clarification to add a word or two.

Employers' Appraisal of Strengths of College Business Graduates

Question 1. In observing personnel within your employment, what do you believe are the main strengths exhibited by college trained personnel?

There were 96 responses to this question. The employers

responding judged the main strengths of the college trained business graduates to be: (1) overall general knowledge, (2) the ability to recognize and analyze problems, (3) the ability to communicate, (4) the ability to understand and work with people, and (5) adequacy of technical training. Listed less frequently were: ability to grasp concepts, adaptability, creativity, confidence and ambition.

Broad General Knowledge. The overall general knowledge that the college student possesses at the completion of his college training was listed most frequently (20%) as a strength by employers. Several statements on the general knowledge of the college graduates that were representative of the employers' comments were:

1. The college graduate displays a broad knowledge of many academic disciplines.
2. The ability to recognize and analyze problems as well as the general knowledge of many academic disciplines is apparent.
3. The graduate usually accumulates a wide range of basic information by the time he is employed.
4. With this foundation the transition from student to producer can be made quickly.
5. The graduate has an exposure to a wider range of information and usually has a better mental adjustment to life.

The statements of the employers indicated that they felt the college

business graduate exhibited an extensive knowledge of many disciplines and with this knowledge made the transition from student to employee readily.

Ability to Recognize and Analyze Problems. The employers gave wide support to the graduates' ability to recognize and analyze problems. It was the second most frequently (16%) listed strength. The following are just a few of the remarks by employers affirming this position:

1. The graduate has the ability to see a problem, understand it, develop a plan, and solve it.
2. They have the ability to analyze their approach to creative problem solving.
3. The young graduate is equipped to attack daily problems with an open mind and has the ability to resolve these problems with the right course of action.
4. Graduates have the ability to recognize and analyze problems.
5. They have the ability to think through difficult problems.

Employers acknowledge that the college graduate has vision, vigorously attacks problems with a fresh approach, and has the determination to complete assignments.

Ability to Communicate. It was interesting to discover that the ability to communicate was listed repeatedly (11%) by employers in the

open-end questions not only under strengths but also under weaknesses. Awareness of need for improvement of the ability to communicate was also noted under suggestions for curriculum improvements. Employers who contended that the ability to communicate was a strength offered these remarks:

1. The college graduate has the ability to grasp and communicate ideas.
2. They exhibit good written communication and reading comprehension.
3. The student is able to communicate ideas and follow written bulletins and instructions.
4. The graduate is at home around highly educated people and therefore more secure in talking to associates with more experience.
5. They have the ability to communicate effectively under sound management principles.
6. They have the ability to express themselves in oral and written communications.

Employers indicated quite clearly their belief that the graduates feel confident in the many situations their employment presents because of their ability to communicate in such important areas as handling bulletins and instructions, in dealing with sound business principles, and in adjusting to educated people.

Ability to Understand and Work with People. Many of the responses by employers (10%) indicated that the college graduate in business performs at a level of competency in his ability to understand and work with people that is acceptable to employers. The following employers' remarks reveal the validity of this opinion:

1. The graduates handle themselves well in pressurized situations, are generally sensitive to human relations, and want to be judged on their ability to motivate others.
2. They tend to possess a greater degree of open-mindedness, a greater ability for articulation of needs and general observation. They are a great deal "more enlightened" than their older counterparts.
3. The college graduate has the ability to get along well with people in all levels of the company.
4. They possess the desire for and a skill in leadership.
5. The college graduates seem to show great flexibility, a willingness to work for achievement, and an interest in people and their problems.
6. They are normally a socially mobile group. They make friends easily and are relaxed in group conversations and discussions.
7. The graduate has an understanding of human relations and knows how to deal effectively with people.
8. They have the ability to deal intelligently with the people and the environment around them.
9. College graduates have a greater appreciation for human relation aspects of employment situations.

10. The graduate has an alertness and understanding in anticipating critical situations or problems and an understanding of people and their reasons for behaving in different ways.

According to the employers the graduates are sensitive to human relations. They exhibit understanding, flexibility and open-mindedness, and are therefore generally effective in dealing with people.

Adequacy of Technical Business Training. Employers in general reported favorably about the business graduates' technical training; approximately 10 per cent listed it as a strength. There were very few complaints about this specialized preparation. Employers pointed out that the graduates showed depth of knowledge in their technical field.

This is verified by the following remarks:

1. Technical skills are usually the main strength of the college graduate.
2. Students are well-trained in theory.
3. In our business, where we use a large percentage of technically trained people, the main strengths of the college graduate appears to be specialized skills and knowledge.
4. Depth of knowledge in the area of specialization, and strength in analyzing and communicating this information is obvious with the college trained person.
5. The college graduates are well-trained in their field and related technical fields.

6. The college graduate is generally better prepared for changes in technology.

Employers believe that business graduates exhibit a high degree of skill in their specialized fields and competence in applying this knowledge.

Ability to Grasp Concepts. A number of employers (9%) expressed the belief that college business graduates have the ability to grasp concepts. Graduates can solve problems or initiate new ideas and fit these into the total business picture. The following statements extracted from the employers' questionnaires emphasize this belief:

1. The student has the ability to see an organization as a whole rather than an individual unit, and the ability to adapt and learn quickly.
2. Normally the graduate can grasp an "overall concept" more readily.
3. The graduate has a desire to work, learn, and cooperate, and a broad understanding of the reasons behind our economy.
4. He has the ability to grasp concepts and communicate ideas.
5. The college graduate has the ability to think in greater depth. He is always looking for new and better ways to do things.
6. The student has better comprehension and does a better job in interpreting the literature.

7. The college graduate is generally of a higher intelligence and has the basic potential to accept greater responsibilities.

These statements of employers point out rather clearly their concession that the college graduate in business can make quick, accurate decisions that display a high degree of intelligence and a depth of thinking.

Ability to Adapt to Various Situations. Although the employers as well as graduates indicated in their questionnaires that the college training sometimes falls short in preparing the student for the actual business world, about 8 per cent of the employers reported that business graduates adapt swiftly and enjoy the challenge of new experiences, as shown in several of their comments:

1. The graduate is interested in finding himself in a new environment and has the ability to do so.
2. He has the ability to adapt to his environment--the people, the problems, and the other adjustments that are necessary.
3. He is flexible to newness.

The rapidity with which business graduates adjust to new environments is commendable according to 8 per cent of the employers.

Ability to Think Creatively. Some employers (9%) were

complimentary about the creativity of the business graduate. Employers expressed the belief that graduates were impatient with the existing state of affairs and were constantly searching for better ways to improve upon present practices. Statements taken intact from the questionnaires of the employers which would confirm this belief are:

1. The graduates from the field of business have the ability to think creatively in areas of interest; they are impatient with the status quo and desire to improve the methods and techniques of business.
2. They display creativity and flexibility of thoughts. This is so badly needed in business.
3. They have the ability to generate enthusiasm and suggest new ideas, thus contributing a more progressive attitude to the new area in which they work.
4. They have the ability to think creatively in their field of specialization.

Employers asserted that creativity was a strength exhibited by the business graduate; but they also warned that the graduate was impatient and suggested that occasionally the graduate confused creativity with a desire to make unnecessary changes.

Ability to Project Confidence. The feeling expressed by several employers (5%) about the confidence demonstrated by graduates show that college training gives students a self-assurance which helps them immeasurably in business. Examples given to show self-assurance were:

1. Initiative, creativity, confidence, inquisitiveness and a desire for responsibility are a few of the desired qualifications possessed by the college-trained student.
2. The college graduate has confidence--"they keep their cool."
3. The student displays a certain self-confidence. This would appear to be based more upon having recieved the degree rather than upon having been "educated."

Employers value the college training because they believe it helps develop necessary confidence. The fact that the graduates have received their degree seems to add to this self-assurance.

Desire to Achieve. The comment made by about 5 per cent of the employers was that the college graduate was ambitious and impatient. Employers did not object to either if the graduates were willing to make the necessary effort to achieve their goals. The following statements were made by the employers to indicate their belief that the desire to achieve was a strength of the college graduate:

1. Good basic awareness of company's philosophy. College graduate shows an eagerness to learn and develop.
2. The college student is constantly seeking higher goals.
3. The student is willing to put in time on his training to obtain his objectives.
4. The college trained person has the ability to think on his feet and generally has the desire for bigger and better things.

5. College graduates seem to show great flexibility, a willingness to work for achievement, and an interest in people and their problems.
6. The college student has a strong desire to be challenged by meaningful work experiences that will lead quickly to positions of responsibility.
7. The student has ambition to be a professional in his area.
8. The college graduate has the drive to succeed and the desire to progress.

These comments by employers indicate that the business graduate is willing to work but wants recognition and compensation for his efforts.

Employers' Appraisal of Weaknesses of College Trained Personnel

Question 2. In observing the personnel within your employment, what do you believe are the weaknesses exhibited by college trained personnel?

There were 94 responses to this question. The weaknesses of the college graduates in business noted by employers were summarized under the following categories: desire to progress too rapidly, attitude of superiority, need for improvement in communication, inability to put knowledge to practical use, unwillingness to accept responsibility and excessive concern with security, dislike of routine details, and disinterest in furthering education. Each of these is treated in one of the following sections.

Desire to Progress too Rapidly. Employers considered the desire to progress too rapidly the greatest weakness of the graduate. Twenty-seven per cent of the responses listed this complaint. The following comments of the employers describe their feelings about the impatience of the graduates:

1. Impatience is the greatest weakness. Young men fail to realize that while they may be handling details similar to senior officers, they are not making similar decisions. Rather, the young men rely on senior officers for mature decisions.
2. Because of the lack of experience, most college graduates are impatient, looking for success, position, or recognition without the willingness to put in the necessary time to learn those details that are necessary to bring about these successes.
3. A desire to move too rapidly in an organization before acquiring the necessary background.
4. Usually they are impatient for more money and reluctant to wait for experience to give them rewards later on.
5. It has been noticed that on occasions, college-trained personnel lack the patience in obtaining promotions, and they do not realize that experience is a necessary part of their career growth.
6. Unwillingness to devote the time and energy in mastering the technical vocabulary and skills necessary in any business prior to the assignment of responsibilities.
7. A desire to progress too rapidly for the climate and employment situation.
8. A reluctance to begin in management at the ground level.

after completing courses in managerial policy and decision making.

9. Occasionally unrealistic about the time-table learning on the job required before a new man is given management responsibility.
10. In my opinion college graduates seem to show too much anxiety for advancement.
11. We have found that some college graduates can be excessively impatient. Their ambition and desire for things in our affluent society tend to mitigate against a well developed program of training on the job. It appears they are overly anxious for rapid advancement up a "career ladder" so they can reach to top positions in a minimum of time.
12. Graduates believe a degree qualifies them for management positions immediately.
13. Lack of realization that Rome was not built in a day.

From the remarks made by the employers one must conclude that the business graduate is overly concerned about reaching the higher levels of responsibility and compensation with a general disregard for background and the developmental experience usually needed.

Attitude of Superiority. Closely associated with impatience and discussed frequently by the employers (17%) was the complaints that graduates have a tendency to display a feeling of superiority toward fellow workers with less education. Remarks taken from the questionnaires which point out this attitude of superiority are:

1. The weakness of intellectual pride in which the graduate tends to discredit the opinions of non-college graduates.
2. Superiority attitude; lack of "common sense"; a desire to start halfway up or at the "top of the ladder"; overly concerned with the monetary rewards of a job or career.
3. Excessive opinion of their ability, lack of practical application, and a lack of business acumen.
4. Aspirations exceed abilities.
5. Their own feeling of what they think of their qualifications. Everyone wants to be a manager in six months, for example. In some situations incredible naivety is witnessed.
6. The student believes that a college education necessarily means they are more intelligent than those without college training.
7. Students often believe they are more highly qualified than they really are.
8. The area in which we occasionally encountered difficulty is in the attitude of a very small number of people we hire who think that their college education will automatically guarantee their success.
9. College students have a problem in attitude. They feel their credentials should carry them while we desire results. Graduates think they are superior and feel they should be entitled to a much higher salary even before they learn the business.
10. Some graduates believe they do not need to work to their potential because of their education.
11. They give one the impression that they have a degree-- they have it made.

Some graduates show an attitude of superiority about their own abilities, and toward employees without college training. Employers expressed some irritation with the attitude of some graduates who felt that their college education automatically guaranteed their success.

Need for Improvement in Communication. The comments by the employers support the idea that there is a real need for additional training in written and oral communications. Inability to communicate was reported as a major weakness by a sizable group of employers (16%). This is a familiar problem to the educator, and in the opinion of the writer the following complaints by employers are legitimate:

1. The graduate has too high a degree of being "test oriented" rather than being well rounded and flexible. They can handle multiple choice and true and false problems but have difficulty in expressing themselves in easy spoken style.
2. Inability to communicate thoughts and ideas to others
3. The main weaknesses we have found in technically trained people are writing, communicating, and the need for more liberal arts type of training.
4. In a majority of instances, their ability to communicate or to make thoughts and feelings understood is lacking. This could be attributable to their newness within the organization and their timely lack of self-confidence.
5. Lack of communications skills at the time they graduate, primarily in organizing and expressing their ideas. These skills can be learned on the job; however, the

student who masters them in college is at a distinct advantage at the outset of his career.

6. Inability to translate theory to practice, and the need to be better communicators.
7. Need for better expression grammatically on written correspondence.

Employers recognize the value of good communicative skills in their employees. They find that this skill is sometimes lacking in technically trained people. They also feel that communications training can be achieved on the job but prefer the graduate who already possesses it.

Inability to Put Knowledge to Practical Use. The employers complained that some graduates are not adept at putting knowledge to practical use. According to 15 per cent of the employers, too many business graduates have theoretical knowledge with no practical experience and little understanding of how to apply theory. Typical complaints were:

1. Unrealistic attitude as to what constitutes success and how we achieve it is a weakness of the business graduate.
2. Their lack of basic understanding of business and its functions. Too many have a theoretical knowledge and no practical application.
3. There is a lack of understanding for the significance and importance of experience.
4. At times a lack of common sense and practical ability. Frequently the student is too idealistic and not realistic.

Often too much theory and not enough practical experience.

These employer comments on the unrealistic attitude of business graduates indicate a strong desire for graduates who are capable of putting theory to practical application. They believe that some graduates are too idealistic in their thinking, and that there is a need for a more practical approach to problems.

Unwillingness to Accept Responsibility and Excessive Concern with Security. Originally these two items were listed separately, but a review of the responses and conversations with local employers indicated they were closely related. A gentleman who had spent many years with a large concern in many positions, one of which was as a personnel recruiter, lamented that few of the young people interviewed had enough of the "gambling instinct." It was refreshing when he met a young person who was not only willing to gamble to succeed but was not frightened at the possibility of failure. He felt that young people were not willing to accept starting positions without security assurance and monetary incentives, even though the ultimate opportunity offered a chance of greater rewards. Approximately 7 per cent of the respondents listed this as a weakness. Statements gathered from the questionnaires which support these complaints are:

1. Almost without exception the graduates are reluctant to venture into new and unknown areas but have a tendency to skirt unfamiliar things. They want to work with "known" items. College should whet the desire to explore new areas--not retard! This is one reason for the extensive training programs developed by major corporations.
2. The need for a real interest and dedication to work. Many are more interested in money than in job success, and are reluctant to participate in community activities for the company and accept broadening activities outside of their field of specialization.
3. Some are just too young to settle down and apply their knowledge. Others have a tendency to be shy and back away from problems for which they possess the ability to resolve.
4. The graduates demand that business take care of every facet of their lives.
5. Unwilling to gamble for a better life.
6. Failure to recognize that a college degree is not a "free pass" to everything, and that industries exist only if a profit can be made. They must understand and give some consideration for the investment made in them by the employer. Less emphasis on fringe benefits and more on what they can do for the company.

Employers charge that the graduate is lacking in zest for taking chances, exploring new and unknown fields, and taking a risk in order to make a gain. They feel the graduates seem to be seeking too much security and that they want all the fringe benefits but sometimes shy away from giving the company the extra effort and initiative.

Dislike of Routine Details. Employers pointed out that there was a

tendency by the graduate to measure a task against his position, or a more accurate measurement, his salary. The graduate has been quick to remind his employer his salary and position do not warrant menial jobs. The employer is not in complete disagreement, but has indicated that on occasion such jobs were necessary. He has felt that if the graduate is sitting around with little to do at a particular time his services are too expensive. About 7 per cent of the employers listed this attitude about the "menial" as a weakness of business graduates. Typical comments made by employers were:

1. Their inability to understand and appreciate the need for personal records necessary in the completion of business transactions.
2. Inability to follow up on details and matters of importance. If the details do not appeal to them, they avoid them.
3. They do not like detail work. They want to be a manager without working for it.
4. Will not take time to write clearly so that interpretation by others is impaired and leads to costly mistakes.
5. Not concerned with spelling; if in doubt will not check but depend on others to make corrections. This leads to embarrassment and errors.

Employers want appropriate attention to detail by their employees. They expect accuracy in record keeping, clear and concise written communications, and greater care with small things such as correct spelling

so that there will be no misinterpretation.

Disinterest in Furthering Education. Employers concede that the business graduate is generally prepared for his first position, but that occasionally he shows a disinterest in acquiring the additional knowledge needed for promotion. Certain employers have indicated that some graduates fail to realize that college preparation has merely opened the door for them and that to progress on the job they must acquire new knowledge and skills. About 5 per cent of the respondents complained of this. The two employer comments that follow indicate that they are concerned with keeping the employees current in their knowledge and with helping them to grow on the job:

1. The inability of the college business graduate to understand that education does not cease when the degree is acquired.
2. The inability of the student to realize that although he has a high degree of the "why" of education he lacks the understanding that he must learn the "how" before he is completely educated.

These and other comments indicate that employers are fully aware that education must be a constant process in the rapidly changing world. It is common practice for companies to encourage employees to continue their formal education.

Employers' Recommendations for Curriculum Changes in
College Business Training

Question 3. The need for improving curriculum is a continuous process. If we in the field of education are going to succeed we need suggestions and criticisms from people in business. What suggestions and criticisms would you make for improving the training of business students?

The employers offered many criticisms and suggestions for curriculum improvement. There were 96 responses to this portion of the questionnaire. The largest number of responses recommended changes in the general education portion of the curriculum. These suggestions were grouped under (1) increasing liberal arts requirements; (2) need for improvement of training in communication; (3) need for learning experiences which encourage actual problem solving; and (4) need for increasing mathematics requirements.

Other criticisms and suggestions were (1) need for an internship for business students as part of their undergraduate program; (2) use of resource people from the field of business; (3) business experience as a requirement in preparation of business faculty; and (4) realistic teaching for the business world. Each of these suggestions is discussed individually in one of the following sections.

Need for Increasing General Education Requirements. The employers' suggestions for improving curriculum included many

recommendations regarding the need for increasing general education requirements. Some of these were recommendations for putting more emphasis on liberal arts courses as a whole. Others were aimed at specific disciplines such as communications, mathematics, and problem solving. Approximately 38 per cent of the respondents made some suggestions regarding general education courses. When all of these recommendations were grouped together, they made up the most frequently listed suggestions for curriculum improvement. However, the comments about the different disciplines will be discussed separately.

Recommendations for extending the liberal arts requirements without reference to specific disciplines included the following comments:

1. There is specific training for some fields of endeavor in business, but it is my feeling that more liberal arts students are desired than those with specialized backgrounds. I think particularly today, a person should have a broader exposure to make him able to do more and varied jobs.
2. Accelerate the "business principles" part of the curriculum and use additional time in broadening the liberal arts part of the program.
3. Too many business majors are narrow individuals in their educational backgrounds. A strong liberal arts background is very necessary.
4. Curriculum aimed at life in general not facts in particular--human relations, economics, psychology, and the arts.

About 8 per cent of the employers answering the questionnaire

listed more emphasis on liberal arts without reference to specific courses as a suggestion for improving the curriculum. These employers felt that this background would give the graduate adaptability to a greater variety of jobs.

Need for Improvement of Training in Communications. Over 13 per cent of the employers recommended that greater emphasis be placed on communications in the curriculum of the business students. This recommendation was supported by the following comments:

1. A greater emphasis and concentration on effective oral communication for group meetings, speeches, and similar situations.
2. Institute a stringent curriculum in communications, both in written and oral.
3. More attention to communicating arts in actual writing or printing, in actual speaking, in expressions of the written and spoken word, and greater emphasis in creative writing and speaking.
4. People seem to be well trained in skills, but I've noticed many cases where the business, engineering, and accounting graduates are very poorly trained in public speaking and expressing themselves on technical problems to a group, in meetings, and similar situations.
5. Communications, written and oral, should be introduced through all four years of the undergraduate program.
6. Teach them how to write a detailed, precise letter and how to present a project to management.

7. Require evidence of verbal and written communications before awarding a degree.

From these statements it is apparent that employers expect greater skill in communications from college trained employees. They want employees who are competent in public speaking and who are able to express themselves on technical problems before a group. They demand skill in written communication and even go so far as to recommend that proficiency in oral and written communications be one of the requirements for awarding the degree.

The Need for Learning Experiences Which Encourage Actual Problem Solving. Employers asserted the need for students to understand that the decisions they make will determine the solutions. Approximately 10 per cent of the respondents stressed the need for developing an orderly, rational, problem-solving ability in business students. The employers made the following suggestions as to ways to improve courses in problem-solving.

1. Less glamour in "management" courses and more problem-solving situations and use of cooperative training where applicable.
2. All business students should be required to take enough courses in problem-solving and public speaking to be more efficient in applying their theory.

3. Curriculum can be improved first in the area of communications and problem-solving.
4. We would suggest more of an emphasis on group dynamics and additional training in management skills.
5. Somehow structure the classes so that student review case studies from lower levels of management point of view as well as looking at things as if they were officers in a company.
6. After adequate theory has been presented, I believe more courses in problem-solving on a case study basis should be offered. Some place we must find a way to bridge the gap between theory and its practicability in solving every day problems.

Problem solving and decision making in business are pointed to as complicated processes which call for background information and application of broad principles. Employers suggest that students be given more training in orderly analysis of problems and rational decision making based on facts and principles.

Need for Increasing Mathematics Requirements. A few of the employers (7%) recommended that the mathematics requirements for business students be increased. They made the following observations:

1. Depending on the school, I have found that many students are not given enough of a math background for the business world of today.
2. For the business students more quantitative subjects would be desirable, particularly in the upper division.

3. Greater emphasis on statistics and ability to solve the rate of return analysis.

From their comments employers expect college trained business personnel to be expert in oral and written communications. Employers want graduates to be capable of analyzing problems and of making decisions based on a rational study of the facts. They expect some background in advanced mathematics.

Need for an Internship for Students as Part of Their Undergraduate Program. The most frequently listed single suggestion for curriculum improvement was the inclusion of actual work experience in the undergraduate program for business students. Over 22 per cent of the employers feel that this training is a prime need in the preparation for a business career. They clarified this need with the following comments:

1. Suggest all business students be required to obtain 6 to 12 months of practical work experience before entering senior year.
2. Give more "on the job" type training--having practical application courses of the theories of business learned in most business courses.
3. Integrate a great deal more work experience into the advanced learning curriculum. Develop and learn the book theory but then find out if it is practical, work it, test it, and if necessary change it. They seem to be especially weak in this. It is quite surprising to many graduates to find out that their book knowledge is only a basic beginning for real growth.

4. Provide an opportunity for internship so work experience arrangements can be made during the senior year.
5. Include some type of business internship where the student can apply his knowledge of theory to actual practice.
6. More business-industry-education coordinated activities to make theory more meaningful from the practical standpoint. This could be accomplished by joint seminars and more empirical studies, to collect data directly from the work environment.
7. In addition to academic preparation which should teach a student to think and solve difficult problems, something should be taught about goal setting. Most young people do not know what they want or how to get there. They need realistic, practical exposure to people, other than educators, who know what the world is really like. Too much college education is book learning. More should be interaction with people other than educators. Educators should make an effort to leave the "halls of ivy" to see what really happens in business, government, science, etc.
8. Business students should have an apprentice program. Just as the prospective teacher must "practice teach" the business student should spend some "practice time" in business.
9. Practical work experience along with classroom--working a few hours in a business each week.
10. Actual clinical training in management groups of large organizations similar to student teaching programs for teachers.

Employers strongly support the idea of an internship of practical work experience for students in training. They suggest not only practical

work but also empirical studies to collect data from the work environment. This would appear to be a very significant approach which would give special purpose to the work experience and also aid the educator and the businessman.

Use of Resource People from Business. Closely associated with the suggestion of an internship program was the recommendation that people from the field of business be invited on campus as guest lecturers, and for seminars and workshops. About 15 per cent of the employers suggested this. Statements given were:

1. More realistic pictures of "how it really is" in business and industry through face to face contacts with industry management people.
2. Have lecturers from business as a regular part of their study programs.
3. Utilize seminars, conferences or workshops with young businessmen in many fields now at middle-management level to explore practical application of academic instruction to changing needs of the future.
4. Exploration jointly with business men of the psychological pressures inherent in the shift from college to business environment.
5. Expose the students to businessmen in different fields in order that the college students do not get the illusion that success is immediate, as well as to learn other problems management people encounter that are not necessarily discussed in text books or classes.

6. A way should be found to expose college students on the business administration track to the everyday operation of a business. Most college instructors have had little practical experience in the business world, and even those that have are probably not up to date as to new techniques. I am sure it would be difficult to ask businessmen to open their doors to college students to expose them to some of the day-to-day problems not covered in textbook theory; however, it would seem that some methods could be devised to have businessmen involved in various phases of activity, lecture to students specifically on some of these non-theoretical situations that they have learned through experience.

About 15 per cent of the employers mentioned that they would like to see closer cooperation between the college and business people in order to give the student a more accurate picture of actual business practices. They suggest seminars, conferences, workshops and guest lecturers which involve both students and business people.

Business Experiences as Necessary Preparation of the Business Faculty. Approximately 11 per cent of the employers who answered the questionnaire voiced criticism of the business school faculties for their lack of firsthand business experience and their lack of up-to-date knowledge of business practices. The following are some representative comments regarding this lack of business faculty contact with the business world:

1. Business professors and/or teachers should have either

practical or firsthand business and/or industrial experience.

2. Curriculum should be constantly up-dated and revised as necessary to keep abreast of the changing conditions in the business world. Too many times members of the faculty have little if any contact with the business world and as a result, their materials, presentations, etc., is not current enough to meet the needs of industry today.
3. Most frequently the businessman and the professor inhabit two worlds, each isolated and almost foreign to the other. I'd like to see some key industry people become "advisers" to curriculum planners and professors become "advisers" to businessmen. All too often a study guide or reference work used by a student has been written by someone who is totally unfamiliar with the application to be made of the material. This criticism is not valid when law, firm rules, or theorem must be studied and learned.
4. Have your staff become more familiar with the workings of business and industry in practice rather than theory. We are living in an extremely fast changing world, not one of history.

Businessmen were critical of the business faculties' lack of current knowledge of business practices. It would appear that cooperation between the businessmen and educators is necessary in order to correct this. Perhaps the same seminars and internships suggested for the students would help educators to become more knowledgeable about business operations.

Realistic Teaching for the Business World. The complaint that

present training does not give a realistic image of the business world is closely related to the criticism that business faculties do not have current knowledge of actual business practices. The businessmen feel that there is too wide a schism between the theory taught in college and the actual practice of business. This feeling of separation was voiced by about 10 per cent of the employers in the following ways:

1. To borrow a much used phrase: "tell it like it is." Often there is far too wide a schism between theory and practice.
2. We have no quarrel with the basic curriculum being taught in the business area. However, one factor which is causing us growing concern is the negative reaction some college graduates have toward business because of the "profit motive." Many articles have been written recently and we have seen this attitude in some students, that is, a lack of interest in business because they do not believe they can achieve personal satisfaction beyond strictly economic gain. We know that professors are aware of many things business does to improve living in the community. Granted more can always be done but we do feel this area is overlooked or understressed, and would like to see more emphasis devoted to improving the image of business and its positive role in social progress.
3. More practical approaches to business in general and less emphasis on theoretical or abstract approaches to doing a job.
4. "Facts of life" of industry--if labor is going to manage and call the shots then management might as well not invest. There must be certain management rights.
5. If possible, improve the understanding of financial, marketing, and other areas of supervision.

Businessmen were critical of the lack of understanding by business faculties of the "facts of life" of industry. They seem to sense a certain negative reaction of educators and graduates to the profit motive of business. They want educators to help improve the image of business and the positive role that business plays in social progress.

Summary

The three open-end questions asked for the employers' opinions as to the main strengths of their college trained personnel, the weaknesses of their college trained personnel, and suggestions for improving the curriculum for business students. Answers are summarized briefly.

The main strengths of college trained personnel as listed by the employers were general knowledge, the ability to recognize and analyze problems, the ability to communicate, the ability to understand and work with people, technical training, ability to grasp concepts, adaptability, creativity, confidence, and ambition.

The weaknesses of college trained personnel as listed by employers were impatience, attitude of superiority, need for improvement in communication, inability to put knowledge to practical use, unwillingness to accept responsibility, excessive concern with security, dislike of routine details, and disinterest in furthering education.

Suggestions by employers for improving the curriculum for

business students were: (1) increase the general education requirements especially in the areas of communications, problem-solving and mathematics; (2) create an internship as part of business training; (3) use resource people from the business community in workshops, conferences, and seminars; (4) encourage business experience as preparation of the business faculty; and (5) teach realistically about business practices.

It may appear paradoxical that employers listed certain abilities under both strengths and weaknesses and also under recommendations for improving the curriculum. Statements regarding communications training were numerous among the responses to all three questions. Perhaps it is because employers place such importance on this ability that it was mentioned as a strength of the graduates, as a weakness of the graduates, and as a recommendation for improving curriculum.

General education or general knowledge and problem-solving were also listed both as strengths of graduates and as suggestions for improving the curriculum. Employers recognize the value of this training and wish for a greater emphasis on general education as well as problem solving in the graduates' training.

From the responses to all three questions it is apparent that business people want graduates with skill in oral and written communications, training in problem-solving and decision making, and an understanding of mathematics. They also want closer cooperation between business and

faculty in order that graduates gain a better understanding of actual business practices.

CHAPTER VII

GRADUATES' RESPONSES TO OPEN-END QUESTIONS ON STRENGTHS AND WEAKNESSES OF COLLEGE TRAINING AND SUGGESTED CURRICULUM IMPROVEMENTS

The purpose of the survey was to discover strengths and weaknesses in the general education background of present business programs and obtain recommendations from the graduates who have had an opportunity to test the caliber of their training. Questionnaires sent to Montana State University and Eastern Montana College graduates included five open-end questions. Though this study pertains to general education courses for business students, the open-end questions were not limited to general education. These questions were used for two reasons. Firstly, this was a unique opportunity to ascertain graduates' opinions of the total business curriculum. Secondly, by giving the graduates the latitude to answer questions as to what competencies they considered important, what the weaknesses and strengths of their college training were, and what curriculum changes they would recommend in the total program, it was hoped that this would give a better understanding of the importance the graduates placed on general education in the total program. If their answers had been limited to general education courses, the investigator would not have been able to judge the importance they placed on general education as compared with their specialized training.

Although the 36 abilities explored in Chapter 5 were limited to subject-matter usually associated with general education, the five open-end questions allowed for a wider choice of responses. The myriad of suggestions were analyzed, interpreted, and grouped to present answers to each question in the manner that would best reveal the opinions and suggestions submitted. These opinions and suggestions are presented in the following sections.

Graduates' Appraisal of Adequacy of College Training for Employment Needs as Revealed by Open-End Questions

Question 1. What competencies, abilities and understandings have been most important to your employment? List three or four in the order of their importance.

The graduates in responding to the open-end question on the competencies, abilities and understandings which were most important to them in their employment listed 235 items. These answers were generally brief one-word or one-phrase items. The answers were then grouped into categories and treated according to frequency of listing.

The competencies, abilities and understandings which were considered most important by the Montana State University and Eastern Montana College graduates in their employment and listed most frequently were: ability to work with and understand other people (26%), ability to communicate (14%), technical knowledge (12%) and problem

solving (8%). Numerous personal qualities such as dependability, loyalty, personality, emotional stability, tactfulness, patience, willpower, self-respect, self-understanding, open-mindedness, and self-discipline accounted for 8 per cent of the responses.

Other items that were considered important by the graduates but listed less frequently were: knowledge of business environment and structure (4%), general knowledge (4%), ability to organize (4%), adaptability (4%), confidence (3%), ability to do a job well (2%), ability to understand and to follow instructions (2%), ability to think creatively (1%), grooming and a sense of style (1%), competence in finding information (1%), understanding world problems (1%) and understanding of community (1%).

It was apparent from the nature of the responses that the business graduates placed a great deal of importance on human relations. Over 25 per cent of the remarks of the Montana State University and Eastern Montana College graduates indicated that the ability to work with and to understand other people was most important to their employment.

Question 2. What do you believe were the main strengths of your college training in both business and general training?

Graduates indicating the strengths of their college training in both business and general training listed 174 items. Their answers were

again brief, but it was found that these could be categorized under the five headings: (1) preparation in general education, (2) knowledge of business, (3) personal qualities strengthened by college training, (4) understanding of people and ability to work with others, and (5) miscellaneous.

Preparation in General Education. The most frequent response indicated that some part of general education was the main strength of college training. Forty per cent of the responses could be classified as being in the general education offerings. Responses such as "good overall knowledge" or "general knowledge" were common. Others listed broad disciplines such as communications, or problem solving, while still others listed specific courses. The items which could be classified under general education and listed most frequently were: general knowledge with no specific courses designated (10%), communications (9%), problem solving (9%), Economics (3%), History (2%) and training in finding information (2%). Other items listed but not in significant numbers, were: Literature, Speech, Social Science, Mathematics and Psychology. These totaled about 3 per cent.

Knowledge of Business. The second most frequently listed answer as to strengths of college training was knowledge of business (28%). Here again some respondents simply listed "general knowledge of

business" or "area of business," while others listed various courses. The responses most frequently given were: general knowledge of business (12%), Accounting (8%), Principles of Management (3%) and Data Processing (3%). Others mentioned less frequently were: Advertising, Economic Geography, Marketing, Salesmanship and Business Finance. These accounted for 2 per cent of the responses.

Personal Qualities Strengthened by College Training. The third most frequently listed reply (22%) on strength of training was in the category of personal qualities. Answers recorded most often were: confidence (3%), maturity (3%), tolerance and open-mindedness (3%), self-discipline (2%) and self-understanding (2%). Other personal qualities listed fewer times and accounting for 7 per cent of the total responses were: a thirst for knowledge, a desire to learn, determination, creativity, competitiveness, appreciation of knowledge, enjoyment of life, and ability to study.

Understanding of People and Ability to Work with Others. A sizable number (6%) listed the ability to work with people as the main strength of their college training. From some of the comments it was evident that these people gave credit to their college experience as an important factor in gaining this ability. Their comments included "better understanding of people," and "My general or liberal arts

education gave me a starting point for knowledge about myself, other people, and how to enjoy life and learning."

This ability to work with people was also listed quite often as an answer to the first question of this section which asked for competencies, abilities and understandings that have been most important to the graduate in employment.

Miscellaneous. A few of the responses (4%) could not be included in any of the preceding categories. Three graduates felt that the main strength of their college training was their association with competent professors. One graduate cited "seven instructors who had the ability to communicate their subjects to me in useful terms," and another mentioned "top quality professors demanding determination and creativity." The third simply said, "competent instruction (for the most part)."

Four other graduates listed extracurricular activities as the main strength of their college training, and one felt that the main strength of his training was the degree itself which made him more desirable as an employee.

Question 3. What do you believe were the greatest weaknesses of your college training?

The criticism most frequently given by the graduates was that they derived little benefit from some of the courses. Other criticisms

pointed to the insufficient amount of work in communications and other disciplines. Some pointed out the need for additional vocational guidance and counseling. Still others complained of the lack of field experience in business and apathetic teachers. A few felt that the testing and grading system was unfair. There were 130 criticisms submitted.

Lack of Benefit from Some Courses. That they derived little benefit from some courses was a major complaint of graduates responding. Twenty-one per cent registered dissatisfaction with certain courses. These complaints pointed to three criticisms: (1) the courses were poorly planned; (2) certain courses did not prove beneficial; and (3) materials taught in some courses were hypothetical and had little application to business practices.

Graduates criticized both the methodology used and time devoted to presenting subject matter. Typical complaints were:

1. The inability of my English instructors to make my English credits worth the time spent on them. They teach it in a static form as opposed to a dynamic language.
2. Certain accounting courses should be broken into two quarters rather than the "rush rush" one quarter classes.
3. Although I received excellent training in accounting, the training in English and Speech courses was very limited. For example, English 121 through 123 all covered the same topics--writing, reading and speech--but so little time was spent in each course on each subject that all

courses ended up being primarily measurement courses to find how much one already knew.

It was apparent that several graduates reporting saw little value in some courses they were required to take and felt that little benefit was derived from them. Representative comments were:

1. Many of the general education courses are repeats of that which we had in high school.
2. Too many required courses not needed.
3. The requirement of some classes which I didn't feel were needed. Teachers only taught them because they had to--made for a boring class.

Criticisms made indicated that graduates believed courses should be more applicable to actual employment needs so that transition to business could be made more smoothly. The following responses are indicative of the nature of this feeling:

1. Some required courses had no relation to anything.
2. Situations were hypothetical and very different from those found in the outside world.
3. The application of the education received while in school--college many times--is the gaining of information without making application.
4. Was not really prepared for the actual outside world. Failure to understand "what it's all about."

5. Business training very poor. Can't apply a lot of it to outside world. Too much hypothetical and not enough practical things relating to the actual outside world. Even business courses were not realistic enough and not enough time was spent teaching you.

Most common criticisms of courses were that English and Speech training were inadequate, too much material was crowded into too short a time in accounting courses, and some business courses were not applicable to employment.

Insufficient Work in Communications. An appreciable number (15%) expressed concern about their inability to communicate. Although some of these graduates were convinced that their poor performance in communications was due to their own limitations or to poor training in pre-college schooling, they also criticized their college English classes and expressed the belief that more and better training would have helped them. Representative statements concerning inadequacies of training were:

1. Communications --English (this was mainly due to my own limitations) and Speech.
2. Not enough emphasis on communications oral and written, however I realize that these should have been developed before entering college.
3. Inability to express ideas in a satisfactory manner.

4. Insufficient written work.
5. A lack of speech training and class discussion.
6. A glaring weakness in my college education was a lack of training in speech.

Remarks made by the graduates would indicate that the problem of communications was one that originated in pre-college training and continued for many students at the college level until they graduated still feeling inadequately trained.

Insufficient Work in Other Areas. There were many courses that were mentioned in the "would have liked more" context. A total of 28 per cent of those responding listed courses that they believed would be helpful. Among those most frequently mentioned were: Data Processing (5%), Principles of Management (4%), other business courses (3%), Philosophy (3%), Mathematics (3%) and Psychology (2%). Courses mentioned less frequently and accounting for 8 per cent of the responses were: Economics, American Government, Business Finance, Statistics, Humanities and Business Machines.

Need for Practical Experience and Seminars in Business. There was clearly indicated strong support among both employers and graduates of the need for implementing an internship experience for business students. An appreciable number of graduates (15%) mentioned the lack

of such experience as a weakness of their training. Many also thought that seminars and workshops with business people would have added to their understanding of actual business practices. Typical comments were:

1. The practical side of business should have been explored through guest lecturers. Texts usually give the idea pattern, but actual practices may vary substantially. Seminars would be great--I don't recall any.
2. Not enough practical experience. Not enough good part time jobs that are related to business training.
3. Not enough field work. Business students should be made to work in the business field while still attending college.
4. Would have liked more practical training in business--some sort of "on the job training," while still in college would have given me more confidence when starting my job.

Many graduates contended that some type of internship program would be helpful to the business student. They also recommended more exposure to business people through guest lecturers, seminars and workshops.

Inadequate Instruction, Testing and Grading. Of the graduates responding, 8 per cent were concerned with the caliber of instruction, the selection of tests, and the inequities of grading. Several remarks illustrative of the graduates' complaints were:

1. Lack of conviction some instructors would show in courses.
2. Poor attitudes of a few teachers.
3. Ability of instructors to instill interest and desire in subject matter.
4. Impersonal instructors.
5. Dry lecture sessions by lazy professors.
6. The greatest weakness of my college training was the fact that I learned how to take tests without studying too much. This was especially true with I. B. M. tests.
7. More written tests.
8. Methods used in grading in major curriculum.

These complaints by the graduates were frequent enough to indicate that some instructors lacked not knowledge but rather enthusiasm and depth of conviction. The criticisms of graduates also indicated that they believed a wider use of subjective tests would provide a greater challenge to the student.

Lack of Training in Problem Solving. A limited number (5%) of students brought out that lack of training in problem solving was one of the weaknesses of their college training. One student articulated the complaint with these remarks, "The primary problem is the area of problem solving. Only one course, Special Topics, presented a

situation where I had to define the problem and determine the alternatives for solution. If this approach were taken in each course it would better prepare the student." Others suggested an increased use of the case-study method to strengthen the graduate's ability to solve problems.

Insufficient Vocational Guidance and Counseling. A small but vocal number (2%) of the graduates expressed discontent with the lack of vocational guidance while in college. They felt they were not aware of job opportunities in many fields and that they would have prepared themselves for different occupations had they known. Their criticisms were:

1. Young people simply do not know what they want to do for the next 40 or 50 years of their lives.
2. There should be a course where all the job opportunities in the world today are studied.
3. The lack of help in selecting a vocation for which one is best suited.

Several graduates were of the opinion that additional vocational guidance would have been extremely beneficial and although a small number brought this out it was an often made complaint.

Question 4. Physical education is usually included in the general education area. There are those who believe physical education does not serve a useful purpose at the college level while others support it. Do you believe physical education courses should be graded? Do you believe physical education should be taken for credit?

No other area of general education has been debated more vigorously than physical education. The study of 40 colleges cited earlier (Tables 4, 5, 6, 7) showed that some schools have eliminated the physical education requirement while others have demanded as many as 12 quarter credits. A common practice throughout the country has been to excuse students who have served in the military from physical education activities. Another plan gaining recognition has been to allow individual departments within the college to determine the physical education requirements for their majors.

In this investigation it was believed that the Montana State University and Eastern Montana College business graduates could be objective in answering questions and in offering constructive criticisms because physical education was required in the business programs at both institutions.

The graduates were asked three questions. The first was whether they believed that physical education should be required at the college level. Of those responding, 74 per cent felt that physical education should be a part of the program while the remaining 26 per cent opposed such a requirement. The following responses are indicative of the three-fourths who felt strongly the need for physical education:

1. Physical education courses are absolutely needed in in today's push-button world.

2. With the leisure time we now have physical education plays an important role in our lives.
3. An active body and an active mind complement each other.
4. Physical education is a must! It builds character and a competitiveness that is needed in later life.
5. If for no other reason, physical education courses should be given to relieve tension and provide a certain variety.
6. Complete, or almost complete, physical inactivity is sooner or later bound to take its toll on the general outlook and well being of the student. The occasional physical exertion required for physical education courses does more good than harm for most students.
7. I found through personal experience that when I'm in excellent physical condition I'm more alert mentally.
8. In the C. P. A. business physical activity is sometimes limited. I feel that exposure to physical education would help to encourage the non-athlete to compete and keep fit.

The graduates supporting the need for physical education courses felt that physical activities were especially important to those entering business professions because of the physical inactivity of many positions in the field of business.

Only a few of the graduates were completely negative in their statements. The suggestions in general pointed to modifications of the compulsory requirements. Statements of the graduates advocating this position were:

1. I feel physical education should be encouraged but not as a specific requirement for graduation. Also these courses should be worthwhile and not just a game time.
2. Physical education should be desired by the student and not forced on him. Due to various physical abnormalities or possibly emotional blocks I don't feel that students who are considered adults should be forced to do something they do not wish to do.
3. Physical education should be on an optional basis for those interested except for physical education majors.
4. Physical education should be offered for those who desire it as a graded course for credit, but should not be mandatory across the board--only for certain related curriculums.
5. These courses should be optional at college age because one's physical exercise habits are usually well established. A student will either enjoy or resent participation in physical education.
6. I did not have to take physical education because I had just been discharged from the armed services. Others, even those partaking in athletics, were required to. I do not believe physical education is necessary.
7. Physical fitness is an individual thing, and the individual should have his choice about how far he wants to go.
8. It should be offered as an extracurricular activity.

From the responses made those objecting to the compulsory requirement would react favorably to physical education on an optional basis.

Graduates were asked if they believed that physical education

courses should be graded. Of those responding, 61 per cent opposed grading and 39 per cent believed that grades should be given for these courses. Several statements made by the graduates seemed to summarize their thinking:

1. Physical activities are very important and should be continued but not graded.
2. Physical education should be graded on effort not on results, because of the differences in the human body.
3. Grading physical education courses deters many students from taking a sport that would benefit them because they are afraid to lower their grade point average.
4. Open more courses aimed at adding to your ability to participate in some form of sport later in life and not so much on giving physical education majors A's.
5. I feel that students should be given credit based on attendance. There is a tendency to grade on natural ability rather than on achievement under the present system.

There were a few who expressed the belief that a pass-fail grading system would be most advantageous in measuring the competency of the student in physical education activities.

The third and final question regarding physical education courses asked the graduates whether they felt that physical education courses should be taken for credit. Seventy per cent of those responding believed that this would be equitable, while 30 per cent opposed any

consideration for credit. The most prominent of the reasons of graduates who believed that credit should be given was not only the grade, but also the credits served as an incentive to the student to do a better job in his physical education activities, and since the student allocated valuable time to these activities he should be given some consideration.

Question 5. The need for improving curriculum is a continuous process. If we in the field of education are going to succeed we need suggestions and criticisms from people in business. What suggestions and criticisms would you make for improving the training of business students?

This question produced the most detailed and longest answers of any of the items in the questionnaire. Some of the respondents wrote answers several pages in length. These answers were analyzed and the suggestions grouped by categories. Of approximately 120 individual recommendations for improvement of curriculum, 33 per cent were recommendations for more courses in general education, 31 per cent for additional courses in business and economics, 21 per cent for establishment of an internship for business students similar to practice teaching for student teachers, 4 per cent for improving faculty, and 4 per cent for more vocational guidance. The five categories are discussed in the sections to follow.

General Education Recommendations. Thirty-three per cent of the

recommendations pertained to general education. These were nearly all specific recommendations for increased requirements in specific disciplines and were categorized as follows: 13 per cent recommended additional work in oral and written communications; 8 per cent suggested more courses in human relations, Psychology, or Personnel Management; 7 per cent advised more Logic and problem solving courses; 3 per cent, more courses in Mathematics; 3 per cent more Humanities. Two other recommendations were for more courses in History and one was simply a request for more general education.

Typical comments from those recommending more courses in communications were:

1. I was required to take four credit hours in written and oral communications. It helped me considerably, but it wasn't enough training in the field of communications.
2. More required communications courses. The proper use of the English language cannot be overemphasized.
3. The student who can express himself in a clear and concise manner is most sought after by employers in business.

Respondents who asked for more courses in human relations commented:

1. College students should have a full understanding of people. They should be trained to be good listeners, informal talkers, and should understand personnel problems . . . Psychology for personnel and

administration should be taken. Courses should teach being a good boss, peer, subordinate and a good listener. Somewhere in these courses a personnel problem solving course should fit in.

2. I feel that the courses I took concerning personnel problems, the psychology of people, groups, etc., are the most beneficial now. Any of the courses dealing with "people problems" are what I consider "KEY" courses.

Those who suggested more courses in logic and problem solving expressed their feelings with comments such as:

1. Teach them to think. Specialized training has its place, but if the world is to survive, the people must be taught to think, analyze and work together. Highly specialized training tends to narrow one's thinking and fracture teamwork. Specialized training must be obtained since we are living in a specialized era, however, the training is soon obsolete and must be updated by a return to the classroom or ongoing training where you work. Therefore, the most important training that can be given young people is (1) development of proper attitude, (2) how to think, (3) how to study, and (4) how to keep on learning after formal education is completed.
2. Courses should be taught by using problem solving rather than memorization.

Communications, human relations, and problem solving courses were the areas most frequently mentioned by graduates for increase in course requirements.

Recommendations for More Business Courses. Thirty-one per cent of the recommendations were requests for more business courses.

These were categorized as follows: 7 per cent were requests for more data processing and computer courses; in 6 per cent of the responses it was suggested that more seminars, guest speakers and discussion groups would improve business courses; in 4 per cent, it was recommended that advanced accounting courses should be oriented toward certified public accounting preparation or toward other specialized accounting training. Three per cent were proposals that courses be made more relevant to future employment; 3 per cent for more economics; 2 per cent for additional electives in business; and 2 per cent for more marketing courses.

Typical comments were:

1. If possible, business students should have the opportunity to graduate in the field of computer operation and programming.
2. After a student has completed first year Accounting, a series of courses toward the certified public accounting examination could be offered.
3. Accountants should be trained in areas relating to the vocation of public accountant or private accountant.
4. In accounting specifically, open different lines of study based on sales of accounting machines, CPA or public accounting, industrial accounting or government accounting. I feel there is as much separation of fields of accounting as there is in engineering.
5. Students of the future are going to need more knowledge of computers and how to use them.

6. Improvement could be made by including courses on actual corporate structure of United States corporations, their international operations and their control of other institutions such as government.

Course suggestions made most frequently were data processing and computer courses, more seminars and guest speakers, and more specialized accounting courses.

Recommendations for Establishing a Business Internship. Twenty-one per cent of the recommendations made by the graduates were for the establishment of some form of on-the-job training or internship for business students before college graduation. Most of the respondents felt that this training should come shortly before graduation with time left to go back to college for a few months. As one graduate stated, "Ideally, if a student could work for six months and then go back to school for six months, I feel that his education would be immeasurably improved." Another said, "If students, with the aid of the college, could be hired during their junior or senior year for jobs connected with their majors, they would have the practical experience to find what area they would like to go into, and it would also help them in finding employment." Still another recommended "recognition and credit hours for work in the business world outside of the classroom. I learned more through application than study."

Many graduates strongly favor an internship in an actual business situation to improve business training.

Need for Improvement of Faculty. Four per cent of the graduates believed that the curriculum could be made better by improvement of faculty. Some students expressed the belief that business faculties were out of touch with actual business practices. One student commented, "Practical experience in the field--on the job--would help the instructors to understand the problems of the students and might give them some answers to pass on."

Need for Vocational Guidance. Three per cent of the graduates recommended making more vocational guidance available to the students. One graduate stated, "Increase the opportunity for students to obtain sound judgments as to the occupation or field they would be most happy in. Make this a noncompulsory opportunity, however."

Summary

In answering the first open-end question, "What competencies, abilities and understandings have been most important to your employment?"--the graduates considered their ability to work with people of primary importance. Ability to communicate was judged second in importance and technical knowledge was considered third.

In answering the question--"What do you believe were the main strengths of your college training both in business and general training?"--the graduates listed general education disciplines most frequently. Knowledge of business was next, followed by strengthening of personal qualities and understanding of people.

In answering the third question--"What do you believe were the greatest weaknesses of your college training?"--the graduates cited poor courses as the most frequent weakness. In some instances these were noted as courses poorly planned or taught. Others were required courses respondents did not feel had been beneficial to them and still others were courses in which the subject matter taught was not applicable in their employment. Of the courses cited, there was a fairly even division between general education and business courses which the graduates felt were poor.

A second weakness mentioned by the graduates was a lack of sufficient number of and emphasis on courses teaching problem solving. The third most frequently mentioned weakness was insufficient work in communications. Other weaknesses mentioned were lack of computer and data processing courses and lack of vocational guidance.

The majority of respondents (75%) believed that physical education should be a part of the student's program, but over 60 per cent of the respondents felt that the physical education courses should not be graded

except on a pass-fail basis. Seventy per cent of the respondents believed that credit should be given for these courses.

In answer to the fifth question, which asked for suggestions for improving the curriculum, the largest number of respondents (33%) offered suggestions for increasing certain general education requirements. More courses in oral and written communications, more courses dealing with human relations, more courses in logic and in problem solving, and more mathematics courses were recommended.

The second largest number (31%) of respondents suggested increasing offerings in business, seminars, guest speakers, discussion groups and requested business courses be made more relevant to actual business practices. Another suggestion made by a large number (21%) of the graduates was the establishment of some form of internship for business students.

It is interesting to note that many of the same items appeared in answers to different questions. For example, human relations or the ability to work with people was considered the competency most important in employment. This was also listed by many respondents as a strength of college training, and a number suggested that the addition of courses in human relations would be a valuable curriculum change.

In the same manner, the ability to communicate was listed as a competency second most important in employment. It was also listed

by some as a strength of college training, and by others as a weakness of college training. Some respondents recommended an increased emphasis on training in both oral and written communications as a seriously needed curriculum change.

Technical knowledge or knowledge of business, listed as the third most important competency in employment, was listed second most frequently as a strength of college training, and also as the second most important category needing improvement through curriculum change.

It would appear from this survey that graduates consider human relations, general knowledge, ability to communicate, knowledge of business or technical knowledge and competency in problem solving the most important factors in college training and most important to successful employment.

CHAPTER VIII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The main purpose of this study was to examine general education needs in the business curriculum to see what competencies, abilities and understandings are essential for the student in the undergraduate program in business. A secondary purpose was to survey the business program to determine whether present curriculums are meeting the needs of graduates entering employment in business. The study consisted of four main steps:

1. A study of contemporary issues which have implications for business in the future.
2. A review of literature pertaining to general education in the business curriculum and a study of what other colleges are doing in curriculum revision.
3. A survey of business graduates to determine their opinions as to effectiveness of present curriculum and to see what changes they would recommend.
4. A survey of employers of business graduates to obtain their evaluation of the training of business graduates and to see what changes they would recommend in the curriculum for business graduates.

The sample population for the survey was 138 employers of business graduates and 189 business graduates from Montana State University and Eastern Montana College for the years 1963 through 1968, making a total of 327. Of the 138 employers, data were gathered from 96,

and of the college graduates, data were gathered from 93.

Summary

Contemporary issues which have implications for future planning of curriculums in business training as revealed in literature are:

1. The need for coping with the rapidly increasing store of knowledge.
2. Adjusting to new knowledge as the old becomes obsolete.
3. The increasing need for social responsibility by business management in major community problems such as environmental pollution and taxation.
4. Increasing international scope of business.

The review of the literature revealed very clearly that there was great need for revision of curriculum in business training programs. The review of literature also points out that there was little disagreement as to the value of general education for the business student, but because of the increased knowledge in all disciplines making a "common learning" impossible, it is necessary to determine what competencies, abilities and understandings are most important to business students.

Eleven categories were selected as competencies developed through general education. These became the major aspects of the survey instrument. Results of the survey revealed both employers and

graduates as a group rated the business graduates' competencies in the following order:

1. Competence in finding information
2. Understanding of people
3. Competence in oral communications
4. Ability to think creatively
5. Competence in solving problems
6. Understanding of society
7. Competence in written communication
8. Understanding of societies other than our own
9. Understanding of physical environment
10. Satisfying personal philosophy
11. Appreciation of the arts

Employers were asked their opinions through open-end questions of their college trained personnel and suggestions for improving the curriculum for business students. The main strengths of business graduates as listed by employers were their general overall knowledge; the ability to recognize and analyze problems; the ability to communicate; the ability to understand and work with people; technical training; and ability to grasp concepts, adaptability, creativity, confidence and ambition.

The graduates listed their main strengths as general overall knowledge; knowledge of business; personal qualities strengthened by college training such as confidence, maturity, tolerance and open-mindedness, self-discipline and self-understanding; understanding of people; and ability to work with others.

Weaknesses of college trained personnel as listed by employers were impatience, attitude of superiority, need for improvement in communication, inability to put knowledge to practical use, unwillingness to accept responsibility, excessive concern with security, dislike of routine details, and disinterest in furthering education.

Graduates listed the weaknesses of their college training as lack of benefit from some courses; insufficient work in communications, data processing, management, philosophy, mathematics and psychology; need for practical experience and seminars in business; inadequate instruction; lack of training in problem solving; and insufficient vocational guidance.

Suggestions by employers for improving the curriculum for business students were: increase the general education requirements especially in the area of communications, problem solving and mathematics; create an internship as part of business training; use resource people from the business community in workshops, conferences and seminars; encourage business experience as preparation of the business faculty; and teach realistically about business practices.

Graduates suggestions for improving the curriculum were to: increase general education requirements in oral and written communications; offer more courses dealing with human relations, logic, problem solving and mathematics; increase offerings in business; cooperate with

business for more seminars, guest speakers, discussion groups and workshops; make business courses more relevant to business practices; and establish some form of internship for business students.

Conclusions

On the basis of the review of literature and the results of the survey of employers and business graduates, the following conclusions were made:

1. A major conclusion based upon the recommendations made by respondents through answers to open-end questions is that there is a need for increased requirements in general education for the business trainees. This need expressed stems from certain competency area findings from which the following minor conclusions were drawn:
 - a. The value placed on finding information in business and the clearly demonstrated ability to do this indicate the need for greater stress in general education as a means of meeting the demands of the problem of coping with the increasing store of knowledge.
 - b. The consistently satisfactory or better ability demonstrated by business graduates in oral and written communications and the expressed feeling of need for even greater competency for communication in business lead to the conclusion that the effective training program should provide additional and more advanced training.
 - c. Although the business experiences of the graduates revealed competency in dealing with people, one could conclude from the suggestions made by employers that the entire training program should

direct greater attention to the development of the well-integrated personality for business.

- d. The revealed limited training experiences of the graduates in both mathematics and logic and the strongly expressed desire by employers to have graduates capable of handling mathematics in the business world, analyzing problems, and making decisions point directly to the need for more training in these areas.
 - e. The graduates' satisfactory ability to solve problems on the job and the employer view of problem solving and decision making as a complicated process in need of greater attention in the training program clearly indicate that the program must provide greater opportunities for problem solving and for greater competency in the orderly analysis of problems and rational decision making based on facts and principles and their application in problem situations.
2. The second major conclusion based upon the recommendations by respondents through open-end questions is that business programs need to be revised to include greater involvement by both teachers and students with the business community.
- a. The views expressed by both employers and graduates clearly indicate that there is a need for practical experience in the business environment similar to the practice teaching program for student teachers.
 - b. The graduates and employers dissatisfaction with faculty knowledge of business environment clearly indicates a need for faculty to improvize and simulate actual business experiences.
 - c. The expressed feeling by both graduates and employers of the lack of knowledge shown by business faculties demonstrates a need for business experiences in faculty training.

Recommendations

From the findings and conclusions in this study the following

recommendations are made:

1. Increased emphasis should be placed on training in written and oral communications, problem solving, advanced mathematics and humanities for business students. Course offerings in human relations, psychology, personnel management, data processing and computer training should be increased.
2. In communications training, careful testing upon college entrance to determine individual needs of students in both oral and written communications, then placement in classes at the level of their abilities is recommended. Communications training should be carried on informally in all classes.
3. More vocational guidance should be made available to students. Students should be made aware of this opportunity for guidance.
4. Closer cooperation between colleges and businesses should be attempted in the training of business students. More joint efforts in the form of workshops, seminars, and guest lecturers from the business community are recommended. There should also be some study and experimentation to determine the advisability of internships in business. Independent empirical studies with the aim of mutual benefit to both students and business should be tried. This cooperation should help faculty become more aware of actual business practices and help update teaching.
5. Physical education courses for business students should be continued. They should be graded on a pass-fail basis and academic credit should be given for these courses.

APPENDIX

Appendix A

Excerpts From An Article by Daniel Bell entitled,
"The Scholar Cornered," The American Scholar,
XXXVII (Summer, 1968), pp. 401-6.

EXCERPTS FROM AN ARTICLE BY DANIEL BELL ENTITLED,
"THE SCHOLAR CORNERED"

Recently Columbia, Chicago, and Harvard and other colleges have in varying degrees been calling their programs in general education into question. Daniel Bell writes of this in a recent issue of The American Scholar. He feels that fragmentation threatens general education:

This disintegration of curriculum arises, in part, out of intellectual reasons. The hopes of interdisciplinary integration, so high twenty years ago, have not materialized, at least on the general education level. Disciplines have become more intensive and specialized, reaching each other if at all, at the peripheries of frontiers of concepts and problems. The multiplication of new knowledge, particularly in the sciences and the social sciences, has made it difficult to teach the subject by organizing it around "problems" or by surveys, while the effort to define unifying conceptual structures, to the extent that they could be used in general education, has been lacking.

The traditional idea of general education was based on two premises: (1) that there were invariant truths about human behavior that could be established by human reason; (2) that there was a range of knowledge that every civilized man ought to know under pain of being judged uncultivated. Both notions constituted a "classical" concept of education and both were derived from humanities. Today both are called into question. The first because of quantitative accretion and new horizons of knowledge.

In science the world is no longer conceived as fixed or bounded--but as a set of paradigms, each intellectually coherent and self consistent. These paradigms are subject to change as new angles of vision are introduced. Revolutions in physics--quantum mechanics, relativity, have shaken our fundamental conceptions of matter and energy. There has been a change in unity of knowledge.

What is clear is that science proceeds by creating successive

conceptual structures and one task is to show how new modes of conceptualization are established and how these become reorganized when necessary as new structures of explanation.

The collapse of a liberal arts curriculum, where there has been greater societal pressure to specialize, has led to several paradoxical ideological reactions--none more curious than the cry of the New Left for "freedom" in curriculum. When the Reforming of General Education first appeared with set of proposals for new curriculum at Columbia, a number of New Left students in characteristic response said, "Who are you to tell us what to take?" Freedom in curriculum, as the issue is raised, seems to mean "no requirements." Freedom here is equated with completely free choice and rejection of any constraints. So defined, freedom is not freedom but a search for identity. Freedom has never been the complete absence of restraints, but the self-conscious shaping of one's future between constrained alternatives. Nor is the freedom to take a pot pourri of courses an education. Education is a confrontation--a confrontation with a teacher . . .

I do not believe in a set of eternal verities, some fixed set of moral injunctions or final truths, a "vade mecum" of ready quotations to be used as a guide to all the puzzles of life. But I do believe in an enduring commitment, which is the commitment of the free play of the mind, but tested and disciplined, in the pursuit of inquiry. For education is also a judgment, and necessarily the acquisition of a set of standards. There has to be some consistent structure of meaning. I do not insist that there is one and only one orderly structure, a trivium and quadrivium, which everyone must follow. But whatever education one seeks, it is incumbent that the sequences one selects be articulated into some coherent intellectual structure that is rationally defensible. Without that, it is not education.

At present the universities have let curriculum go by intellectual default. And it is ironic that the New Left has raised this default into an ideology . . .

The final problem--how to cope with the increasing flood of knowledge so what one learns today is not useless in a few years. The answer has to be in the making of the modes of conceptualization, the nature of methodological consciousness, one of the grounds

of curriculum; to teach the student the principles of a discipline and to show him how basic concepts can be reorganized so as to assimilate the new discoveries in a field.

The nature of conceptualization is the most difficult to define, for conceptualization divorced from subject simply becomes arrant scientism. On the other hand, to define education by the contents of a hundred great books, or a hundred great ideas welded together by a syntopicon, is a fruitless effort that merely repeats the controversy between "new medievalists" and the "pragmatists."

The way to cut through the tangle is to define the issues not in terms of what one is to know, but how one is to know. "The how of knowing." But if one accepts, as I do, the importance of emphasizing conceptual schemes, how does one define their limits? In a sense, how far can one go with the abstract?

The fundamental truism, perhaps, is that knowledge is relational. Knowledge is the clarification of the structure of relationships. The purpose of education is to teach students how to understand these relationships. That is the changeless element within the perceptual and conceptual flux; that is the eye of the hurricane of knowledge.

Appendix B

Catalogs Used to Make a Comparison of General
Education Requirements Among Forty
Colleges and Universities

Catalogs Used to Make a Comparison of General
Education Requirements Among Forty
Colleges and Universities

Western States

- Arizona, Northern Arizona University, Flagstaff, Arizona, General Catalog 1967-1969, Volume XLIV Number 6, May, 1967, pp. 75-77.
- Arizona, Arizona State University, Tempe, Arizona, General Catalog 1967-1969, Volume LXXXII, Number 2, May, 1967, p. 81.
- Colorado, Colorado State College, Greeley, Colorado, Undergraduate Catalog 1968-1969, Bulletin Series LXVIII, Number 2, May, 1968, p. 28.
- Colorado, Western State College of Colorado, Gunnison, Colorado, 1968-1969 Bulletin, Volume LVII, Number 6, February, 1968, pp. 63-64.
- New Mexico, New Mexico State University, Las Cruces, New Mexico, Undergraduate Catalog 1968-1969, Volume LXII, Number 1, December, 1967, p. 147.
- New Mexico, Eastern New Mexico University, Portales, New Mexico, 1968 Bulletin 1970, Volume XXXIV, Number 3, May, 1967, p. 60.
- Oregon, Portland State College, Portland, Oregon, 1968-1969, Undergraduate Catalog, Volume III, Number 3, April, 1968, p. 23.
- Oregon, Southern Oregon College, Ashland, Oregon, Oregon State System of Higher Education Bulletin 1968-1969, p. 36.
- Washington, Washington State University, Pullman, Washington, Catalog Issue 1968-1970, Volume XXVIII, Number 2, December, 1967, p. 57.
- Washington, Eastern Washington State College, Cheney, Washington, 1968-1969 Bulletin, Volume LXI, Number 10, April, 1968, pp. 19-20.

Mid-Western States

Illinois, Illinois State University, Normal, Illinois, 1968-1969 Undergraduate Catalog, Volume LXVI, Number 331, April, 1968, pp. 57-58.

Illinois, Southern Illinois University, Carbondale, Illinois, 1967-1969 Undergraduate Catalog, Volume IX, Number 10, August, 1967, pp. 13-14.

Kansas, Fort Hays Kansas State College, Hays, Kansas, General Catalog 1967-1969, Volume LVII, Number 2, April, 1967, p. 56.

Kansas, Kansas State College of Pittsburg, Pittsburg, Kansas, General Catalog 1967-1968, Volume LXIII, Number 6, April, 1967, pp. 76-78.

Minnesota, Bemidji State College, Bemidji, Minnesota, Undergraduate Bulletin 1968-1970, Volume XXVII, Number 3, April, 1968, pp. 56-57.

Minnesota, Moorhead State College, Moorhead, Minnesota, Bulletin 1967-1969, Volume LXVII, Number 2, April, 1967, pp. 50-51.

Missouri, Central Missouri State College, Warrensburg, Missouri, General Catalog 1968-1969, Volume LXIX, Number 1, June, 1968, pp. 128-129.

Missouri, Southwest Missouri State College, Springfield, Missouri, College Catalog 1968-1969, Volume LXIII, Number 2, April, 1968, p. 36.

Oklahoma, Central State College, Edmond, Oklahoma, General Catalog, 1966-1969, Volume LV, Number 5, November, 1966, p. 44.

Oklahoma, Oklahoma State University, Stillwater, Oklahoma, General Catalog 1968-1969, pp. 47-48.

Southern States

Arkansas, Arkansas State University, State University, Arkansas, General Bulletin 1968-1969, Volume LIII, Number 1, January, 1968, p. 54.

Arkansas, Southern State College, Magnolia, Arkansas, General Catalog, 1967-1969, Volume LIX, Number 2, December, 1967, pp. 38-39.

Florida, Florida State University, Tallahassee, Florida, General Catalog, 1968-1969, Volume LXI, Number 3, March, 1968, p. 148.

Florida, University of Florida, Gainesville, Florida, Undergraduate Catalog, 1968-1969, Volume, LXIII, Number 3, March 1968, p. 148.

Mississippi, Mississippi State University, State College, Mississippi, General Catalog 1967-1968, Volume XLIV, Number 1, January, 1968, pp. 112-113.

Mississippi, University of Southern Mississippi, Hattiesburg, Mississippi, General Catalog 1968-1969, Volume LV, Number 4, April, 1968, p. 79.

Tennessee, East Tennessee State University, Johnson City, Tennessee, Bulletin 1968-1969, Volume LVI, Number 11, April, 1968, p. 158.

Tennessee, University of Tennessee, Knoxville, Tennessee, General Catalog, 1968-1969, Volume LXXI, Number 1, January, 1968, pp. 93-94.

Texas, East Texas State University, Commerce, Texas, General Catalog, 1968-1969, Volume LII, Number 1, p. 235.

Texas, Texas A & M University, College Station, Texas, General Catalog 1967-1968, Volume XV, Number 1, February 1, 1968, pp. 102-103.

Eastern States

Connecticut, The University of Connecticut, Storrs, Connecticut, General Catalog 1968-1969, Volume LXIII, Number 6, April, 1968, pp. 118-119.

Connecticut, Central Connecticut State College, New Britain, Connecticut, General Catalog 1968-1969, Volume II, Number 3, p. 102.

Michigan, Michigan State University, East Lansing, Michigan, General Catalog 1968, Volume LXIII, Number 2, July, 1968, p. 107.

Michigan, Eastern Michigan University, Ypsilanti, Michigan, Undergraduate Catalog 1968-1969, Volume LVIII, Number 2, May, 1968, pp. 120-121.

Ohio, Kent State University, Kent, Ohio, General Catalog 1967-1969, Volume LV, Number 6, June, 1967, pp. 113-114.

Ohio, The University of Akron, Akron, Ohio, General Bulletin 1967-1968, Volume VII, Number 1, July, 1967, p. 218.

Pennsylvania, The Pennsylvania State University, University Park, Pennsylvania, Undergraduate Catalog, 1968-1969, Volume LXII, Number 2, May, 1968, p. 67.

Pennsylvania, Indiana University of Pennsylvania, Indiana, Pennsylvania, Undergraduate Catalog 1968-1969, Volume LXXIV, Number 1, February, 1968, p. 121.

West Virginia, West Liberty State College, West Liberty, West Virginia, Bulletin, 1968-1970, Volume XXX, Number 2, September, 1968, p. 126.

West Virginia, West Virginia University, Morgantown, West Virginia, Undergraduate Catalog 1967-1968, Volume LXVII, Number 12-1, June, 1967, p. 210.

Appendix C

Copies of Letters and Questionnaires Sent
to Employers and Graduates, and
Names of Employers Responding

COPY OF LETTER SENT TO EMPLOYERS WHO WERE
ASKED TO COMPLETE THE SURVEYEastern Montana College
Billings, Montana
(Date)

Dear _____:

You no doubt are aware of the fact that college graduates trained in business are among the most sought after employees in the country today. Because you employ college business graduates, I am seeking your opinion regarding their training. As part of my doctorate thesis I am making a survey of graduates and employers. This information will be used in curriculum planning at Montana State University and Eastern Montana College. It will also be available to other interested institutions.

My study is concerned with the general education requirements rather than with the area of business specialization, such as accounting, marketing, and management. I would like to have your opinion as an employer as to the value of training for various abilities.

As you will note on the form, I have grouped items pertinent to certain competencies. If you think that I have overlooked important items, please feel free to add these in the space left under "other." If you believe I have included unimportant items, check in the column provided, then rate your college trained employees as a group as to their degree of competency in the items listed. There is also a group of open-end questions which I hope you will give a little thought and answer frankly.

Curriculum revision must be a continuing process to meet changing needs. We seek your suggestions and criticisms in order to meet the needs of business.

I would certainly appreciate your taking twenty minutes or so to complete the form. A self-addressed envelope is enclosed and a return by November 22 would be most helpful to me.

Thank you for your time and cooperation.

Sincerely,

Louis W. Veraldi
Chairman, Business Department

COPY OF LETTER SENT TO GRADUATES OF MONTANA STATE UNIVERSITY
WHO WERE ASKED TO COMPLETE THE SURVEY

Eastern Montana College
Billings, Montana
(Date)

Dear _____:

Dr. Harvey Larson has given me your name as a graduate of the Commerce Department at Montana State University. I am making a survey of recent business graduates in connection with my doctorate thesis. The information will be used in curriculum planning at Montana State University and Eastern Montana College.

My study is concerned with general education for business students. I am contacting a group of graduates from Montana State University to see what their feelings are as to the merit of various general education courses. No attempt is being made to evaluate individual graduates or instructors. We are simply evaluating adequacy of curriculum. No names will be used.

I would certainly appreciate your taking twenty minutes or so to complete the enclosed survey form. As you will note on the form, I have grouped items pertinent to certain competencies. If you think that I have overlooked items which are important to any specific competency or ability, please feel free to add these in the spaces provided. Then rate yourself and list the courses which helped you. There is also a group of open-end questions which I hope you will give a little thought and answer frankly.

Curriculum revision must be a continuing process to meet changing needs. We seek your suggestions and criticisms in order to shape a curriculum to meet current and future needs of business and its employees.

Thank you for your time and cooperation. A self-addressed envelope is enclosed, and a return of this completed form by October 10 would be most helpful to me, and hopefully to future curriculum planning at Montana State University and other colleges.

Sincerely,

Louis W. Veraldi
Chairman, Business Department

COPY OF LETTER SENT TO GRADUATES OF EASTERN MONTANA COLLEGE
WHO WERE ASKED TO COMPLETE THE SURVEY

Eastern Montana College
Billings, Montana
(Date)

Dear _____:

I am making a survey of recent business graduates in connection with my doctorate thesis. The information will be used in curriculum planning at Eastern Montana College. I have contacted all of the Eastern graduates from 1963-68 who completed the Business education degree and entered the business field rather than teaching.

My study is concerned with general education for business students. I am contacting a group of graduates from Montana State University to see what their feelings are as to the merit of various general education courses. No attempt is being made to evaluate individual graduates or instructors. We are simply evaluating adequacy of curriculum. No names will be used.

I would certainly appreciate your taking twenty minutes or so to complete the enclosed survey form. As you will note on the form, I have grouped items pertinent to certain competencies. If you think that I have overlooked items which are important to any specific competency or ability, please feel free to add these in the spaces provided. Then rate yourself and list the courses which helped you. There is also a group of open-end questions which I hope you will give a little thought and answer frankly.

Curriculum revision must be a continuing process to meet changing needs. We seek your suggestions and criticisms in order to shape a curriculum to meet current and future needs of business and its employees.

Thank you for your time and cooperation. A self-addressed envelope is enclosed, and a return of this completed form by October 10 would be most helpful to me, and hopefully to future curriculum planning at Eastern Montana College and other colleges.

Sincerely,

Louis W. Veraldi
Chairman, Business Department

BUSINESS TRAINING GRADUATE'S APPRAISAL OF CONTRIBUTION OF COLLEGE
TRAINING TO SELECTED COMPETENCIES, ABILITIES AND UNDERSTANDING

Present position _____ Age _____ Sex _____

Please describe briefly the nature of your work _____

Colleges attended _____

Degree or degrees _____ Date of each degree _____

Please rate the competence that you believe your college training gave you in the following areas:	Please check the column which would best answer the question for you 5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X Competence gained outside of college							Courses which developed this competence
	5	4	3	2	1	X		
<u>Competence in oral communication</u> (public speaking, talking to customers, company conferences) diction _____ correct use of language _____ fluency of speech _____ effective participation in group discussion _____ ability to "think on one's feet" _____ other _____								
<u>Competence in written communications</u> (letter writing, technical writing, internal communication) clarity of thought _____ ability to organize and express ideas _____ correctness of grammar _____ other _____								

	5	4	3	2	1	X	
	5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X Competence gained outside of college						Courses which developed this competence
<u>Competence in finding information</u>							
ability to follow printed instructions							
ability to locate information quickly (use of library, government publications)							
ability to apply information							
other							
<u>Competence in solving problems</u>							
ability to analyze problem situations							
ability to evaluate and interpret facts							
ability to arrive at satisfactory decisions							
an understanding of probability, correlation, and sampling as needed in business							
other							
<u>Ability to think creatively</u>							
ability to formulate new ideas applicable to business, such as original advertising							
ability to apply new ideas							
flexibility of thinking to meet changing situations, for example new uses for products, changing to use of computers							
other							
<u>Understanding of people</u>							
ability to work effectively with others, such as efficient cooperation between departments							

	5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X Competence gained outside of college						Courses which developed this competence
	5	4	3	2	1	X	
<u>Understanding of people (continued)</u>							
handling difficult people, for example dissatisfied customers							
other _____							
<u>Understanding of society as demonstrated by</u>							
ability to approach controversial problems with objectivity, for example seeing both sides of issues, such as politics and religion							
ability to see reasons for social movements, such as race riots, youth unrest, problems of the cities							
understanding of government--structure, economics, laws as they affect business and the individual							
other _____							
<u>Understanding societies other than our own</u>							
sensitivity to values and traditions of other cultures							
general understanding of world economic problems							
other _____							
<u>Understanding of physical environment</u>							
sufficient background of the physical and biological world so as to understand one's self, and also see the need to live intelligently in one's surroundings							

	5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X Competence gained outside of college						Courses which developed this competence
	5	4	3	2	1	X	
<u>Understanding of physical environment</u> (continued)							
a general understanding of technology such as dams, power plants, highway construction							
application of conservation in the wise use of natural resources							
other _____							
<u>Appreciation of the Arts</u> (through exposure to literature, music, fine arts)							
ability to sense and recognize quality of form in the sights and sounds about us _____							
appreciation of the things we touch, hear and see _____							
ability to comprehend some of the most profound expressions of human experiences _____							
other _____							
<u>Satisfying personal philosophy</u> revealed by							
ability to evaluate critically one's own conduct, and to live a consistent and meaningful life							
practice clear and integrated thinking about the meaning and value of life _____							
a desire to achieve but not at the expense of others _____							
an attempt to seek the most intelligent principles of behavior _____							
a search for spiritual guidance							
other _____							

	5 Consistently superior	Courses which developed this competence
	4 Sometimes superior	
	3 Consistently satisfactory	
	2 Usually acceptable	
	1 Consistently unsatisfactory	
	X Competence gained outside of college	
<u>Other competencies which are important to you as an employee</u>	5 4 3 2 1 X	

1. What competencies, abilities and understandings have been most important to you in your employment? List three or four in the order of their importance.
2. What do you believe were the main strengths of your college training both in business and general training?
3. What do you believe were the greatest weaknesses of your college training?
4. Physical education is usually included in the general education area. There are those who believe physical education does not serve a useful purpose at the college level while others support it.
 - a. Do you believe physical education should be required at the college level? yes ___ no ___
 - b. Do you believe physical education courses should be graded? yes ___ no ___
 - c. Do you believe physical education should be taken for credit? yes ___ no ___
 - d. Other comments --
5. The need for improving curriculum is a continuous process. If we in the field of education are going to succeed we need suggestions and criticisms from people in business. What suggestions and criticisms would you make for improving the training of business students?

**EMPLOYER'S APPRAISAL OF COLLEGE-TRAINED EMPLOYEES'
SELECTED COMPETENCIES, ABILITIES AND UNDERSTANDINGS**

Name _____ Position _____ Type of Business _____

Name of Company _____

Number of employees in the company _____

Please rate your college-trained personnel in general as to the following competencies, abilities and understandings:	Please check the column which would best answer the question for you. 5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X No opportunity to observe Y Do not believe this is important							
	5	4	3	2	1	X	Y	
<u>Competence in oral communication</u> (public speaking, talking to customers, company conferences)								
diction _____								
correct use of language _____								
fluency of speech _____								
effective participation on group discussion _____								
ability to "think on one's feet" _____								
other _____								
<u>Competence in written communications</u> (letter writing, technical writing, internal communication)								
clarity of thought _____								
ability to organize and express ideas _____								
correctness of grammar _____								
other _____								
<u>Competence in finding information</u>								
ability to follow printed instructions _____								
ability to locate information quickly (use of library, government publications) _____								
ability to apply information _____								
other _____								

	5	4	3	2	1	X	Y
5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X No opportunity to observe Y Do not believe this is important							
<u>Competence in solving problems</u>							
ability to analyze problem situations							
ability to evaluate and interpret facts							
ability to arrive at satisfactory decisions							
an understanding of probability, correlation, and sampling as needed in business							
other							
<u>Ability to think creatively</u>							
ability to formulate new ideas applicable to business, such as original advertising							
ability to apply new ideas							
flexibility of thinking to meet changing situations, for example new uses for products, changing to use of computers							
other							
<u>Understanding of people</u>							
ability to work effectively with others, such as efficient cooperation between departments							
handling difficult people, for example dissatisfied customers							
other							
<u>Understanding of society as demonstrated by</u>							
ability to approach controversial problems with objectivity, for example seeing both sides of issues, such as politics and religion							
ability to see reasons for social movements, such as race riots, youth unrest, problems of cities							

	5 Consistently superior 4 Sometimes superior 3 Consistently satisfactory 2 Usually acceptable 1 Consistently unsatisfactory X No opportunity to observe Y Do not believe this is important						
	5	4	3	2	1	X	Y
<u>Understanding of society (continued)</u>							
understanding of government -- structure, economics, laws as they affect business and the individual _____							
other _____							
<u>Understanding societies other than our own</u>							
sensitivity to values and tradition of other cultures _____							
general understanding of world economic problems _____							
other _____							
<u>Understanding of physical environment</u>							
sufficient background of the physical and biological world so as to see the need to live intel- ligently in one's surroundings _____							
a general understanding of technology, such as dams, power plants, highway construction _____							
application of conservation in the wise use of our natural resources _____							
other _____							
<u>Appreciation of the arts (through exposure to literature, music, fine arts)</u>							
ability to sense and recognize quality of form in the sights and sounds about us _____							
appreciation of the things we touch, hear and see _____							
ability to comprehend some of the most profound expressions of human experiences _____							
other _____							

	5	4	3	2	1	X	Y
5 Consistently superior							
4 Sometimes superior							
3 Consistently satisfactory							
2 Usually acceptable							
1 Consistently unsatisfactory							
X No opportunity to observe							
Y Do not believe this is important							
<u>Satisfying personal philosophy</u>							
revealed by							
ability to evaluate critically one's							
own conduct, and to live a							
consistent and meaningful life							
practice clear and integrated							
thinking about the meaning and							
value of life							
a desire to achieve but not at the							
expense of others							
an attempt to seek the most							
intelligent principles of							
behavior							
a search for spiritual guidance							
other							
<u>Other competencies which are</u>							
<u>important to you as an employer</u>							

1. In observing personnel within your employment, what do you believe are the main strengths exhibited by college trained personnel?
2. In observing personnel within your employment, what do you believe are the weaknesses exhibited by college trained personnel?
3. The need for improving curriculum is a continuous process. If we in the field of education are going to succeed we need suggestions and criticisms from people in business. What suggestions and criticisms would you make for improving the training of business students?

EMPLOYERS CONTACTED THROUGHOUT THE UNITED STATES WHO RESPONDED TO THE QUESTIONNAIRE.

The names of the companies and their representatives submitting questionnaires are listed. Most of the companies are well known, and the others have names that are sufficiently descriptive to give some indication of their operation. Additional information that may be helpful in viewing the results are:

1. The number of employees in the companies responding employ from 250 to 800,000 employees.
2. Businesses responding were involved in the following operations: communications, manufacturing, chemicals, transportation, pharmaceutical products, accounting, insurance, utilities, petroleum, food processing, electronics, retailing, military service, photography, banking, trading stamps, and the federal government.

C. W. Adams
Personnel Manager
Birmingham, Alabama
Birmingham, Alabama

Charles E. Nicholas
Personnel Manager
Goodall Rubber Company
Trenton, New Jersey

T. Zurumski
Employment Supervisor
General American Life Insurance
Company
St. Louis, Missouri

A. E. Farrell, Jr.
Personnel Supervisor
American Telephon & Telegraph
Company
New York, New York

Harold E. Roush, Director
College Relations
Radio Corporation of America
Cherry Hill, New Jersey

M. Pierre
Staff Placement Coordinator
Hobard Manufacturing Company
Troy, Ohio

A. R. MacCollis
Riegal Paper Corporation
New York, New York

Vern F. Peak, Director
Personnel Recruitment and
Development
Daiser Industries Corporation
Oakland, California

Edward C. Blum, Manager
Personnel Admission
Consolidated Freightways
Menlo Park, California

D. E. Hyde, Director
Employment and Employee
Relations
Parke, Davis & Company
Detroit, Michigan

O. G. Bryne
Professional Employment
Bristol Laboratories
Syracuse, New York

C. Dykes, Coordinator
Recruiting
Continental Oil Company
New York, New York

L. R. Nuss, Manager
College Relations
Collins Radio Company
Cedar Rapids, Iowa

E. M. Sears
Personnel Manager
Sarkes Tarzian, Inc.
Bloomington, Indiana

E. F. Waterman
Regional Manager
Personnel Relations
Container Corp. of America
Chicago, Illinois

J. VonBampus, Supervisor
Professional Recruitment
Tee-Pak, Inc.
Chicago, Illinois

William White
Director of Personnel
Brockway Glass Co., Inc.
Brockway, Pennsylvania

Robert J. Dingman
College Relations Representative
Koppers Company, Inc.
Pittsburgh, Pennsylvania

James J. Siutz, Supervisor
College Recruiting
Eastern Air Lines
New York, New York

William R. Gifford, Partner
National Recruitment Director
Price Waterhouse & Company
New York, New York

George K. Simpson, Director
Manpower Development
Aetna Insurance Company
Hartford, Connecticut

Tom Edwards
College Relations Administrator
Carnation Company
Los Angeles, California

John L. Wilcox, Employment
Manager
Seattle-First National Bank
Seattle, Washington

A. A. Manske, Director
Employment and Compensation
Packaging Corporation of
America
Evanston, Illinois

W. K. Randall
Humble Oil & Refining Company
Houston, Texas

Norman A. Durfee
National Director
Office of Personnel
American National Red Cross
Washington, D. C.

Elmer Brese, Manager
Corporate Recruiting
Whirlpool Corporation
Benton Harbor, Michigan

T. V. Adams, Manager
Personnel Recruiter
Pacific Gas & Electric Company
San Francisco, California

E. W. Steele, Manager
College Relations
3M Company
St. Paul, Minnesota

R. E. Rodman, Coordinator
Professional Employment
Standard Oil Company of California
San Francisco, California

Golo Wehmueller, Supervisor
Professional Personnel
Dow Corning Corporation
Midland, Michigan

Hersey G. Summer, Manager
College Relations
Army & Air Force Exchange
Service
Dallas, Texas

John Saada
Ernst & Ernst
Cleveland, Ohio

W. L. Pickard
General Personnel Supervisor
Pacific Northwest Bell Telephone
Company
Seattle, Washington

R. M. Palkoner
Industrial Relations Assistant
Wallace Business Forms, Inc.
Chicago, Illinois

E. Zuckerman
Staff Assistant
International Business Machines
Armonk, New York

Robert L. Inslee
Employment Manager
S. C. Johnson & Son, Inc.
Racine, Wisconsin

Frank R. Robinson
Division Personnel Manager
Allstate Insurance Company
Northbrook, Illinois

William H. Jacob
Executive Development Manager
Higbee Company
Cleveland, Ohio

John C. Johnannesmeyer
Manager, Management Division
Talon, Inc.
Meadville, Pennsylvania

R. A. Kampwirth, Manager
Personnel Administration
Universal Foods Corporation
Milwaukee, Wisconsin

F. R. Seltzer, Vice President
Personnel
J. C. Penney Co., Inc.
New York, New York

John W. Rayner
Assistant Personnel Director
Toni Company
Chicago, Illinois

Mary McDermott, Training Director
American Photograph Corporation
New York, New York

William Belveal, Supervisor
Sales Personnel
AC Spark Plug Division
General Motors Corporation
Flint, Michigan

R. B. Garner
Recruiting and Placement
Administrator
American Hospital Supply Corp.
Evanston, Illinois

J. F. Reder, Supervisor
Corporate Technical Recruiter
The Firestone Tire and Rubber
Company
Akron, Ohio

William Watson, Jr., Manager
Employment and Training
Atlantic Richfield Co.
Philadelphia, Pennsylvania

W. E. Stohldrier, Manager
College Relations
General Food Corporation
White Plains, New York

Peter E. Veruki
College Relations Representative
Bethlehem Steel Corporation
Bethlehem, Pennsylvania

Charles P. McDowell
Employment Manager
Toledo Edison Company
Toledo, Ohio

Richard G. Punches
Vice President Sales
College Life Insurance Company
of America
Indianapolis, Indiana

Richard R. Ross, Vice President
Personnel Director
William H. Block Company
Indianapolis, Indiana

L. T. Wilson
Top Value Enterprises, Inc.
Dayton, Ohio

George Beacham
 Assistant Director
 Personnel & Recruiting
 Arthur Andersen & Company
 Chicago, Illinois

M. K. Osborn
 General Personnel Supervisor
 Pacific Telephone & Telegraph
 Company
 San Francisco, California

E. W. Yorke, Personnel Director
 Salt River Project
 Phoenix, Arizona

EMPLOYERS CONTACTED WITHIN THE STATE OF MONTANA WHO RESPONDED TO THE QUESTIONNAIRE

Names of employers interviewed and who were also asked to submit questionnaires are listed. Additional information that may be helpful in studying the results are:

1. The number of employees in the companies submitting questionnaires range from nine to 2,500.
2. Businesses responding were involved in the following operations: banking, recreation facilities, securities, retailing, communications, petroleum, mining, federal government, accounting, transportation, insurance, and college services.

David L. Auer, Treasurer
Wyo-Ben Products, Inc.

Dale Madsen, Manager
Colborn School Supply Company

Neal Nelson, President
Peterson Typewriter Exchange, Inc.

C. E. Vandegenachte
Personnel Officer
Bureau of Indian Affairs

Darrell Booth, President
Kampgrounds of America, Inc.

Royal C. Johnson, Vice President
Dian, Kalman & Quail, Inc.

Don Baker, Investment Broker
Burgan Investment & Security

William R. Anderson
Employee Relations Advisor
Humble Oil & Refining Company

Richard J. Hofmann
Branch Manager
North American Life &
Casualty Company

K. B. Jakobson
Vice President and Cashier
Midland National Bank

Gordon T. Pierrie
Administrative Coordinator
Continental Pipe Line Company

Robert H. Howe, Station Manager
Northwest Airlines

J. F. Ryan, President
Security Federal Savings & Loan
Association

Paul M. Wold, Cashier
First National Bank & Trust
Company

David E. Cleveland, Vice President
Valley State Bank

Frank H. Switzer, Manager
J. C. Penney Company

Anthony Gerharz, Jr., Partner
Certified Public Accountants
Gerharz & Company

James D. Mitchell
Chief Area Personnel Branch
Department of Health, Education,
& Welfare
Public Health Service

Harvey D. Backman
Vice President & Controller
Garryowen Broadcasting System

William M. Osborne,
General Agent
Massachusetts Mutual Life
Insurance

C. A. Cromwell
Refinery Manager
Farmers Union Central Exchange,
Inc.

J. A. Bischke, Branch Manager
Burroughs Corporation

Ned L. Hoover, Assistant
Manager
Continental Pipe Line

Carl Barz, President
Northland Steel

D. H. Thomas,
Montana Personnel Supervisor
Mountain States Telephone

L. G. Throop
Assistant Vice President
Security Trust & Savings Bank

D. W. Rogers
Assistant Store Manager
Sears, Roebuck & Company

Kenneth W. Heikes
Business Manager
Eastern Montana College

David May, District Manager
Saga Food Service

James A. Johnson, Vice Pres.
Midland National Bank

C. J. Angle, Manager
Regional Employee Relations
Humble Oil & Refining Company

James H. McLuskie, Chief
Employee Utilization Branch
U. S. Department of the Interior
Bureau of Reclamation

Appendix D

Computation of t-score Values of Mean Ratings for the
Four Groups in the Measured Competencies

COMPUTATION OF t-SCORE VALUES OF MEAN RATINGS FOR THE FOUR GROUPS IN THE MEASURED COMPETENCIES

The t-scores are used to test the significance of the data resulting from the computations. The t-scores were used in this study to determine whether there was a significant difference among the mean ratings for the four groups surveyed at the .05 level of confidence. The following formula¹ for computing t was used:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sum x_1^2}{k_1 (k_1 - 1)} + \frac{\sum x_2^2}{k_2 (k_2 - 1)}}$$

The $\sum x^2$ for each group is obtained from the formula

$$\sum x^2 = \sum X^2 - \frac{(\sum X)^2}{k}$$

In the formula, t is the standard score for small samples, $\bar{X}_1$ is the mean of the first group, $\bar{X}_2$ is the mean of the second group. $\sum x_1^2$ is the difference between the sum of the squares of the observations of the

¹James E. Wert, Charles O. Nedd, J. Stanley Ahmann, Statistical Methods in Education and Psychological Research (New York: Appellton-Century-Crofts, Inc., 1954), pp. 131-132.

first group and the mean of the square of the sum of the first group observations, and Σx_2^2 is the difference between the sum of the squares of the second group and the mean of the square of the sum of the second group observations. In the formula k_1 is the number of observations in the first group, and k_2 is the number of observations in the second group.

TABLE 31. t-SCORE VALUES OF MEAN RATINGS FOR THE FOUR GROUPS IN THE MEASURED COMPETENCIES FOUND IN THE QUESTIONNAIRE

Individual competencies listed in the questionnaire	Comparison of National Employers			M.S.U. Compared
	Local Employers	M.S.U. Graduates	E.M.C. Graduates	E.M.C. Graduates
<u>Diction</u>	.0943	.0143	.0176	.0035
<u>Correct use of language</u>	.1322	.0000	.0036	.0036
<u>Fluency of speech</u>	.1187	.0596	.0038	.0521
<u>Effective participation in group discussions</u>	.0268	.0152	.0116	.0260
<u>Ability to think on one's feet</u>	.0404	.0440	.1116	.0668
<u>Clarity of thought</u>	.0934	.1788	.1375	.0413
<u>Ability to organize and express ideas</u>	.2042	.2909	.1685	.0735
<u>Correctness of grammar</u>	.1260	.1838	.1193	.0757
<u>Ability to follow printed instructions</u>	.0718	.0972	.0962	.0032
<u>Ability to locate information quickly</u>	.1749	.0120	.0651	.0513
<u>Ability to apply information</u>	.0929	.0346	.0735	.0368
<u>Ability to analyze problem situations</u>	.1197	.1321	.0427	.0860
<u>Ability to evaluate and interpret facts</u>	.0717	.0589	.0000	.0578
<u>Ability to arrive at satisfactory decisions</u>	.0604	.2245	.1868	.0241

Table 31. (Continued)

Individual competencies listed in the questionnaire	Comparison of National Employers			M.S.U. Compared
	Local Employers	M.S.U. Graduates	E.M.C. Graduates	E.M.C. Graduates
<u>An understanding of probability, correlation and sampling as needed in business</u>	.2837	.2075	.1057	.1221
<u>Ability to formulate new ideas applicable to business</u>	.0814	.0769	.0329	.0439
<u>Ability to apply new ideas</u>	.0116	.0382	.0408	.0790
<u>Flexibility of thinking to meet changing situations</u>	.0330	.0624	.0324	.0957
<u>Ability to work effectively with others</u>	.0381	.1898	.1605	.0306
<u>Handling difficult people</u>	.1053	.2356	.2939	.0539
<u>Ability to approach controversial problems with objectivity</u>	.0370	.0907	.0932	.0104
<u>Ability to see reasons for social movements</u>	.0391	.1276	.0921	.0381
<u>Understanding of government</u>	.0699	.2129	.1594	.0541
<u>Sensitivity to values and traditions of other cultures</u>	.2242	.1882	.0400	.1434
<u>General understanding of world economic problems</u>	.1664	.2025	.0146	.1911

Table 31. (Continued)

Individual competencies listed in the questionnaire	Comparison of National Employers			M.S.U. Compared
	Local Employers	M.S.U. Graduates	E.M.C. Graduates	E.M.C. Graduates
<u>Sufficient background of the physical and biological world</u>	.1074	.1083	.0480	.0351
<u>A general understanding of technology</u>	.0685	.0973	.1735	.0724
<u>Application of conservation in the wise use of natural resources</u>	.0785	.1293	.0479	.0316
<u>Ability to sense and recognize quality of form in the sights and sounds about us</u>	.3268	.1279	.0496	.0844
<u>Appreciation of the things we touch, hear and see</u>	.1465	.0608	.1249	.0633
<u>Ability to comprehend some of the most profound expressions of human experience</u>	.1246	.0357	.0809	.0467
<u>Ability to evaluate one's own conduct, and to live a consistent and meaningful life</u>	.0212	.0040	.0766	.0818
<u>Practice clear and integrated thinking</u>	.0248	.0355	.0326	.0862
<u>A desire to achieve but not at the expense of others</u>	.1455	.0927	.0742	.0117

Table 31. (Continued)

Individual competencies listed in the question- naire	Comparison of National Employers			M.S.U. Compared
	Local Em- ployers	M.S.U. Gradu- ates	E.M.C. Gradu- ates	E.M.C. Gradu- ates
<u>An attempt to seek the most intelligent prin- ciples of behavior</u>	.0942	.0242	.0159	.0389
<u>A search for spiritual guidance</u>	.2024	.0233	.0323	.0122

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