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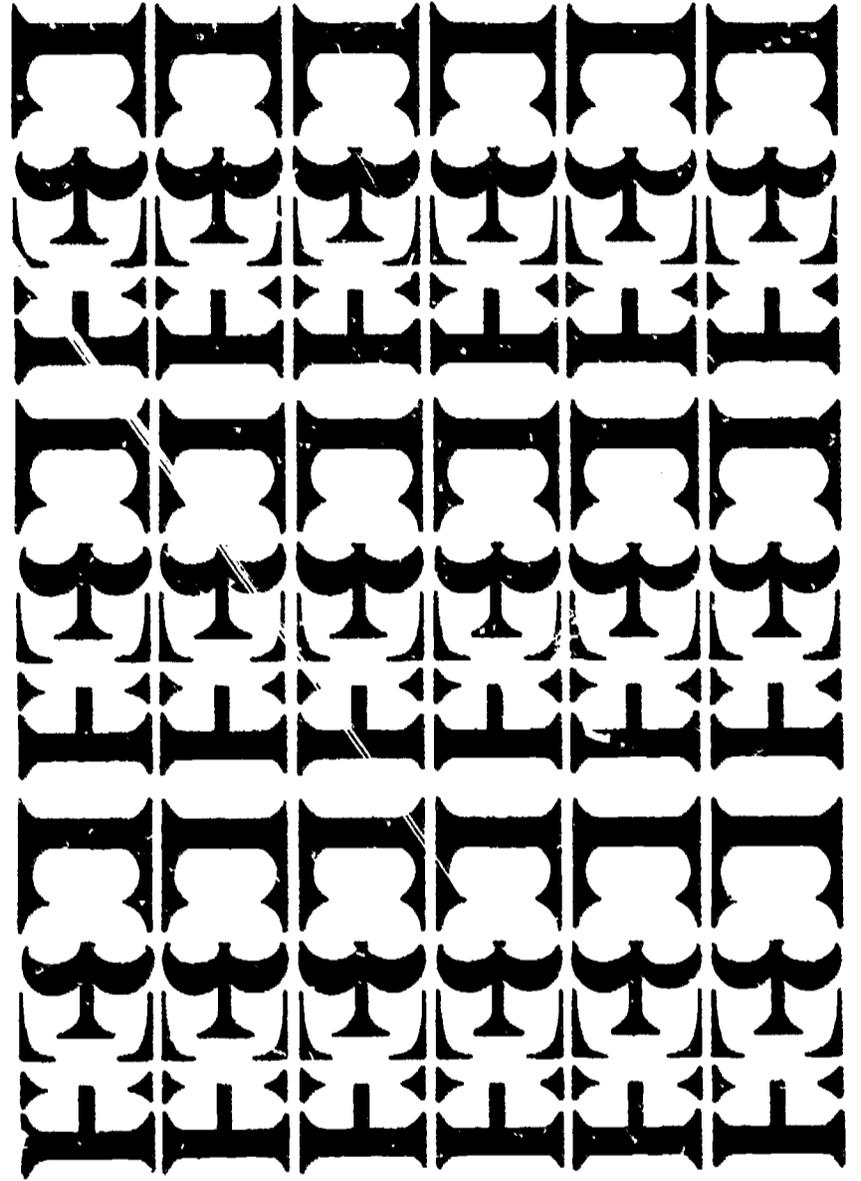
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ABSTRACT

Developed by pooling the knowledge and experience of business education teachers throughout the state, this program guide and manual should be useful to both teachers and administrators in articulating and operating business education programs. Major sections concern: (1) a capsule history of Iowa business education, (2) philosophy and related principles of business education, helpful in developing various levels of programs, (3) general responsibilities of business education, the advisory committee, evaluation, public relations, etc., (4) curriculums in the business programs of a secondary school, (5) post secondary program trends in Iowa, including ideas on course implementation and several bibliographies, and (6) an appendix including information on teacher certification, a taxonomy system for business education, and definitions of business education terms. Although each educational level is covered, primary emphasis is given to secondary schools, whose business programs cover all of Iowa. Students, counselors, curriculum committees, school board members, and the interested public will find this handbook informative for their own purposes.
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IOWA BUSINESS EDUCATION HANDBOOK

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A HANDBOOK FOR BUSINESS EDUCATION IN IOWA

**a joint publication of
the Iowa Business Education Association
and the
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1972**

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FOREWORD

The world of business plays a dominant role in the lives of all citizens. To a large portion of our population, it represents a source of employment, income, and financial security. To an even greater number of people, it represents the source of goods and services used in their day-to-day lives. Therefore, business as an area of study should occupy a significant place in the curriculums of our schools.

A large share of Iowa's youth will ultimately work in the business world, and all of them will devote a significant part of their earnings to the purchase of goods and services. Students at all levels, but especially in the junior high schools, the secondary and post-secondary schools should be expected to participate in those fundamental experiences and learnings which are concerned with the operation of our economic and business systems. A great number of those students also should be directed toward developing skills and competencies necessary to entering a vocation of their choice. Both in the general education portion of the school's programs as well as in the areas of specialization, the study of business must be included if modern curriculum development is to take place.

This publication represents the best thinking of business education teachers throughout the state. By pooling their knowledge and experience, they have developed a very useful set of guidelines for understanding the many-sided business education programs at the various levels in the state. The materials presented cover both the administration and operation of secondary and post-secondary business education programs and should be helpful to present and future teachers, administrators, and the general public.

The value of any publication lies in its proper use. This handbook is no exception. It offers ideas that can benefit schools of all sizes in all sections of the state, but these ideas must be studied and experimented with before any benefit can be derived from them.

The State Department of Public Instruction subscribes to a strong business education program in Iowa's schools. It makes available this set of guidelines for use in the State of Iowa, especially for those persons most responsible for developing and maintaining strong business programs and strong links with the business community.

PAUL F. JOHNSTON

State Superintendent of Public Instruction

Section 1

ACKNOWLEDGMENTS

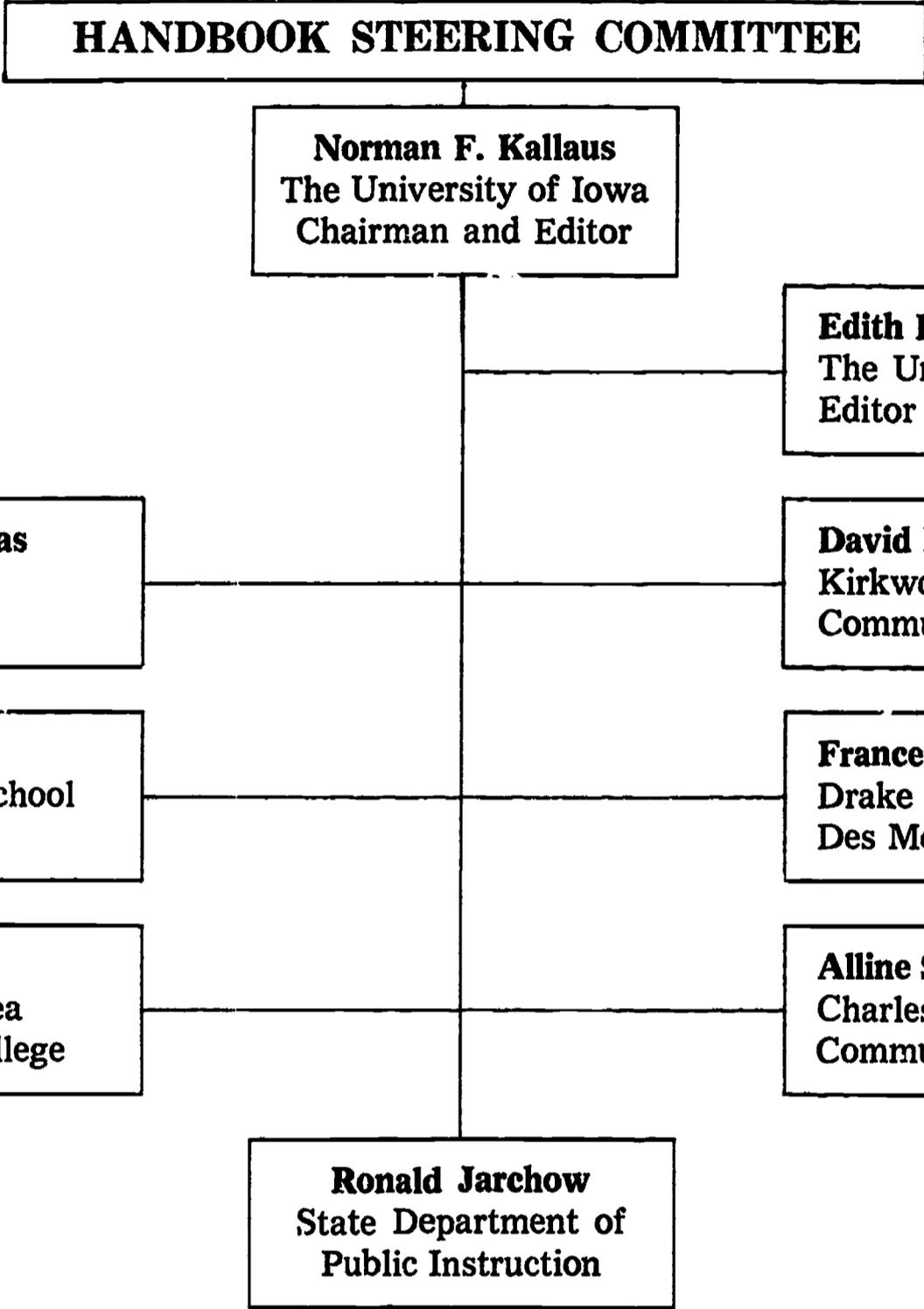
Norman F. Kallaus
The University of Iowa
Iowa City

Section 1

ACKNOWLEDGMENTS

To a very great extent the publication of this Business Education Handbook can be called a labor of love. It represents the combined talents, the coordinated efforts, and the co-operative motivations of a group of dedicated business educators. It was their principal objective to provide for the State of Iowa a useful publication which both described and prescribed business education and its many programs at the several levels of education. The remaining pages of this document serve as a standing tribute to this group effort.

A large number of people are primarily responsible for this publication. This group is indicated and their responsibilities explained in the following organization chart.



From the steering committee, an organization plan evolved and writing assignments were made. All sections of the State of Iowa as well as all levels of business education are represented.

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Beyond the responsibilities for writing were the invaluable advisory contributions made by the following staff of the State Department of Public Instruction: Mr. William Edgar,

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A special note of thanks is due Mrs. Sue Oxenford, senior business education student at The University of Iowa. Her special editorial talents, including her unusual and mature grasp of the subject matter, made her editorial services to the publication of this handbook invaluable.

The services of the graduate students in business education at The University of Iowa, as well as those of the secretary of the Department of Business Education, Carol Skripsky, contributed immeasurably to many of the behind-the-scenes activities in the production and refinement of the final manuscript.

From this large and selfless group who responded to every call for action and met deadlines and other responsibilities with unfailing devotion, I express my gratitude. To this same group, business education in Iowa can long be grateful.

Norman F. Kallaus
Handbook Committee Chairman

Section 2

PURPOSES, USES, AND ORGANIZATION OF THIS HANDBOOK

**Donald A. Nellermoe
The University of Iowa
Iowa City**

SECTION 2

PURPOSES, USES, AND ORGANIZATION OF THIS HANDBOOK

Purposes of this Handbook

Since its inception, business education in the Iowa schools has generated a multitude of purposes to serve a growing number of needs. Its basic offerings are directed to students with widely differing (and often unresolved) future plans, and its vocational or career-oriented programs have long been the principal education source for students preparing for business positions.

With the relentless march of time, various levels of educational institutions have become the focal points of expanding business education programs. Both the junior and senior high schools offer business programs, as do most post-secondary institutions such as the community colleges and their vocational-technical divisions and the private business schools. At the four-year colleges and universities business students are prepared as instructors for the various levels of business education programs.

The teachers in these many institutions, as well as their administrative and counseling staffs, will find many sections of this handbook helpful in understanding business education in the modern world—and, in addition, helpful in the development and improvement of the business education programs themselves. The general public, including the parents of students and the businessmen-employers of the business department's graduates, will find this publication a source of information for understanding and fostering good relationships with the business education department.

This handbook describing business education in its many forms and environments necessarily serves many publics—and necessarily has multiple purposes. While attention is devoted to each educational level, primary emphasis is given to the secondary schools, whose business programs cover the entire state. The post-secondary programs

are also included because of their growing impact upon the educational scene in Iowa.

Uses of this Handbook

This reference has something to offer school administrators, parents and students, guidance and counseling personnel, teachers, curriculum committees, and school boards, as well as the general public. Specific uses for each group are suggested as follows:

School administrators at the various secondary and post-secondary school levels, public as well as private, will be able to utilize the information in this handbook in weighing the values and importance of various phases of business education relative to their decision-making processes. For such school officials with responsibilities over educational facilities, funds, policy, and personnel, this handbook provides invaluable ideas and suggestions for continued program development in business education.

Students, as well as their parents, are often concerned about adequate planning for future study. This source, then, provides information concerning a variety of course and program choices suitable to the needs and interests of all students at both the high school and post-high school level.

This handbook also satisfies a need in the field of *guidance* by offering general information as well as specific ideas about all areas of business education from grades seven through twelve and at the post-secondary level. Counselors will find this source indispensable in assisting the student with course and program choices. Counselors may also use it as a general orientation to business education and for developing a taxonomy of occupational information in the school community, as well as for generating information through follow-up studies of students.

10/11

Teachers will find this handbook helpful in providing information needed in the planning and revision of their business education programs. Topics related to adopting or planning a new program, or gaining insight into the formulation of terminal objectives of programs, are included. For the concerned and progressive teacher this information is invaluable.

Curriculum committees may use this material for developing their own special curriculums or for the improvement of existing programs. The content of this handbook is not intended, from this standpoint, to represent a rigid or arbitrary set of principles. It does, however, provide a set of guidelines from which the curriculum specialists or curriculum committees may operate. Hopefully, more modernistic and futuristic business education programs may evolve through utilization of this publication.

School board members, collectively as well as individually, will find this handbook a reliable source of information for policy formulation and for analyzing existing programs. In addition, the *general public*, in order to keep well informed, will find the contents of this publication enlightening. As taxpayers and supporters of education, they, as much as any other group, need to be well informed.

Organization of the Handbook

The organizational structure and content of the handbook is briefly described in the following sections.

History

A capsule history is provided describing the development of business education in Iowa, and its significant contributions to the state and profession. Included is a list of Iowa Business Education Association presidents from 1909 to the present.

Philosophy

The philosophy and related principles of business education stated in this section provide guidelines which should be helpful in developing various levels of business education programs. In addition, this section details realistic objectives for such a department or for program(s) within a department.

Suggestions for curriculum improvement are also included.

General Responsibilities

The general responsibilities section includes a discussion on the professional development of the business teacher with suggestions for keeping abreast of new developments in the profession. Additional topics covered include utilizing advisory committees, evaluating the business department, promoting public relations, and developing leadership skills and personal traits in the business-education student. Values and purposes of surveys of the business community and of the business department graduates as well as topics on adult (continuing) education and instructional media are also discussed.

Programs

This handbook section relates to those curriculums making up the business programs in a secondary school. Four broad subject areas presented are basic business, data processing, distributive education, and office occupations. Each subject area includes program descriptions and objectives, as well as ideas on course implementation. Selected information related to teaching methodology, equipment, facilities, and a special bibliography are found in each section.

A statement of sample minimal objectives in each subject division is presented in a new format — *terminal* (behavioral) *objectives* — especially for those teachers who wish to formulate a specific set of objectives for each offering.

Post-Secondary Business Education in Iowa

The Post-Secondary section provides a general description of business education program trends throughout the State of Iowa. In addition, the objectives and examples of typical program offerings in the community colleges, junior colleges, vocational and technical schools, as well as a description of private business school programs, are included. Trends of business education in the four-year colleges and universities are also discussed.

Appendix

The areas covered in the concluding section include certification of business teachers, a discussion of the taxonomy system, and an

alphabetical list of significant definitions of business education terms so that the reader

may share an understanding of terminology with business educators in Iowa.

Section 3

HISTORY OF BUSINESS EDUCATION IN IOWA

**Frances E. Merrill
Professor Emeritus, Drake University
Des Moines**

SECTION 3

HISTORY OF BUSINESS EDUCATION IN IOWA

Early Beginnings

The early years of business education in the public schools of Iowa reflect the national trends of that period: Business education had a distinct vocational objective; and bookkeeping and penmanship—the two most commonly offered subjects in the business curriculum—were necessary office skills for both the bookkeeper and the amanuensis (a person who took dictation or copied something already written). These trends, of course, were in existence before the invention and mass production of the typewriter.

Business education was first taught in private business schools—called “business colleges” at that time—and they were the only agency for training business teachers during this early period. The first independent business school west of the Mississippi River was Bayless Business College, started in Dubuque in 1858 by Aaron Bayless. The presidents of this school and all the private business schools gave strong leadership to the cause of business education in Iowa.

In 1880 Austin N. Palmer, as a young man of twenty-one, began teaching penmanship in the Cedar Rapids Business College. Mr. Palmer had been an engrosser of policies for an insurance firm (since at that time fancy script penmanship was considered a sign of solidarity for an insurance company). However, this job was not considered to be very challenging, so Mr. Palmer turned to teaching and developed the famous Palmer Method of Penmanship, which for many decades was taught throughout the country. In 1898 he became president of the Cedar Rapids Business College and retained that position until his death in 1927.

Another pioneer in private business education in Iowa was J. M. Mehan. In 1884, he opened the Capital City Commercial College in Des Moines, popularly known as “The Four C’s.” This school had a strong influence

on business education in Iowa for three-quarters of a century. In 1894-95, Mr. Mehan was president of the National Education Association’s Department of Business Education.

The earliest record of a business teacher in Iowa was that of Clay D. Slinker, who was hired by the Des Moines Public Schools in 1888. Mr. Slinker was a pioneer educator who continued to teach in the Des Moines Schools for forty-seven years. A graduate of the Capital City Commercial College (CCCC) in Des Moines where he specialized in ornamental penmanship, Mr. Slinker taught bookkeeping and penmanship. In the early 1890’s he returned to CCCC to study Pitman Shorthand, which he later taught for a number of years.

In 1899 Almon F. Harvey (later known as Almon F. Gates) assumed management of the Waterloo Collegiate Academy, which had been organized in 1884, and Barrett’s College of Commerce, which had been organized in 1886. These schools then became known as the Waterloo Business College. In the years which followed several other private business schools were established in Waterloo: Waterloo College (organized in 1900), the College of Commerce (organized in 1908), the Corn Belt Business College (organized in 1924), and Robbins’ College of Commerce (organized in 1932). These schools later merged with the Waterloo Business College, which is the legal name of the school now popularly known as Gates College.

1908-1926:

Identification and Organization

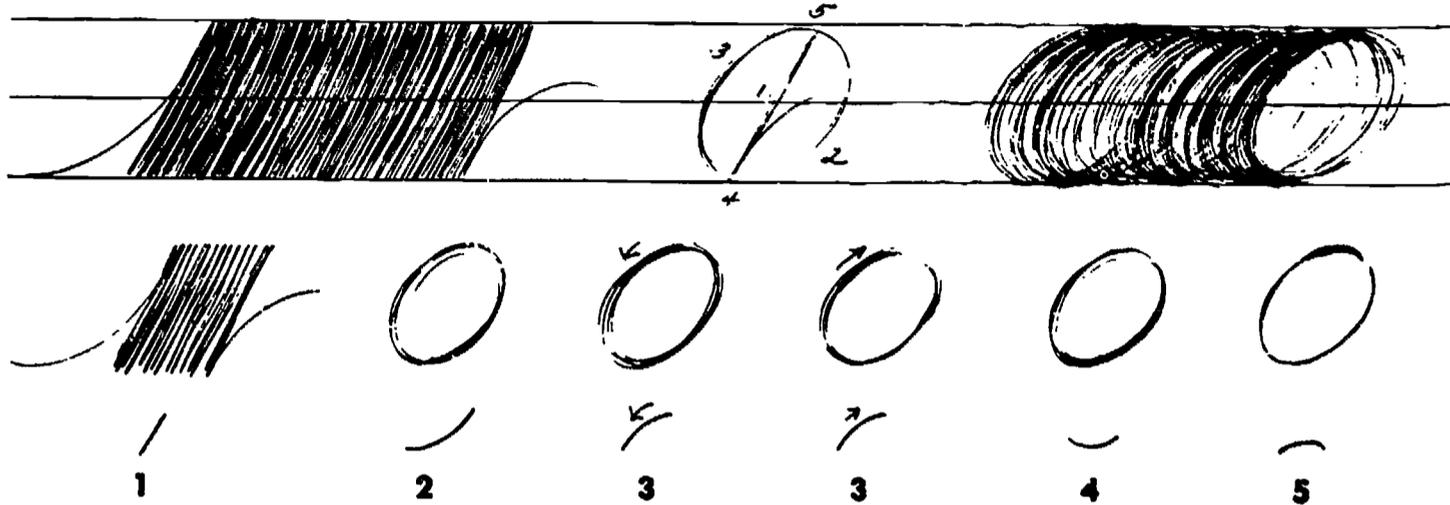
The period 1908-1926 in business education history was a time for the organization of teachers on both a state and national basis. Proudly it can be said that Iowa provided a goodly share of the leadership. During this

16/17

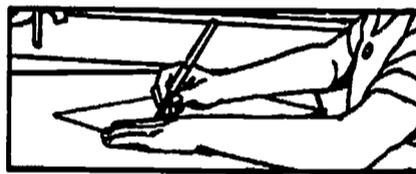
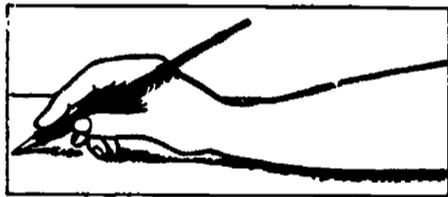
Diagram I

Diagram II

Diagram III



An exercise from the Palmer Method instruction book.



*Oh-Oh, Kids,
The Palmer Method
Is Back!*



W. M. Palmer

The Palmer Method of handwriting, showing a typical lesson from a workbook. (Des Moines Sunday Register, Section 6, March 12, 1967, Des Moines, Iowa)

time business education was usually called "commercial education."

Commercial Section, ISTA

The first evidence of an organized group of business teachers in Iowa was in the formation of the Iowa State Teachers Association (ISTA) in December, 1908. The Commercial and Penmanship Teachers Section, a division of ISTA, listed its program as follows:

- "1. Penmanship in the High School
2. Penmanship in the Grades

General discussion will follow each topic."

By 1911 the word "penmanship" was dropped from this group's title, and this section was then listed as the "Commercial Teachers Section" or shortened to the "Commercial Section," until the general revision of the ISTA in 1945. Through the years, the content of the programs of this group evidenced the changing philosophy and vocabulary of the times. The term "penmanship" last appeared in the 1918 program, and subsequently "transcription" evolved as a topic for discussion.

American Vocational Association

In 1925 the Vocational Education Association of the Middle West and the Western Arts Association held a joint professional meeting in Des Moines. At this conference a new constitution was adopted, merging these two organizations into the American Vocational Association (AVA), thus making Iowa the birthplace of this important association, which is highly influential in our national educational structure today.

Business Education Leaders of the Period

In 1913 Clay D. Slinker was appointed Director of Business Education in the Des Moines Public Schools, the first such position in the United States and a benchmark of progress for business education. In 1921-22 he was president of the National Education Association's Department of Business Education. Mr. Slinker continued in his capacity of Director of Business Education in Des Moines until 1937.

During this same period Bruce F. Gates, the son of Almon F. Gates, began teaching in the Gates Business College in Waterloo and

in 1923 became its president. Mr. Gates was active in many state, regional, and national organizations of the private business schools and also served as secretary of the National Commercial Teachers Association, which later became the National Business Education Association (NBEA).

1926-1944:

Research and Innovations

Research

The business education community in Iowa very early felt the impact of educational research as it was being developed in graduate schools throughout the country. As the result of a series of national surveys and research studies by the National Educational Policies Commission, for example, some of the emphasis in research shifted from the office skills subjects, with a strong vocational orientation, to areas of more emphasis for all students. As a result of such research, basic business (nonskill) subjects were brought into the curriculums and offered to students regardless of their career objectives.

This shift in emphasis also was illustrated in the terminology used in business education programs, conferences, and publications of the period. In 1930, for example, the term "business" was substituted for the familiar term "commercial" in the ISTA program. By the mid-1930s, the terms "socio-business" and "general business" appeared in the titles of discussion groups at professional business education meetings.

Under the leadership of Dr. E. G. Blackstone of The University of Iowa, research in business education was developed significantly during this period. Beginning in 1926 and lasting for eight years, a series of two-day conferences (called the Iowa Research Conferences on Commercial Education) was held on The University of Iowa campus. Many outstanding leaders in business education were brought in from all over the country for these conferences. The policy underlying such professional meetings was geared to enable the authors of each of the latest available research studies to give reports, followed by informal discussions of each report, as one research study indicated,

so that vague or disputed points may be settled and where theories, dreams,

and intuitions may be exchanged with no requirement for proof or supporting evidence, for, from such informal meetings at the first conference of the series, much that was helpful and suggestive and stimulative emerged.¹

Significant research was also reported from The University of Iowa business education staff. For example, beginning in 1926, five volumes of *Research Studies in Commercial Education* were published by The University of Iowa and distributed throughout the country.

In connection with the Iowa Research Conferences on Commercial Education held at The University of Iowa, informal discussions were held by the conference participants regarding the improvement of facilities for training commercial teachers. As an outgrowth of these discussions, a recommendation was made that a professional organization be initiated to bring together all those persons interested in training commercial teachers. The resulting organization was the National Association of Commercial Teacher Training Institutions, later the National Association of Business Teacher Institutions, and now the National Association for Business Teacher Education (NABTE), one of the divisions of the National Business Education Association.

In 1929 the President of the United States, Mr. Herbert Hoover, appointed Clay D. Slinker, the Director of Business Education in Des Moines, to represent the United States at the International Congress of Commercial Education at Amsterdam. This organization is now known as the International Society for Business Education and has continued to offer International Education Courses in a different country each year.

Innovations

In 1932, one of the most significant innovations in business education (in fact, the first of its kind in the nation) was the institution of "High School Day," conceived by Mr. Slinker in Des Moines. During this day, 16 stores and other businesses paid 275 students of retail selling, business organization, business English, art, and journalism \$2 each for a day of work in their stores. This program was repeated annually for many years

1. E. G. Blackstone, *Research Studies in Commercial Education*, Vol. I (Iowa City: The University of Iowa) July, 1926, p. 3.

and laid much of the groundwork for the later development of the cooperative business programs now commonly found in vocational business education programs throughout the country.

When Mr. Slinker retired from the Des Moines Schools in 1937, Ernest A. Zelliott became Director of Business Education. Under his leadership, cooperative business education programs and other educational innovations were started. At the end of World War II, Mr. Zelliott supervised the continued development of such programs in Des Moines Technical High School, which became one of the outstanding vocational schools in the nation. Mr. Zelliott was active in both state and national professional organizations and was president of the United Business Education Association in 1936-37.

During the last few years of the 1930s, stimulated by federal legislation for vocational education, distributive education programs were instituted in a number of schools in Iowa. During their senior year, students in the distributive education programs worked half days in retail stores under the supervision of a teacher-coordinator, and the remaining half day was spent in related course work in the classroom. Some of these programs were subsidized with federal and state funds; others were funded entirely by the local schools.

Although business education was furthered during the war years, the progress that was made during this period was slow. The war effort drained much of the creative ability, and those who still were working in the field of business education found it difficult to get together as a result of wartime restrictions such as gas rationing, which limited travel.

1945-1963:

Postwar Recovery

Following World War II, there was a period of recovery and reassessment of the aims of business education. For many schools it was also a period of retcoling and updating equipment and curriculums which had to be postponed for higher-level priorities during the war years.

Following a pattern similar to the post World War I period, a rapid acceleration of technology occurred in the late 1940s, the



A 1907 office production center. (*The Wonderful Writing Machine* by Bruce Bliven, Jr., published by the Royal Typewriter Company, 1954; courtesy of the Royal Typewriter Company)

A Ten-Minute Lesson in Gregg Shorthand

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A more extended Lesson and a copy of "Shorthand in the Public Schools," will be sent you free upon application.

The Gregg Publishing Co., 151 Wabash Ave., Chicago

An advertisement for Gregg Shorthand on the back cover of the November 1908 issue of *Midland Schools*, journal of the Iowa State Education Association. (Courtesy of the Royal Typewriter Company)

aftermath of atomic and electronic research during World War II, culminating in the launching of Sputnik in 1957. For several years a relatively greater emphasis was placed on programs in the physical sciences than in the social sciences, including business education. However, business education programs in Iowa continued to expand at all levels.

Development of IBEA

In 1945, the ISTA was reorganized and the name changed to Iowa State Education Association (ISEA); the business section of ISEA then became the Iowa Business Education Association (IBEA). Each of the sections of the ISEA was given authority to elect its own officers and to present its own programs.

By 1945, as the wartime period drew to a close, the IBEA found it difficult to carry on a meaningful program and at the same time to plan for a subsequent fall program at its annual fall meeting. Therefore, under the leadership of William J. Masson, Professor and Head of Business Education at The University of Iowa, an informal spring meeting was held by the IBEA for the purpose of making more comprehensive plans for the meeting at the fall state convention. These meetings have been continued and have been enlarged as the scope of professional concerns has broadened to include promotional activities through public relations, research and surveys, as well as the interchange of professional ideas within the group.

Business Education Leaders in the Period

In 1950 a committee of dedicated business teachers from Iowa schools under the guidance of Lloyd V. Douglas, Head of Business Education at Iowa State Teachers College, authored a handbook entitled *Business Education in the Secondary Schools* which was issued by the Department of Public Instruction of the State of Iowa. This volume provided guidelines to curriculum construction, subject matter planning, selection of equipment and supplies, and development of course outlines.

Dr. Douglas has represented Iowa on many local, state, regional, and national professional groups and has filled many offices in national business education organizations, such as the National Business Education

Association (NBEA), Pi Omega Pi, Delta Pi Epsilon, American Vocational Association, National Policies Commission for Business and Economic Education, N-CBEA (North-Central Business Education Association), and others. In 1960 he was given the John Robert Gregg Award in Business Education. In 1970 he retired from his position as Head of the Department of Business Education and Office Administration at the University of Northern Iowa after a tenure of almost four decades.

During this period business education programs continued to develop in all sections of the state of Iowa. Besides the University of Northern Iowa, The University of Iowa developed a large graduate program, leading to the doctorate in business education. As chief architect of this program, William J. Masson headed the Department of Office Management and Business Education for nineteen years, a period of time in which many national figures in business and business education were developed. He left the headship in 1966 to return to full-time teaching until he moved from the state in 1968.

Other business education programs developed during the period in private colleges and universities. Of special note is the program at Drake University which was headed for twenty-five years by Frances E. Merrill, who gave strong leadership to the training of secretarial teachers and secretarial office workers in Des Moines. On two separate occasions she served as president of the IBEA.

1963-Present:

Vocational Revival

In 1963, the passage of the Vocational Education Act heralded a renewal of the vocational emphasis for business education. Subsequently new developments in business education programs were initiated.

Area Community Colleges

In 1965, the Iowa General Assembly passed an enabling act, permitting the use of federal funds supplemented by state funds to establish area community colleges. Sixteen areas were defined and 15 colleges were organized. These colleges added vocational business education at the post-secondary level in distributive and office education; and some of the schools have also developed

advanced programs on the management level in specialized areas.

Higher Educational Institutions in Iowa

In order that the reader may be aware of the higher education institutions offering business programs, a list of the four-year liberal arts colleges, public and private junior colleges, area community colleges, and private or proprietary business schools in the State of Iowa is presented in Table 3-1.

High School Programs

With the stimulus of state and federal funds, many cooperative work-experience programs were added to the high school curriculums. In this period there was a significant increase in the number of distributive

education programs, and office education was expanded from the usual bookkeeping and stenographic areas to include clerical practice and data processing. During this period of time, office education was expanded and funded along with distributive education programs.

IBEA

In 1962 the IBEA began the publication of a mimeographed "Newsletter" in order to improve communication and to develop professional unity among its members. By 1966 this newsletter became the commercially printed "IBEA Bulletin."

In 1968 the IBEA hired a part-time executive secretary because of the need to coordinate and centralize its expanding activities.

Table 3-1

**Four-year Liberal Arts Colleges and Universities,
Private and Public Junior Colleges,
and Institutions of Continuing Education in Iowa, 1971**

Four-Year Colleges

<u>Name of Institution</u>	<u>Address</u>
Briar Cliff College	Sioux City, Iowa 51104
Buena Vista College	Storm Lake, Iowa 50588
Central College	Pella, Iowa 50219
Clarke College	Dubuque, Iowa 52001
Coe College	Cedar Rapids, Iowa 52402
Cornell College	Mount Vernon, Iowa 52314
Dordt College	Sioux Center, Iowa 51250
Drake University	Des Moines, Iowa 50311
Graceland College	Lamoni, Iowa 50140
Grinnell College	Grinnell, Iowa 50112
Iowa State University	Ames, Iowa 50010
Iowa Wesleyan College	Mount Pleasant, Iowa 52641
Loras College	Dubuque, Iowa 52001
Luther College	Decorah, Iowa 52101
Marycrest College	Davenport, Iowa 52804
Morningside College	Sioux City, Iowa 51106
Mount Mercy College	Cedar Rapids, Iowa 52402
Northwestern College	Orange City, Iowa 51041
Parsons College	Fairfield, Iowa 52556
William Penn College	Oskaloosa, Iowa 52577
St. Ambrose College	Davenport, Iowa 52803

(Continued)

Table 3-1 (Continued)

Simpson College
 University of Dubuque
 The University of Iowa
 University of Northern Iowa
 Upper Iowa College
 Wartburg College
 Westmar College

Indianola, Iowa 50125
 Dubuque, Iowa 52001
 Iowa City, Iowa 52240
 Cedar Falls, Iowa 50613
 Fayette, Iowa 52142
 Waverly, Iowa 50677
 Le Mars, Iowa 51031

Private Junior Colleges

Name of Institution

Address

Grand View
 Mount St. Clare
 Ottumwa Heights
 Palmer
 Sioux Empire
 Waldorf

Des Moines, Iowa 50300
 Clinton, Iowa 52700
 Ottumwa, Iowa 52501
 Davenport, Iowa 52800
 Hawarden, Iowa 51023
 Forest City, Iowa 50436

Private Business Colleges

Name of Institution

Address

American Institute of Business
 American Institute of Commerce
 Cedar Rapids Business College
 Gates College
 Hamilton College
 Iowa City Commercial College
 Nettleton Business Training College
 Sawyer College of Business
 Spencer School of Business

Des Moines, Iowa 50309
 Davenport, Iowa 52803
 Cedar Rapids, Iowa 52404
 Waterloo, Iowa 50701
 Mason City, Iowa 50401
 Iowa City, Iowa 52240
 Sioux City, Iowa 51102
 Davenport, Iowa 52803
 Spencer, Iowa 51301

Area Community Colleges

Area

Name of Institution and Address

Area I

Northeast Iowa Area Vocational-Technical
 School
 Calmar, Iowa 52132

Area II

North Iowa Area Community College
 Mason City, Iowa 50401

Area III

Iowa Lakes Community College
 Estherville, Iowa 51334
 Emmetsburg, Iowa 50356

Area IV

Northwest Iowa Vocational School
 Sheldon, Iowa 51201

Area V

Iowa Central Community College
 Fort Dodge, Iowa 50501
 Eagle Grove, Iowa 50533
 Webster City, Iowa 50595

(Continued)

Table 3-1 (Continued)

Area VI	Merged Area VI Community College Marshalltown, Iowa 50158 Ellsworth at Iowa Falls, Iowa 50126
Area VII	Hawkeye Institute of Technology Waterloo, Iowa 50704
Area IX	Eastern Iowa Community College District Scott Campus at Davenport, Iowa 52801 Clinton, Iowa 52732 Muscatine, Iowa 52761
Area X	Kirkwood Community College Cedar Rapids, Iowa 52406
Area XI	Des Moines Area Community College Ankeny, Iowa 50021 Boone, Iowa 50036
Area XII	Western Iowa Tech Sioux City, Iowa 51105
Area XIII	Iowa Western Community College Council Bluffs, Iowa 51501 Clarinda, Iowa 51632 Harlan, Iowa 51537
Area XIV	Southwestern Community College Creston, Iowa 50801
Area XV	Indian Hills Community College Ottumwa, Iowa 52501 Centerville, Iowa 52544
Area XVI	Southeastern Iowa Area Community College West Burlington, Iowa 52655 Keokuk, Iowa 52632

The first such executive secretary was the late Dr. Kenneth Hansen of the University of Northern Iowa. Later his wife, Mrs. Gloria Alcock Hansen, served in this capacity. This secretary also serves as membership chairman and supervises the mailing function. As a result, the organization has been run more

efficiently, and the membership has more than doubled.

Through the years many devoted teachers have served as president of IBEA. From records available since 1909, these officers are listed in Table 3-2.

Table 3-2**Iowa Business Education Association Presidents
1909-1971**

Year of Office	Name and Address
1909	E. E. Strawn, Estherville
1910	Clay D. Slinker, Des Moines
1911	H. C. Cummins, Iowa State Teachers College
1912	J. C. Glason, Council Bluffs
1913	J. C. Glason, Council Bluffs
1914	R. V. Coffey, Cedar Falls
1915	W. W. Arner, Des Moines
1916	E. L. Miller, Indianola
1917	Dollie D. Burges, Council Bluffs
1918	R. E. Nyquist, Mason City
1919	R. E. Nyquist, Mason City
1920	George A. Bingham, Des Moines
1921	Robin Lynn Hamilton, Sioux City
1922	Ernest A. Zelliott, Des Moines
1923	Robert M. Richardson
1924	M. A. Jencks, Des Moines
1925	O. F. Barnes, Des Moines
1926	Anna E. Young, Ames
1927	N. B. Curtis, Des Moines
1928	F. W. Hancock, Marshalltown
1929	Irma L. Morgan, Indianola
1930	Frances Botsford, Iowa City
1931	Clara Foss, North High School, Des Moines
1932	Bessie Young, Waterloo
1933	Dwight Easter, East High School, Des Moines
1934	Lena E. White, Council Bluffs
1935	E. G. Blackstone, The University of Iowa
1936	A. R. Shoemaker, Corning
1937	Floyd Hancock, Marshalltown
1938	Harold Williams, Roosevelt High School, Des Moines
1939	Cleo P. Casady, Webster City Junior College
1940	Ralph A. LeMoines, East High School, Waterloo
1941	Charles W. Maxon, Burlington Junior College
1942-1945	During the World War II years there was no statewide IBEA activity.
1944	George M. Hittler, The University of Iowa
1946 (January)	George M. Hittler, The University of Iowa
1946 (November)	Lloyd V. Douglas, Iowa State Teachers College
1947	Lloyd V. Douglas, Iowa State Teachers College
1948	August J. Lukes, East High School, Waterloo
1949	Frances E. Merrill, Drake University
1950	E. L. Marietta, Iowa State Teachers College
1951	E. L. Marietta, Iowa State Teachers College

(Continued)

Table 3-2 (Continued)

Year of Office	Name and Address
1952	Ruth Tumbleson, North High School, Des Moines
1953	M. H. Haahr, Mason City
1954	William J. Masson, The University of Iowa
1955	Paul J. Boysen
1956	James T. Blanford, Iowa State Teachers College
1957	Kenneth N. Griffin, Mason City Junior College
1958	Carl Millsap, Amos Hiatt Junior High School, Des Moines
1959	Norman F. Kallaus, The University of Iowa
1960	Paul Phillips, Eagle Grove Community School
1961	Frances E. Merrill, Drake University
1962	Richard E. Simpson, Clarion High School
1963	Gloria Alcock, Wartburg College
1964	Gloria Alcock Hansen, Wartburg College
1965	Shirley Follhoefer, Washington High School, Cedar Rapids
1966	Glenn Wiebke, Sumner Community School
1967	Aurelia Prior, University of Northern Iowa
1968	Agnes Lebeda, University of Northern Iowa
1969	M. Jane Ealy, Lincoln High School, Des Moines
1970	W. Frank Hoffman, North Iowa Area Com- munity College, Mason City
1971	Carroll Bennett, Des Moines Area Community College
1972	Edith E. Ennis, The University of Iowa

In 1969 under the dynamic leadership of Miss M. Jane Ealy, the IBEA started a revision of the 1950 *Business Education in the Secondary School Handbook*, resulting in the publication of this volume. In the spring of 1971, the IBEA held its first independent conven-

tion, devoted solely to the interests and concerns of business education. This spring convention adds one more valuable professional contribution of IBEA to both the teaching profession and to the improvement of business education in Iowa.

Section 4

BASIC PHILOSOPHY AND OBJECTIVES OF BUSINESS EDUCATION

Lloyd V. Douglas
Professor Emeritus, University of Northern Iowa
Cedar Falls

SECTION 4

BASIC PHILOSOPHY AND OBJECTIVES OF BUSINESS EDUCATION

An Orientation for Iowa Business Teachers

Purposes of Business Education

Business educators generally agree that there are several objectives for all levels of business education:

1. The *vocational* (career) objective, i.e., to prepare students for employment in the world of business.
2. The *general education* objective — to educate all individuals regardless of their future career interests and plans. This general education objective may in turn be subdivided into the following two objectives.
 - a. The *consumer-economic education objective*, which is related to knowledge, abilities, and attitudes pertinent to the world of business and of value to everyone as consumers of business services and products and as citizens in our American free-enterprise system.
 - b. The *personal-use objective*, which is related to those skills and abilities (such as the ability to operate the typewriter well) of value to everyone regardless of his career and citizenship activities.

This two-fold basic concept of business education is predicated on the knowledge that this nation's economy is, and the belief that it will continue to be, a business-oriented economy. Such a concept encompasses "both sides of the coin," i.e., the *career* side concerning the production and distribution of goods and services and also the *consumer* side, utilizing these products and services of the world of business.

One must recognize, however, that the business-oriented economy in America is a constantly and rapidly changing one. While its basic concepts of freedom of individual choice and of private property rights change

only slowly, its tools and its methods of implementation change rapidly. Such changes evolve by means of constant experimentation and subsequent improvements, looking toward their proper functioning in a setting of changing societal needs and desires.

Accordingly, the business teacher must keep abreast of (and be able to use effectively) the constantly improving tools and techniques of his profession as a teacher. He must at the same time be alert to comparable changes and improvements in the world of business, principally because it is this world for which he is preparing most of his students for employment. This is a challenging task indeed—with great personal satisfaction present for the business teacher who achieves these goals in his profession!

The Vocational (Career) Objective in Business Education

When an educational group (such as business teachers) has more than one purpose, it perhaps matters little which is considered *more* important; it is equally important that each be well achieved.

Yet business teachers find themselves working as a part of a total educational system, encompassing various historical backgrounds and resulting viewpoints, attitudes, and environmental factors. History records the fact that our early beginnings in business education were largely vocational in nature. And it probably is accurate to state that today most people still look upon business education as being primarily a vocational or career area of education.¹

At least it appears that this vocational objective (now more properly referred to as "career education") may be considered our

1. The reader is alerted to the fact that "vocational" or "career education" as used in this publication is *not* limited to vocational programs which are funded or reimbursed from government appropriations.

raison d'être—the real “reason for existing” as a separate educational discipline. Were it not for this career education objective, quite possibly the objective of general education might be absorbed into other academic disciplines—and business education then would not exist as a separate entity.

In all likelihood the objective of appropriate preparation for employment and careers in the world of business is of major importance to any school which hopes to continue to support any separate program in the field of business education. And tremendous advances have been made in career education in Iowa; however, it seems likely that consumer education will receive more and more attention in the future.

New Professional Orientations

Like business, the teaching profession also changes rapidly. These changes not only involve the teacher's tools, techniques, procedures, and learning systems,² but in many ways they give expression to changes in our very philosophy of education. It seems likely that the more successful business teachers of today will find themselves accepting or favorably inclined toward, concepts such as the following:

1. An orientation toward a *computerized* world.
2. An orientation to *rapid* change.
3. An orientation to teaching *more* students *faster*—yet with increased effectiveness through *greater* attention to *individual* needs.
4. An orientation to *guiding* learning—as opposed to the former idea of “dispensing information.”
5. A greater orientation toward serving the needs of the *disadvantaged*.
6. An orientation toward the expansion and improvement of *adult* or *continuing* education.
7. An increased orientation to *interdisciplinary* education.
8. An orientation toward a greater use of *learning aids*—often making use of equipment of an electronic nature.

2. Iowa business teachers are encouraged to watch especially for professional literature reporting on the progress of the national NOBELS (New Office and Business Education Learning Systems) funded research and of schools participating in the “ES '70” (Education Systems for the 70's) experiment.

9. An orientation toward the measurement of outcomes in terms of *changed behavior*—toward the use of *behavioral-type* objectives.
10. An orientation toward a greater use of *federal funds* to supplement those which the local school district is able to provide.
11. An orientation to the values derived from increased *personal professional participations* in our numerous recognized professional organizations

Space does not permit detailed comment about these orientations in this publication—and perhaps none is needed. It is hoped, however, that Iowa business teachers occasionally will evaluate themselves and their own professional work against this list of 11 suggested orientations.

The Business Curriculum

Today the total business curriculum in our Iowa educational institutions must be viewed as consisting of all those learning activities organized and directed by the business department or the business staff. As such, it is more than just a sequence or group of courses. It includes youth groups such as Distributive Education Clubs of America, Future Business Leaders of America, the Office Education Association, and Phi Beta Lambda. In addition, it often includes learning activities taking place in a resource or learning center or laboratory or while the student is on the job under school supervision. In some cases the learning is individually prescribed for each student, and his program is a unique one organized just for him with the assistance of programmed materials.

Today the business teachers of each school are finding it necessary to continuously *develop* their own total curriculum—in terms of local philosophies, needs, and resources. Realistic business educators know that despite the new curricula they are “failing” many students in that their programs continue to have many dropouts. In essence, *such students are not being educated*. At the same time the educators realize that student populations are increasing and that serious taxation problems are prevalent which impede efforts to staff and equip schools and ultimately to improve educational outcomes!

A brief review of many of the significant

guidelines recommended for Iowa business education follows.

The Ideal Business Education Curriculum

Such a curriculum probably never will exist! But every school should attempt to approach it as nearly as conditions will allow. Following is a brief though not necessarily all-inclusive set of essential characteristics of such a curriculum:

1. It should be comprehensive and varied in its offerings of choices for those preparing for employment and careers in business.
2. The curriculum should include opportunity for *all* students to gain an understanding of both the business and the consumer worlds, thus facilitating good consumer usage of the services and products of business.
3. *All* students should be given the opportunity to learn those skills and business abilities which they can use effectively in their personal lives.
4. It should be built on a foundation of economic and work attitudes and understandings interwoven into the elementary and junior high school programs.
5. It should be organized so it will permit each student to progress at his own rate until he achieves valuable personal goals and also will so interest and challenge him that he will maximize his opportunities and abilities.
6. The curriculum should be organized to assure the achievement of salable skills by the student at many points in his school career. It should be designed in a "building-block" manner so that each new or improved skill will further increase his job potential. Such a curriculum will provide training for the dropout and obviously help to prevent or reduce the incidence of dropouts.
7. The ideal business education curriculum should be closely interwoven into the total guidance program of the school.
8. The program should provide appropriate continuing (adult) education for upgrading and retraining all who can profit therefrom.
9. Administrators and teachers should

constantly review or adjust, if necessary, and improve the curriculum to assure that it is appropriate for the specific community, student body, and social and economic needs being served.

10. Due attention should be given, in its vocational or career aspects, to *both* preparation for the beginning job *and* preparation for advancement in a career.
11. A maximum amount of attention should be given to the development of desirable personal qualities, traits, and attitudes in each individual student.
12. The curriculum should use only such physical facilities and equipment as will: (a) meet the standards of modern business and (b) assist in building a student's pride in his own achievement and in his preparation for a career.

Implementing the Ideal Curriculum

Appropriate questions at this point are: "How does one go about developing a curriculum which will approach an ideal one? What are the various procedures, structures, methods, and other professional practices which *might* be used?" Obviously, there is no one answer which will fit each individual school, department, or business teacher! Each school or department will have to choose, create, experiment, improve, and *continue to improve* its own curriculum. True, this points toward the need for business teachers who are professionally well informed, intelligent, creative, and energetic. As such they will need to research and to experiment—and to know what the research and experimentation of others are telling them!

There are, however, some useful suggestions for implementing the ideal curriculum. All are now in use in many business departments over the nation, and all are recommended by many who are knowledgeable in business education. Iowa business teachers should, therefore, consider the following in curriculum planning:

1. Resource centers and/or learning laboratories.
2. *Selected* programmed packets of materials suitable for individualized learning, together with necessary equipment.
3. Individualized learning, including the

- concept of individually prescribed programs of learning.
4. Flexible scheduling, as through modular units of time.
 5. "Block time" structures for upper level vocational learnings.
 6. Informal classroom and learning experimentation.
 7. Appropriate survey and follow-up studies.
 8. Appropriate youth groups—such as Distributive Education Clubs of America, Future Business Leaders of America, Office Education Association, and Phi Beta Lambda.
 9. Carpeting and comparable factors affecting the physical and psychological environment of the classroom.
 10. High school vocational programs centered around the concept of "job clusters," perhaps continuing these programs in specialized forms in post-secondary education.
 11. Use of the community as a laboratory through well-organized cooperative programs.
 12. Educational programs which can be financed with federal or state funds.
 13. Effective placement and follow-up services for both dropouts and graduates.
 14. Appropriate advisory committees, many with leaders in the business community.
 15. Career guidance information in, or prior to, junior high school.
 16. Comprehensive and continuous public relations programs.
 17. Team teaching, often with nonbusiness teachers.
 18. Large lecture groups interspersed with small discussion groups along with independent study by the individual student.
 19. Selected field trips and guest speakers.
 20. Evaluation of achievement in terms of behavioral changes of the individual student.
 21. Short, individually prescribed units or packets of learning, coordinated with pre-tests and post-tests.
 22. Less emphasis on comparative grading and greater emphasis on complete achievement by each student according to his own capabilities.
 23. Professional involvement in conventions, conferences, meetings, and graduate courses, as well as major professional literature.
 24. Communication with teachers in other departments in order to integrate with learnings in related disciplines.
 25. Job standards and requirements through cooperation of state employment agencies and/or through job analyses.
 26. Assisting college-bound students to acquire salable skills and abilities.
 27. Short, intensive, laboratory-type courses or programs to meet specific needs, such as for adult education.
 28. Special remedial instruction to provide for students deficient in fundamental processes.
 29. Various types of learning media (such as visual, audio, and tactile) to provide for individual learning preference of students.
 30. Certificates of competency for students in vocational programs.
 31. Effective use of teacher's assistants and other paraprofessionals.

Section 5

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section

- 5-A Professional Development of the Business Teacher**
- 5-B Business Department Surveys**
- 5-C Advisory Committees**
- 5-D Public Relations and the Business Department**
- 5-E Continuing Education**
- 5-F Developing Leadership Skills and Personal Traits
in the Business Student**
- 5-G The Business Education Instructional Media Center**
- 5-H Evaluating the Business Education Program**

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Des Moines

Frank Hoffman
North Iowa Area Community College
Mason City

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GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-A

Professional Development of the Business Teacher

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-A

PROFESSIONAL DEVELOPMENT OF THE BUSINESS TEACHER

Continued professional growth should be the aim of every business teacher. Keeping abreast of new developments in the field of education requires time and effort, but the rewards make the effort worthwhile. Professional development can take many forms, the most important of which are discussed below.

Professional Literature

The business education teacher should make every effort to read the professional literature in his field. Several good business education publications which every business teacher should read are included in Table 5A-1.

Table 5A-1

Selected List of Business Education Publications

Publication	Publisher	Cost
Business Education World	Gregg Division McGraw-Hill Book Co. 330 W. 42nd St. New York, NY 10036	Free
The Balance Sheet	South-Western Publishing Co. 5101 Madison Road Cincinnati, Ohio 45227	Free
Collegiate News and Views	South-Western Publishing Co. 5101 Madison Road Cincinnati, Ohio 45227	Free
Business Education Forum	National Business Education Association 1201 Sixteenth St., N. W. Washington, D. C. 20036	Included with NBEA membership \$10.00 per year
American Vocational Journal	American Vocational Association, Inc. 1510 H Street, N.W. Washington, D.C. 20005	Included with AVA membership; \$4 per year for non-members

(Continued)

Table 5A-1 (Continued)

The Journal of Business Education	Robert C. Trethaway 15 S. Franklin Street Wilkes-Barre, Pa. 18701	\$5.5 year, \$10.00 for 2 years
The Delta Pi Epsilon Journal	Delta Pi Epsilon (Honorary graduate business education fraternity)	Membership (by invitation)

The Balance Sheet is written primarily for the secondary school teacher while *Collegiate News and Views* is primarily for the post-secondary, college, and the university teacher. In addition to these two publications, the South-Western Publishing Company also publishes, from time to time, monographs and other special papers, (for example, *Typewriting News*), which are also available free of charge to business education teachers.

All of these periodicals include information of general interest to all business teachers. In addition to those listed, there are a

number of periodicals which relate directly to subject-matter fields and these, too, should form an integral part of each business teacher's professional library.

Members of the National Business Education Association, an affiliate of the National Education Association, receive a yearbook annually as a part of the services offered by the organization in addition to the *Business Education Forum*. (See Table 5A-2). The current value of such yearbooks can best be ascertained by noting the titles listed below.

Table 5A-2
National Business Education Yearbooks, 1963-1971

YEAR	YEARBOOK TITLE
1963	New Perspectives in Education for Business
1964	Recent and Projected Developments Affecting Business Education
1965	New Media in Teaching the Business Subjects
1966	Business Education Meets the Challenge of Change
1967	Selected Readings in Business and Office Occupations
1968	Business Education: An Evaluative Inventory
1969	Criteria for Evaluating Business and Office Education
1970	The Emerging Content and Structure of Business Education
1971	Contributions of Research to Business Education

An invaluable aid in researching the professional literature of business education is the *Business Education Index*, compiled each year from a selected list of periodicals and yearbooks. Approximately 20 general periodicals and more than 30 business education periodicals are indexed under more than 80 different subject headings. The *Index*, sponsored by Delta Pi Epsilon, honorary graduate fraternity in business education, is sent free to all members in good standing and is available to others from the Executive Secretary, Delta Pi Epsilon, at a minimum cost.

The information provided above pertains to the literature that is to be found in the field of business education. A word of caution is in order at this point: The business education teacher must not limit his professional reading to his own field. In fact, there is a very real danger in becoming so highly specialized in one area that one is unable to discuss intelligently the total aspects of education. The business education teacher of today must be cognizant of curriculum, counseling, guidance, finance, and other facets of the total educational scene if he is to function most effectively within the framework of his teaching position.

Because of the vast amount of professional literature available and the teachers' limited time to locate it for study purposes, it behooves the business teacher to be aware of national information systems which gather

and make available in a central data base various types of documents that business educators will find valuable. A good example of such a system is the Educational Resources Information Center (ERIC), a system which is a source for obtaining documents on education. ERIC collects, screens, organizes, disseminates, and reports—as well as prepares—short summaries, reviews, and bibliographies. It also prepares microforms of records on which many pages of text are reproduced, and through the use of a reader-reproducer makes it possible to reproduce instantly any portion of the microrecord pages, thus minimizing reading time. Such machines are becoming readily available.

In connection with the reading of professional literature, one often hears the comment, "I just don't have time to do my professional reading." One method to remedy this situation is to set aside a given period of time each day for such reading. It is surprising the amount of professional literature that can be covered by allocating only 15 minutes out of each day to this activity.

Professional Organizations

Every business education teacher worthy of the name should belong to and take an active role in his professional organizations. A list of such organizations which each Iowa business education teacher should consider for membership is given below (Table 5A-3).

Table 5A-3

Selected List of Professional Business Education Organizations

ORGANIZATION	CONTACT
Iowa Business Education Association	Executive Secretary, IBEA c/o Iowa State Education Association 4025 Tonawanda Drive Des Moines, Iowa 50312
National Business Education Association	National Business Education Association 1201 - 16th St., N.W. Washington, D.C. 20036
North-Central Business Education Association	Membership through National Business Education Association membership fee

(Continued)

Table 5A-3 (Continued)

National Association for Business Teacher Education	Institutional membership (for those interested in teacher education)
American Vocational Association	(See Iowa Vocational Association)
Iowa Vocational Association	Executive Secretary, IVA c/o Iowa State Education Association 4025 Tonawanda Drive Des Moines, Iowa 50312
Future Business Leaders of America	High school business club affiliated with the national FBLA. For information, write the National Business Education Association office (see above)
Phi Beta Lambda	National business fraternity for post-high school students. For information, write the National Business Education office (see above)
Office Education Association	For students and coordinators in reimbursed office education programs. For information, write the Division of Career Education, State Department of Public Instruction, Grimes State Office Bldg., Des Moines, Iowa 50319
National Association of Distributive Education Teachers	For students and coordinators in reimbursed distributive education programs. For information, write the Division of Career Education, State Department of Public Instruction, Grimes State Office Bldg., Des Moines, Iowa 50319
Future Secretaries Association	High school club for secretarial students. For information, write National Secretaries Association, 616 East 63rd Street, Kansas City, Missouri 64110

There are two honorary educational fraternities in the field of business education. Pi Omega Pi was organized to develop professional spirit at the undergraduate level. Delta Pi Epsilon, the honorary graduate fraternity, has been especially active in promoting research in business education and, as previously mentioned, sponsors the *Business Education Index* and *The Delta Pi Epsilon Journal*. Membership in both fraternities is by invitation and is based on scholarships and an intention to enter or continue in the business education field. The University of Iowa and the University of Northern Iowa sponsor chapters of both fraternities.

Other organizations which the business teacher might consider are the local Chamber of Commerce or the Junior Chamber of Commerce, the Administrative Management Soci-

ety (noted for its cooperation with business education), the Business and Professional Women's Club, the National Secretaries Association, and the American Management Association.

The cost of belonging to professional organizations and associations is no small item as was found in a recent study by Dr. Lloyd V. Douglas. However, it is not a question of "Can I afford to belong to all of those organizations?" but rather, "Can I afford not to belong to my professional organizations?" Dr. Douglas cites four good reasons for such membership: (1) we need all of the professional information we can get in today's rapidly changing educational scene; (2) we, as business teachers, sorely need a strong, unified voice; (3) each of us also needs specialized information pertinent to our own special educational work; and (4) keeping well informed

is worth more to each of us than it is now costing us. Surely, approximately one percent of a teacher's annual salary is a small price to pay to keep abreast of current developments in his occupation.

Professional Writing

Publishers are constantly looking for new ideas and methods as well as reports of research carried on by business education teachers. The business education teacher who can write well stands a good chance of making a professional contribution to the literature if he can present a new idea that has practical value to other teachers.

A common criticism of the professional magazines is that they contain nothing more than a *duplication* of ideas that have been around for many years. To a certain extent, this criticism is valid. However, a truly professional teacher does not waste his time in such criticism but attempts to do something about it by submitting some of the original ideas that have made his teaching more effective.

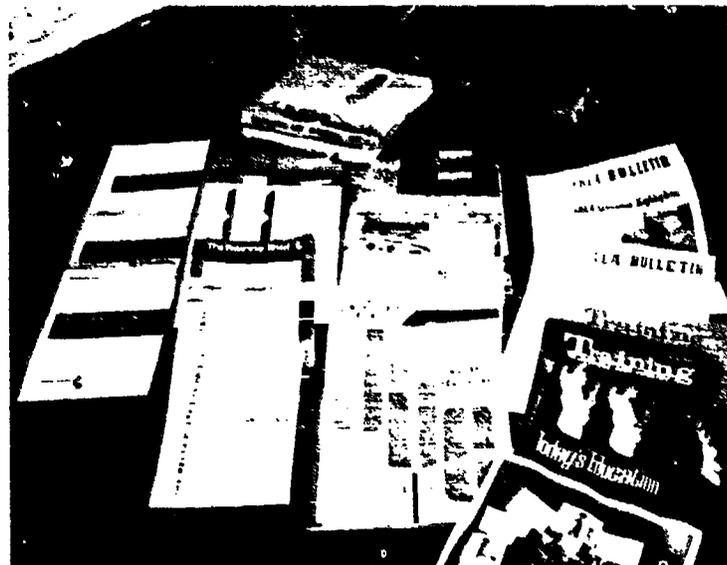
The business teacher who prepares material for publication must not be disappointed nor discouraged if his manuscripts are rejected. Rather, he should attempt to analyze his writings with the goal of making them acceptable.

Nor should the business teacher who writes for publication expect to make his fortune. Usually payment (if any) for such writings is very nominal. Rather than a financial reward, remuneration for the teacher might well take the form of professional advancement with greater employment opportunities—and a possible end result of a publishing company considering him as a co-author or author of a textbook on the subject matter for which he has shown proficiency and knowledge.

Professional Participation

Actual participation in professional organizations is the key to a maximum return on a professional membership investment. Such participation may take place at these levels: (1) local, (2) state, (3) regional, and (4) national.

At the local level, the business teacher can organize and attend meetings, seminars, and workshops for the business teachers in his city, county, or area. Arrangements for



Membership in professional organizations will provide a wealth of literature for the business educator.

such meetings can range from a simple informal exchange of ideas to a formal conference keyed with a banquet and with a speaker widely recognized in the field. Publishing companies and office equipment firms will often provide nationally known speakers for such occasions. In all fairness, the sponsor should be certain that attendance will be of sufficient magnitude to justify the expense to the company of providing such personnel.

The Iowa Business Education Association and the Iowa Vocational Association represent two organizations which provide professional participation at the state level. Both organizations sponsor conventions throughout the school year as well as other activities which provide an opportunity for members to hear outstanding speakers in the many facets of vocational and general business education.

The Iowa Distributive Education Teachers Association (IDETA) and the Iowa Office Education Association (IOEA) are organizations for business teachers involved with reimbursed programs in distributive education and office occupations. An annual workshop, sponsored by the State Department of Public Instruction, is held for these teachers.

The most comprehensive regional convention for Iowa business education teachers is the annual North-Central Business Education Association convention. This convention presents nationally known speakers, problem clinics, discussion sessions, tours, exhibits, and social events. Usually this convention is held in a major midwestern city, thus bringing it well within range of all Iowa teachers.

Occasionally, the Mountain-Plains Business Education Association holds its annual convention in one of the states bordering Iowa, and Iowa business teachers are extended the privilege of attendance through the reciprocity feature of membership in the National Business Education Association.

At the national level, the National Business Education Association sponsors an annual late winter convention which is usually held in Chicago. All areas of business education are represented at this convention.

The American Vocational Association sponsors a convention at the national level at which attention is given to business education. It should be pointed out, however, that such emphasis is usually reserved for those programs which are reimbursed by the state and national funds through provisions of the Vocational Education Acts.

Professional Study

A periodic return to the classroom as a student is additional evidence of professional growth on the part of the business teacher. Generally speaking, the attainment of the master's degree is the first major step for the practicing business education teacher beyond the bachelor's degree. The professional business teacher does not stop at this point, however, but continues to keep abreast of the changing educational scene by means of refresher courses, workshops, and institutes.

Such efforts can be highly rewarding, not only from the academic content of such work, but also from the point of view that a vacation can form an integral part of such study. Thus, by taking work in different institutional programs throughout the country, the teacher can combine travel with professional study.

An occasional summer spent in a work situation can also be very rewarding financially and can provide work experience that can relate well to the classroom and students. A teacher with work experience in a large office "knows whereof he speaks." In some institutions, graduate credit is allowed for such work if the teacher is registered as a student, thereby providing an additional incentive for such activity.

Teacher Certification

Business teachers already certified to teach at the high school level may aspire to other types of business teaching positions which will in turn require further certification. For example, it is necessary to satisfy additional requirements in order to be certified as a coordinator of distributive education or office occupations work experience programs. In the same way, to teach at the post-secondary level requires meeting additional certification requirements. For further information on such certification, please consult the Appendix, Certification of Business Teachers.

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-B

Business Department Surveys

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-B

BUSINESS DEPARTMENT SURVEYS

To be strong a building must have a firm foundation. This principle is also true of building a strong business education department—it must be built on a thorough understanding of the students and the community it serves. In order to obtain this understanding, the department may wish to use the well-known methods of conducting community and follow-up surveys.

Community Surveys

Initially, an organized community research program (community survey) is a basic requirement for every school system. An analysis of the community and the surrounding area in which students seek employment will provide the business teacher with valuable information, enabling the school and teachers to build a program to meet the requirements of future employers. The business education department may glean key information in regard to types of occupations in the community, number of workers in each occupation, salaries paid to workers at various job levels, rate of employee turnover, and experience requirements.

Follow-up Surveys

To complement the community survey, the department should conduct a follow-up appraisal of former students. The follow-up survey will consist of researching the employment records of former students and/or employers to determine where the students are working and what type of work they are doing. It will also include data as to how much the educational preparation received in school has assisted former students in becoming successful employees. The persons providing the information for a follow-up survey will be:

1. Recent graduates—those who have been out of school for at least one or two years.

2. Former students who have been out of school for five years or more. (Some people feel there is little value in surveying students who have been out of school more than five years. This criticism seems logical because of the rapidly changing world of work.)
3. Drop-out students.

Special attention should be given to the drop-out student. For this type of student, questions similar to the following are suggested:

1. At what grade level did he leave school?
2. Why did he leave school? (Health reasons, financial reasons, uninteresting or irrelevant curriculum).
3. What type of work is he now doing?
4. Would he be interested in an adult or career education program?
5. Has he been receiving on-the-job training?

Suggestions for Conducting Surveys

These two types of surveys have much in common. Often they may be conducted by the same people and in the same manner. However, before conducting any survey, the person in charge of the survey must be sure that it is well planned and well organized.

Any survey should have a clearly defined objective. For example, a survey by the business education department may be made for one or more of the following reasons:

1. To secure information for improvement and revision of program planning.
2. To secure information on equipment needs.
3. To obtain data on availability of employment for beginning workers.

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4. To secure information on hiring and advancement standards and job opportunities for beginning office workers.
5. To review the effectiveness of the present program.

The manner in which the gathered data are to be tabulated, as well as the interpretation of data and publication of results, must be established before either community or follow-up surveys are initiated. Either type of survey may be conducted by the mailed questionnaire method, by the interview method, or by a combination of the two.

If the mailed questionnaire method is chosen, the business department should mail the questionnaires to various selected individuals possessing the desired information. A cover letter asking the cooperation of the individual and explaining the purpose of the survey should be included with the questionnaire.

Many people prefer to gather data through personal interviews. With this technique, a

high return is possible, but this data-collection method is time consuming. Too, if a number of people are acting as interviewers, caution should be taken that each person interprets the questions in the same way. Each interviewer must thoroughly understand the questionnaire and present the material in the same manner. Any possible ambiguity should be avoided.

In using the combination method, an interviewer may call on the person supplying the information, explain the purpose of the survey, and leave a questionnaire to be filled out and mailed to the school.

In gathering information by questionnaire, one must remember to keep the questionnaire short. The questions should be constructed so that they are clear in meaning, and in addition, specific instructions for completing and returning the questionnaire should be included in the questionnaire proper as well as in the cover letter. Examples of questionnaires that might be used in community and follow-up surveys are illustrated in Figures 5B-1 and 5B-2, respectively.

HIGH SCHOOL BUSINESS EDUCATION DEPARTMENT BUSINESS OCCUPATIONAL SURVEY

MAY 11, 1971

Return to:

**John Doe
West High School
Deep River, Iowa 52222**

Please state the kind of business you are engaged in, such as (Wholesale, Retail, Manufacturing, etc.).....
and please state line, as Hardware, Bakery, etc.....

INSTRUCTIONS: Please record the numbers that apply to present position in your business. Note the sample column filled in. In column five check with an "X" under the word which represents your answer. "M" at the head of the column means male and "F" female.

Columns: I	II Minimum Age Employees Will Be Hired		III Number New Employees Hired Last Year		IV Number You Now Have Employed		V Is Experience Required of Beginners? Check With X		VI Educational Requirements					
	M	F	M	F	M	F	Yes	No	Check Least You Will Accept					
									1	2	3	4	5	
SAMPLE	18		4			21		X		X				
1. GENERAL CLERICAL:														
Messengers														
Bookkeeper-Stenographer														
Bookkeeper File Clerk														
Miscellaneous Clerical														
2. SECRETARIAL:														
Typists (only)														
Filing Clerks														
Secretaries														
Office Managers														
3. ACCOUNTING:														
Accountants (General)														
Cost Accountants														
4. SELLING:														
Retail Salesmen														
Wholesale Salesmen														
Advertising Managers														
5. MACHINE OPERATING:														
Billing Machine Operators														
Key Punch Operators														
Adding Machine Operators														
Dictaphone Machine Operators														
Telephone Switchboard Operators														
Others														

**Figure 5B-1
SAMPLE QUESTIONNAIRE FOR COMMUNITY SURVEY**

Figure 5B-2
Sample Questionnaire for Follow-up Study

SURVEY OF GRADUATES

_____ High School

Please provide the information requested below. (Type or print)

PERSONAL INFORMATION			
Name _____	Last	First	Middle (_____) Maiden Name
Present Address _____			
Street			

City	State	Zip Code	
Male <input type="checkbox"/>	Female <input type="checkbox"/>	Tel. No. _____	
Year of graduation - 19_____		Program Taken _____	
If working, give firm's name and location _____			
Name			

Address	City	State	
Position you now hold _____			

1. Check subject areas that you studied in high school

<input type="checkbox"/> Shorthand	<input type="checkbox"/> Accounting/Bookkeeping	<input type="checkbox"/> Distributive Education
<input type="checkbox"/> Office Practice	<input type="checkbox"/> Data Processing	<input type="checkbox"/> General Business
<input type="checkbox"/> Typewriting	<input type="checkbox"/> Other _____	

2. Which of the above business subjects have you used in jobs you have held since leaving high school?

3. What other subjects, if any, have you used in your jobs?

4. If you have had additional education since leaving high school, please specify. (Extension, community college, vocational school, business school, college or university, in-house training program). Use reverse side if necessary.

Date	School and Address	Courses Taken
(1) _____	_____	_____
(2) _____	_____	_____
(3) _____	_____	_____

5. Please list all employment regardless of duration. Use reverse side if necessary.

Date	Employer and Address	Type of Work
(1) _____	_____	_____
(2) _____	_____	_____
(3) _____	_____	_____

6. Have you failed to secure work because of lack of preparation?

Yes No

If "yes," please explain.

7. Did you seek permanent employment directly after leaving high school?

Yes No

If "yes," how many weeks did you look for permanent employment before you accepted a position? _____ weeks.

8. Have you received any promotions in your present job? Yes No

9. If the answer to the previous question is "No," please check the reason.

1. No opportunity for advancement.

2. Lack of education preparation.

3. Other (please explain) _____

10. Check below the source(s) through which you obtained your first permanent position after leaving high school?

(1) A friend or relative

(3) A commercial agency

(2) The high school office

(4) The want ad section of newspaper

(5) Other (explain) _____

11. What suggestions do you have for the improvement of our high school business program.

Please return to:
Business Education Department
Ela-Vernon High School
Lake Zurich, Iowa 52314

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-C

Advisory Committees in Business Education

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-C

ADVISORY COMMITTEES IN BUSINESS EDUCATION

Advisory committees are a vital part of the administration of business education programs. In fact, the literature of business education contains many references to the organization, functions, and operation of the advisory committee. Such a committee might be defined as a group of local people, interested in quality education, who are willing to expend time and effort in advising the professional school personnel in various aspects of the total educational program.

Composition

Generally speaking, the advisory committee may be composed of any number of people; however, it is usually recommended that the committee be restricted in size, with from five to nine people being considered a good workable number. In business education, such committee members are usually chosen from the business community with the actual representation dependent upon the type of program with which the committee will work. For example, an advisory committee for distributive occupations would be heavily weighted toward those men and women with experience in retailing and the distribution of goods and services; a committee for office education programs, on the other hand, would lean to those people who are experienced in the employment and supervision of clerical and secretarial employees. In the school the teacher-coordinator and the superintendent or principal or both are usually considered permanent members of the advisory committee.

Formation

Several methods of forming an advisory committee have proven effective. One such method requires the program coordinator to meet with the superintendent and principal and draw up a list of business leaders who probably would function adequately in such

a capacity. Letters are then sent by the superintendent requesting the participation of those people who are finally selected as the best candidates.

Another method of selecting committee members is to invite businesses, service clubs, and other such organizations to make recommendations, from within their membership, of persons who are capable and who would be willing to serve in this capacity. The list of names submitted then forms the basis for selecting candidates to receive letters of invitation for membership on the committee.

In making the appointment to an advisory committee, it is well to indicate the term of appointment which might be any one of the following: (1) one year, subject to reappointment; (2) no specified period, the membership continuing indefinitely; (3) three-year terms, staggered, and subject to reappointment; and (4) *ad hoc* appointment for a specified job which ceases automatically upon completion of the job.

Generally speaking, it is best to indicate a specified period of time for the appointment of committee members. Many coordinators feel that a one-year appointment has the advantage of getting rid of the "dead wood" on the committee without anyone's feelings being hurt. The argument against the one-year appointment is that the advisory committee will lack the continuity that is desirable for such a group.

Organization

The advisory committee is usually organized along very simple lines with a chairman and a secretary. It is usually recommended that the superintendent, principal, or other school administrator not act as chairman; but rather the committee should choose a chairman from the group. Often the coordinator acts as secretary although his duties

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An advisory committee can be invaluable assistance in the formation, administration, and operation of a business education program.

will extend far beyond this task; for he will, of necessity, have to work very closely with the elected chairman in making up the agenda, in setting up the physical facilities for the meeting, and in fulfilling other duties that he, as the one most closely connected with the program, can handle most efficiently.

Functions

The following list indicates some key functions with which the advisory committee may be expected to assist:

1. Identify new programs.
2. Make surveys of the business community.
3. Develop course content.
4. Determine the length of offerings and their placement in the total curriculum.
5. Determine needed publicity in the organization of new programs.
6. Provide information on job activities that should be taught in the classroom and those that should be taught on the job.
7. Obtain the cooperation of job training station employers.
8. Provide advice on the selection and purchase of equipment.
9. Advise on wage scales for participating students.
10. Set up standards of training on the job.

11. Formulate general policies to be used in the operation of the program.
12. Advise on the instructor's qualifications.
13. Determine qualifications for trainee's entrance into the program.
14. Advise on teaching materials and equipment to be used in the course.
15. Lend assistance in counseling, guidance, and placement of trainees.
16. Help in securing financial support for the program.
17. Assist in finding potential employers and training stations.
18. Promote and support legislation at the local, state, and national levels.

Precautions

Certain ground rules should be observed by the business teacher in working with advisory committees. A few of the more important rules are listed below.

1. Make it clear to the committee that it is *advisory* only with respect to its work since the school is charged by law with the overall operation of the program.
2. Do not deal with individual members of the committee. Keep in contact with the committee as a whole at all times.
3. Be sure that the committee actually has definite goals assigned to it. Do not use the advisory committee as a "rubber stamp" group to approve action which has already been taken.
4. Never quote committee members as individuals—all action should be the result of the committee as a whole.
5. Prepare an agenda for each meeting and be sure that each committee member has it in his hands in sufficient time before the actual meeting date to permit constructive thinking about the items that appear on the agenda.
6. Keep accurate minutes of each meeting and send copies of the minutes to each member as soon as possible after each meeting has been held.

7. Never take action without the approval of the committee if, in fact, such approval is required.
8. Be certain that each meeting is necessary, is carefully planned, carried out in a businesslike manner, opens and

closes promptly, and allows for a full expression on each issue on the agenda.

9. Express appreciation to the members of the committee at the close of each school year, either through a letter or some other appropriate means of recognition.

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-D

Public Relations and the Business Department

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-D

PUBLIC RELATIONS AND THE BUSINESS DEPARTMENT

A well-coordinated school system represents a harmonious combination of the school and the community working together. The school wants and needs the goodwill of the community, and the community needs the product—the graduates—and the many related services of the school.

The business teacher is a key factor in building good public relations for his school. It is his responsibility to keep up to date with business activities, business equipment, and business opportunities in the community and to know personally the employers and the types of workers needed. Some business teachers feel it is sufficient to allow the result of their work—the graduating student—to promote the department.

Business educators are in full accord with the following philosophy: The products—their students—are certainly one of the best means of establishing good public relations with the community. However, a good public relations program will not result from an impromptu bit of promotion; it requires a well-planned, long-term program. The program to promote the business department should involve teamwork between the faculty and administration of a school system as well as with leaders in the business community.

While there are countless ideas available for developing a sound public relations program for a business education department, the following list should receive early consideration in planning a public relations program:

1. During open house of Education Week, display the department proudly; dress it up. In the classrooms, plan attractive bulletin boards to show the work of the business students. Let the students demonstrate the use of various office equipment available.
2. Prepare a program for the local P.T.A. to explain the objectives of the de-

partment. The parents of the business students are always interested in the philosophy of your department, the type of activities performed in class, and how these activities can be applied after graduation. A series of programs could even be planned to portray the various occupations available to the high school graduate.

3. In addition to P.T.A. meetings, assembly programs may be presented to the student body. These assembly pro-



The school paper is an excellent means of promoting public relations in the business department.

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grams may consist of skits demonstrating such valuable topics as proper business dress, good business etiquette, and how to apply for a job. An exceptionally good typist could demonstrate his ability.

4. Use the school paper to "tell the story" of the business department. Students can be encouraged to write articles about classroom activities; about services performed for the community, such as addressing envelopes; about awards won by business students; and about new business machines and equipment.
5. Take every opportunity to become acquainted with all people in the community. If possible, join the Administrative Management Society or other business organizations and become an active member. The teacher should also make himself available as a resource person to help employers. Such an effort shows a true interest in the affairs of the community.
6. Take the business classes on field trips to businesses in the community. The students will benefit from a visit to a modern office. Such visits will allow the teacher and the students to learn how an office operates; to learn types of office machines used; and to allow employers to become acquainted with future employees.
7. Plan bulletin boards and display cases showing the work of the students without restricting the bulletin board displays to the classrooms. Try to establish display material in prominent places throughout the school building. Provide opportunity for the office occupations students to serve as office assistants to the school administration or school faculty. Business students should be allowed to serve as hosts or hostesses at special school functions.
8. Include a well-supervised work-experience program for the business students. This type of program is an excellent and natural way to establish rapport between school and community. The employer is provided with a part-time worker, and in turn the student acquires actual work ex-

perience. As the teacher-coordinator visits the student at his training station, he can invite a guidance counselor to accompany him. Thus, the guidance department will be informed of many vocational opportunities and at the same time be influenced to channel prospective interested students into the business department.

9. An active and understanding advisory committee will be beneficial to the program. (The advisory committee's activities are explained in another part of the General Responsibilities section of this handbook.)
10. Form a youth organization for the business department and have it become an active part of the community. From an organization of this type, students may perform various community activities, serve as speakers, and prepare skits for radio and television programs.
11. Conduct follow-up surveys of recent business graduates. Students can be helpful in gathering and tabulating data. The information secured will enable the business teacher to build a useful and meaningful curriculum for the future and to serve as a public relations link between school and employer.
12. Conduct frequent surveys on job opportunities, duties performed, and equipment used in business. Surveys of this type will keep the business curriculum up to date and allow the students to become adequately trained for available jobs.
13. Participate in the adult (continuing) education programs. Make suggestions as to courses to be offered for training, retraining, and updating skills for adults in the community. The students in such programs are goodwill ambassadors for the business programs.
14. Plan Career Days. Career Days offer the business teacher a fine opportunity to involve the community in school activities. Businessmen representing various vocational occupations may be utilized as speakers. Students will be able to investigate different types of work and will be

given an opportunity to explore occupations that are of interest to them.

15. Arrange programs to be presented to junior high school students. Recruit students from junior high schools. Recent graduates now working in the community can relate their working experiences which provide an excel-

lent way to recruit students for the school and the business department.

These are but a few ways in which the business department may build good public relations for the school and the department. The list is limited only by the imagination and the energy of the business teacher and his department.

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GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-E

Continuing Education in Business Education

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-E

CONTINUING EDUCATION IN BUSINESS EDUCATION

The business education department in many schools has been the center of instruction for many people not enrolled in the regular day-school program. Such people enroll in business courses, usually offered at night, for one of two basic reasons: (1) to obtain business skills which will enable them to enter the labor market, or (2) to upgrade business skills for purposes of advancement in current employment. To a lesser degree, there are others who register for these classes for personal-use reasons.

At higher levels of administration such programs are provided with distinctive titles, i.e., preparatory, part-time preparatory, and career supplementary. A more common generic term for this type of business education is *adult education*. Since the term adult education has such wide usage and general acceptance in the field of education, it is being used in this section to denote those programs designed for persons not formally enrolled as students in the day school.

Historical Background

Adult education has usually been considered as an adjunct of the total educational program for any given school district. Oftentimes, the superintendent of schools has assumed the responsibility as director of the adult education program within his school district. Sometimes, however, he has delegated the work to a teacher beyond his regular teaching responsibilities with remuneration for the additional work. An Adult Education Council (or Advisory Committee) has usually been employed to assist the director in determining classes which should be offered, to find teachers for those classes, and to determine policy for the administration of the total program.

Within the past decade the federal government has given tremendous impetus to adult education through support of various pro-

grams for the disadvantaged adult. The State of Iowa, through its area schools, has given additional recognition and support to adult education although most people would admit that, primarily because of lack of funds, progress has been rather slow, and only the surface has been scratched in what could be done within the state.

Business education has been one of the prime movers in adult education. The never-ending demand for office and sales workers, coupled with the relatively short training period required to prepare workers for gainful employment, has usually created a high degree of interest in business classes offered under adult education programs. Thus, it is important that each business teacher have some knowledge and understanding of this expanding area of the educational spectrum.

In this handbook only a few suggestions pertinent to the subject can be offered. However, the business teacher is encouraged to search out the literature for additional information concerning the teaching of adults.

Planning for Adult Classes

An advisory committee is necessary for any adult education program if such a program is to achieve the utmost in the way of success. In addition to advising on the courses to be offered, such a committee can add immeasurably to the overall success of the total program by adding in publicity and helping to provide equipment. (See the unit on *Advisory Committees* in this section for additional information.)

It is important that limits be placed on the number of class sessions in planning the length of the instructional period. Anything over 10 weekly sessions is likely to result in a high dropout rate unless the class is being taken for credit. If there is a guideline to be noted here, it might well be that the dropout rate in an adult evening class varies

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directly with the number of sessions that the class meets.

In planning adult education classes, recognition should be given to the fact that business courses to be offered should be those in which a satisfying degree of mastery can result in the allotted time. (Conversely stated, courses which require a great amount of drill and practice to achieve mastery should be avoided.) For example, it is extremely doubtful that a subject such as beginning shorthand can be taught successfully in an adult education situation where the class meets but one night a week for a period of ten weeks. This is true because there is not enough time for the student to absorb the theory which must be presented and still provide sufficient time for drill and practice of that theory. This presents a very real problem in that beginning shorthand is often requested as one of the subjects to be taught in adult night school. (Beginning shorthand may be successfully taught to adults through a properly equipped learning center. Sometimes nonsymbol or limited-symbol shorthand systems are used to reduce learning time.)

Adult education classes probably require more careful planning than day classes, but the teacher should not make the mistake of planning too far ahead. Generally speaking, it will take one or two class meetings to determine the direction of instruction. "Play it by ear" is good advice in the initial meetings, with future planning to depend upon an understanding of the students with whom the instructor will be working.

Tips on Teaching Adults

Teaching an adult evening class can be an exhilarating experience that can add much to a teacher's stature in the community. It can also be a most demoralizing situation if not handled properly. The following suggestions can help make teaching adults most rewarding.

Getting the Class Started

A class can get off to a good start by making sure that the class members know each other. A good technique to employ is to ask each member to give his name, tell a bit about himself (family, hobbies, etc.), and explain why he is taking the course. After the third or fourth person has introduced himself, the teacher can turn to the first person who spoke and ask him to repeat the names

of those who have made their presentations. Then he can ask someone else in the room to repeat the names of those who have introduced themselves. He will find, after the initial shock wears off, that everyone will enter into the spirit of introductions and make a concerted effort to learn the names of other class members. The fifteen or twenty minutes that it takes to achieve the end result is well worth the time. A spirit of camaraderie ("we're all in this together") comes out that will stand the teacher in good stead for the rest of the class sessions. A few minutes spent at the beginning of the second and third session to review names will assure a well-knit group throughout the remaining sessions.

The first class sessions will usually reveal a wide range of ages and abilities in the adult education classroom. The age range may be from seventeen to seventy; the ability range in a beginning typewriting class, for example, might be from one who actually does not know how to type to one who is very proficient. The sooner the teacher can recognize these ranges, the better will be his instruction as he adjusts his teaching procedures to reach all.

Subsequent Sessions

Generally speaking, the adult education teacher does not have to worry about discipline since a student in such a class is usually



The adult student in business education can provide a stimulating teaching experience for the business teacher as well as a worthwhile learning experience for the adult.

serious minded. He is one who, having had contact with the world of work, has developed a healthy respect for the correlation between education and advancement on the job. In short, he is there to learn!

Classes for adults can usually be carried on in a much less formal manner than for typical classroom students. Normally, there is more "give and take" with adults who, surviving the initial embarrassment of beginning the class, will speak out more freely.

Teachers in adult education courses should not insist upon "answer book" answers. The teacher in adult evening classes is quite often surprised to find that "it can be done another way." Whether that way is the most efficient can be determined later, possibly, within the class situation; however, the teacher should not force his own methods or ideas on the students. It is probable that the *teacher* may learn from his class if there is a free exchange of ideas as to how various work situations are covered in the businesses represented by the students in the class.

Grades, *per se*, have little place in the typical adult education classroom. Basically, the adult student is there to learn, and the reward of learning is enough for him—he is usually not interested in a grade but is interested in knowing whether the teacher feels that he is making progress. His progress can be indicated to him in a variety of ways without resorting to the use of grades. For example, the teacher in a bookkeeping class might walk around the room while students are working, pause and compliment a student on the work he is doing or on an answer he gave in class.

A "warning flag" is flying when more than 25 percent of the class comes with assignments not prepared. In most cases, it means that the assignment was too long. It could also mean that the previous session was not clear and that review is in order. In such a case, the teacher should not be afraid to backtrack and cover the material again. It is far more important to cover less material

with understanding than it is to "cover the book."

The teacher should follow up immediately when a student misses more than one class session. In fact, it is a good idea to follow up when a student misses *one* class. This can be handled with a telephone call, or it might take the form of a friendly letter and the assignment for the next week. The important thing is to show an interest in the student and an expectation that he will be in attendance.

Teaching an adult class requires patience and understanding. The teacher should remember that he is working with adults, most of whom have worked an eight-hour day (just like the teacher!) prior to the class. In such a situation, it is important that the teacher take all the time that is necessary to get the instruction across—to every member of the class.

The adult education teacher must not be afraid to say, "I didn't know that," or "I don't know, but I will find out for you." Such statements show that the teacher is human and that adult students don't really expect the teacher to have the answers to all questions asked.

Dividends will accrue to the teacher who will take the time to write a letter with more information for the student who has raised a question which cannot be answered within the allotted class time. The same is true for the teacher who agrees to spend additional time with the student who is having difficulty. Certainly, this is above and beyond the call of duty, but the teacher who subscribes to such action will find that there are rewards in life other than monetary which make teaching one of the most satisfying of careers.

Finally, the adult education teacher should have fun with his adult education class. It can be just that. When approached with a relaxed attitude, the teacher will find a new and enjoyable experience that will be shared by his adult students.

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GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-F

**Developing Leadership Skills and Personal Traits
in the Business Student**

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-F

DEVELOPING LEADERSHIP SKILLS AND PERSONAL TRAITS IN THE BUSINESS STUDENT

The graduate of the modern high school business program will become the citizen and businessman of tomorrow; therefore, it is essential that the student learn to develop desirable personal, social, and business behavior traits and attitudes. While it is important that the business student possess career skills for job entry and for later advancement in his chosen work, it is just as important that he be able to get along with people. Studies show that few people are actually dismissed from their jobs because of lack of career skills, but many are replaced because they cannot adjust to their working environment.

The business teacher has been well aware of this problem for many years and should try to incorporate training for leadership qualities into his offerings. As such, he is concerned with the development of the total student. Character traits such as honesty, cooperation, dependability, integrity, and loyalty are needed for the business world just as they are needed in all aspects of everyday life. The student should also possess other favorable personal characteristics such as tact, courtesy, a sense of humor, consideration of others, and thoughtfulness in order to be a successful individual. While many of these traits are doubtless a basic part of the personality profile of the student, nevertheless the business teacher, by example and emphasis, can positively influence the student in the formation of these desirable personal qualities.

The following suggestions will be found helpful in developing leadership and personal traits in business students:

1. Include in the instruction program a well-planned unit on personality development. Several business textbooks and workbooks are available that deal extensively with this subject. Such references provide many activities that may be incorporated into classroom in-

struction and provide problems to stimulate the thinking of students. After such a unit has been presented, the students should be given exercises to apply the materials covered in class.

2. Encourage businessmen of the community to speak to the classes. A timely topic such as "What does the business world expect of the beginning employee?" is always appropriate. Students will respect opinions of outsiders, and businessmen will be able to cite specific incidents as to why young workers succeed or fail in their work. Such speakers can also stress personality and character traits that are desirable in the business world. Encourage representatives of the Administrative Management Society, Certified Professional Secretaries, National Secretaries Association, National Legal Secretaries Association, and service clubs to participate in the high school business program. Such people will impress students with the importance of proper dress, grooming, and human relations.
3. Recent graduates who have been successful in their work can be utilized as speakers. Many students will know personally the recent graduates and realize they speak from actual experience. Relating actual incidents on the job will often be more realistic to the student than reading from a textbook. The good appearance of the worker, too, will portray to students the importance of proper dress and good grooming.
4. Establish a youth organization such as Future Business Leaders of America, Distributive Education Clubs of America, Future Secretaries Association, or an Office Education Club. Such organizations will provide opportunities

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for leadership in conducting meetings, for fellowship, and for initiative. Active participation in clubs often provides the motive and incentive needed in preparing students to become future community leaders. A number of student organizations listed in this handbook are affiliated with regional and national chapters. Most of these organizations sponsor conventions and provide opportunities for students from different sections of the country to meet and to learn from each other.

5. A carefully supervised cooperative program will help the students to realize the importance of getting along with people. Such a program will also do much in developing good public relations for the school, thus encouraging all phases of education to assist in the training. An alert "co-op" student may observe the action of his co-workers and will soon determine personality traits that lead to becoming a successful employee.
6. A fund-raising project properly planned

and conducted could serve as a fine experience for students. The students should plan the venture, decide what is to be sold, how it is to be sold, and when it is to be sold. The teacher should act only as consultant, with the members of the group being responsible for organizing, conducting, and evaluating the business venture. The students should also be responsible for keeping records of the business and at the end of the project should determine the profitability of the venture. Such a project should warrant using classroom time especially when the activities contribute to their career and occupational competence.

Generally speaking, leadership skills can be most effectively learned in a group situation; hence, the business student should become involved in clubs and organizations that involve the total school population. For example, business students should be encouraged to campaign for class offices. Such involvement permits the development of leadership skills that will be necessary after the student becomes employed.

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-G

The Business Education Instructional Media Center

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-G

THE BUSINESS EDUCATION INSTRUCTIONAL MEDIA CENTER

Today's business education teacher has at his command some of the most sophisticated equipment and materials ever produced by man. The availability of federal funds has in no small part encouraged manufacturers to flood the school market with numerous devices and materials, not all of which are capable of living up to the claims made by their innovators. It behooves the business teacher, therefore, to heed Alexander Pope's words of wisdom: "Be not the first by whom the new are tried, nor yet the last to lay the old aside."

The section that follows will indicate some of the various teaching media with which each business teacher should be familiar. There is no implication that any one teacher will (or should) have all of these devices at his disposal; nor is any attempt made to indicate the many ways in which the media may be used. Much will depend upon the room facilities, the subject taught, the composition of the class, the availability of the equipment, and, in the final analysis, the resourcefulness of the teacher himself. For example, an overhead projector would appear to be more valuable to the bookkeeping teacher than to the business law teacher; voice recording equipment would seem to be a necessity in shorthand, but less important in the teaching of economics. New equipment appears on the market almost daily and is advertised regularly in the business education magazines. Reading the professional journals regularly as well as keeping in close contact with representatives of media manufacturers is probably the best method of keeping up with the rapidly expanding area of teaching media.

Instructional Media

Instructional equipment available for use in business education ranges from the simple to the extremely complex. It is doubtful that any high school in Iowa can justify the

cost and operation of some of the instructional media found on today's market. Attention will, therefore, center upon those media which one might reasonably justify in the classroom with only brief mention made of the more sophisticated equipment which is currently available.

Record Player

One of the most common types of equipment found in the business education classroom is the record player. Dictation records are available to provide dictation practice in the classroom. The records may also be checked out from the business department or purchased by students for home practice. When used in the classroom, however, the record player and dictation records present the disadvantage of providing dictation at only one speed at any one time (unless there are several record players used with headphone sets). While the records are, generally speaking, quite durable, they are, nevertheless, subject to a degree of wear with each playing and do not maintain the clarity and fidelity of recording tape.

Tape Recorder

One of the available auditory devices which probably holds the greatest potential for instructional purposes is the tape recorder. The price of this machine has dropped to the extent that it is now possible to buy three or four very serviceable tape recorders for approximately the same price that one recorder cost not too many years ago.

The compactness of the new tape recorders makes it possible to place one of these machines, equipped with headsets, at each teaching station in shorthand. The shorthand student is able to receive highly individualized practice materials in the form of dictation tapes prepared by the teacher or purchased from commercial agencies.

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The tape recorder can be used in most business education classes. The introduction of tape cassettes allows the instructor to record lectures which may be placed in the library to be checked out by students for use on tape recorders placed in the library for this purpose. A student is thus able to check out a small recorder and the taped lecture and listen to material covered when he has missed a class or when he would like to review material which has been presented in the classroom.

Dictation-transcribing Machines

Most properly equipped business education laboratories will contain one or more commercial dictation-transcribing machines. A variety of dictation belts and records are available for such machines. Specialized dictation for medical and legal secretaries, as well as for other areas of shorthand instruction, may be obtained from commercial companies; or they may be prepared by the instructor. Those machines employing magnetic records, tapes, or belts are especially adaptable to teacher-prepared materials.

Listening Laboratory

Listening laboratories can range from a simple "homemade" device consisting of a tape recorder with headphones to the highly sophisticated dial-access carrel installation.

One of the most popular of the multiple-listening devices is the "wireless" system with "perimeter" pickup in which a single wire runs around the perimeter of the room with the console acting as a miniature broadcasting unit. The student receives the material sent from the console by means of a portable receiving set equipped with earphones. The receiving set is equipped with a switch which enables the student to select from several channels being broadcast. The advantage of such a system rests primarily with the elimination of unsightly wiring associated with the usual "listening lab." The portability of the receiving units is another advantage in that the student is able to receive the transmitted material anywhere within the perimeter of a room thus equipped. A laboratory such as this can provide dictation practice materials simultaneously at several rates of dictation. Further variation in dictation practice can be provided in the degree of difficulty of such materials.



The multiple-listening console, utilizing tapes, broadcasts four different types and / or speeds of dictation simultaneously.

Dial Access Retrieval System

A further sophistication of the listening laboratory is to be found in the dial-access retrieval system. Such installations feature a carrel arrangement with a device that looks like a telephone dial. By dialing a set of specified numbers which are posted in the carrel, machinery in a central room is activated to play back to the carrel a tape recording that is received by the student through a set of headphones with which each carrel is equipped. A program of available tapes is posted in the carrel together with the code number to be dialed for the tape to which the student wishes to listen. Obviously, the dial-access retrieval system is far too costly for the average high school in Iowa but does represent an indication of things to come in the educational field, and should, possibly, be viewed in the same light as

equipping a room with electric typewriters a decade or two ago.

FM (Frequency Modulation) Broadcasting

Mention should be made of FM broadcasting units to which some schools may have access. Unfortunately, such media suffer from the same criticism to which educational TV is subject—that of “being at the right place at the right time” in order to benefit from the material being presented.

Visual and Audiovisual Devices

Many of the so-called “new” audiovisual teaching devices are, in fact, not so new. Generally speaking, many of the newer media represent modifications and adaptations of older media whose usage has been increased many fold because greater quantities of equipment have become available in each school. No longer do teachers have to “take turns” in using equipment. Classrooms are no longer considered complete unless motion picture, filmstrip, slide, opaque, and overhead projectors are easily accessible for use within the room. It is, therefore, assumed that all teachers are familiar with the advantages and disadvantages of such basic equipment. The discussion that follows will deal with some of the other aspects of visual and audiovisual equipment with which the business teacher should have some degree of familiarity and operating skill.

Film Projectors

Educational Development Laboratories has developed a motorized filmstrip projector which utilizes quarter-frame filmstrips involving left-to-right or open-frame presentation of material at a predetermined speed. Various filmstrips are available for use in the teaching of shorthand, adding machines, typewriting, and arithmetic. The material can be presented at a variety of speeds which requires the student to constantly push for higher speeds and greater accuracy in his work.

The single concept film projector or film-loop projector utilizes a looped film of approximately four minutes maximum duration which presents a single concept or idea. Since the film is continuous and contained in a plastic cartridge, no threading of the machine or rewinding of the film is required after each presentation. The cartridge is simply in-

serted into the projector and the machine is then ready for operation. A creative business education teacher can produce his own films for such machines. The Business Education Department at the University of Northern Iowa, Cedar Falls, has experimented with the production of film loops. The business teacher who would like to produce such media should write to that institution for information.

Overhead Projector

The overhead projector is a teaching device that has been in use for approximately thirty years. However, it is only within the last decade that it has achieved the great degree of usage that is apparent today. Improved models have done away with a cumbersome machine that was difficult to transport. When combined with transparencies and overlays, the overhead projector represents one of the greatest timesavers available to the business education teacher today. No longer, to cite only one instance, does the teacher spend literally hours ruling chalkboards for bookkeeping forms. The addition of color to the transparencies and overlays highlights points which need emphasis. Such



The overhead projector assists the business teacher in the projection of materials on the screen, thereby facilitating learning.

transparencies are now very easily produced by the teacher in the business education classroom. One of the latest techniques employed by the overhead projector is the addition of animation, achieved through the use of a wheel and two polarizing sheets of laminated cellophane added to the machine.

Slide Projectors

Present-day cameras have been developed to the point where the preparation of color slides for use in the classroom is no longer the complicated process that it used to be. When such slides are used with a remote-controlled slide projector and a taped commentary, an interesting lesson can be presented. For example, pictures of various office arrangements or a series of slides featuring office equipment will provide students the rare opportunity of seeing conditions in the business world which could be realized only through a field trip.

Recent improvements in slide projectors combine the slide and recorded information in one unit, resulting in a synchronized presentation of picture and sound.

Closed-Circuit Television

Closed-circuit television is available to many schools today. While there were great expectations for this particular medium when it burst on the market, it can hardly be stated that it is the success that was envisioned by those who promoted it at the outset.

Designed primarily for large-group instruction through the utilization of a "master" teacher, it is doubtful that this medium is one that the business education teachers of Iowa can utilize to the best advantage. It is true that closed-circuit television can be used, for example, in the teaching of typewriting by focusing the camera on the demonstration typewriter to show machine and stroking techniques. However, as has been pointed out, for the average typewriting classroom the same result can be achieved almost as well by hanging a mirror over the typewriter so that the keyboard and instructor's hands are reflected to the class.

Using closed-circuit television for purely lecture courses hardly seems justifiable considering the original cost and maintenance of the equipment. A certain degree of success has been attained by the medium as is attested to by the fact that there is now equipment available which transmits in color. The question still remains as to the use of such sophisticated equipment in the business education classroom at the present time.

Studio Television

The utilization of studio television by a single school district is, at best, questionable. The tremendous cost of equipping and staffing a television station can be accomplished only through the use of funds not generally available to the average school district. A very large district, or a consortium of schools, might conceivably justify the expenditure of time and money for educational television. It should be pointed out, however, that broadcast television suffers from the plight of "being in the right place at the right time."

In spite of this, studio television has enjoyed some degree of success in the teaching of business subjects—especially in the areas of shorthand and typewriting taught at the adult education level. Such programs are usually offered in the evening hours at a time when the greatest number of adults may be reached in their homes. The programs may be placed on video-tape and circulated to other television stations in the country thereby reducing their overall cost per viewer.

Other Instructional Media

Instructional media in business education can take many forms and utilize many devices. Not all are to be found in a media center, but in some way they relate to the media center or to instruction and are, for that reason, included in this brief outline of considerations for a multi-media center for the business department.

Programmed Instruction

Programmed instruction is simply the presentation of subject matter in very small units (frames), followed by a question to be answered or a response to be made by the student. The material is usually presented in the form of a book—often in a "scrambled" order in which the frame is presented on one



page and the response answer given on another page together with the next frame.

Programmed materials will usually take one of three forms:

1. Linear—in which every student goes through the same frames in a fixed order;
2. Branching—in which, depending upon his choice of answer, the student is directed to another page that will either confirm his answer and give him the next bit of information, or tells the student why he is wrong and sends him back to the original question again; or
3. A relatively complex method which uses "backward chaining" in which the learner is shown the last step in a sequence and then works backwards to the first step.

The difficulty that has been experienced with programmed instruction lies with the preparation of the frames. Preparing a good instructional program is a complex, time-consuming task. Since material is presented in very small segments, a complete program will usually occupy much more space than would a textbook covering the same material. Programmed learning does, however, have the advantage of providing learning without the presence of a teacher, but it is very doubtful that a student could complete his education through the use of programmed materials alone.

Bookkeeping, accounting, and business arithmetic are representative of the courses in business education which lend themselves well to programmed instruction. Currently, it would appear that programmed materials are used primarily in adult education classes and as supplementary material to the classroom learning situation.

Mini-courses

Somewhat akin to programmed instruction are the mini-courses. Mini-courses are usually subdivisions of a course, prepared in step-by-step detail, which result in self-instruction by the student. A good example of a mini-course is "The Preparation of a Spirit Duplicator Master" in which the stu-

dent is provided with instructions which teach the proper steps in the preparation of a good master copy. This can then be followed by a mini-course in the operation of the spirit duplicator. Basically, the purpose of the mini-course is to break up a complex learning situation into small bits that can be more readily assimilated by the student. Thus, almost any course in business education lends itself to the preparation of mini-courses. Writing such mini-courses is exacting and time consuming, but the results are rewarding if the work is properly done.

Teaching Machines

The teaching machine is related to programmed instruction in that it, too, deals with small "bits" of instructional material in frames. The teaching machine is a mechanical device which requires some action on the part of the learner before the next frame in the learning sequence can be exposed. For example, the student must press a button indicating his answer before the machine can be activated to move to the next frame.

Such a machine was designed, not only to prevent "cheating" by the student (which is possible on the usual programmed instruction books), but also to maintain a record of the student's responses to various frames. Such machines can be used in any business education subject which lends itself to programmed instruction; however, their success can hardly be considered monumental.

Computer-Assisted Instruction (CAI)

A highly sophisticated teaching medium is to be found in computer-assisted instruction. Basically, such instruction involves a student console consisting of a typewriter connected to a computer and, in some cases, a small cathode ray screen. A program, selected by the student, is fed to the student's typewriter or the cathode screen by the computer upon command from the student through use of certain keys on the typewriter. The student responds to the frames, and the computer analyzes the student's typed response, presenting the next frame in the sequence if the student responds correctly. If the wrong answer is given, the computer will provide information which will lead the student to a correct response.

The complexity of computer-assisted instruction is indicated by the fact that in some

installations, the student station will include not only a typewriter and screen, but also a modified sound tape recorder and a modified slide projector, both under the control of the computer; and a desk calculator and a Data-Set telephone instrument.

Generally speaking, the extremely high cost of this type of instruction can hardly be justified at the present time. Aside from the novelty effect of the instruction, it is questionable that the benefit derived from computer-assisted instruction could not be obtained from a good programmed instruction book with less expenditure of time, effort, and money.

Telelecture

Telephone companies have cooperated with education in providing a service whereby well-known educators and lecturers may be contracted to provide a lecture to a class by means of the telephone. A contract is made with the person to deliver a lecture on a given date at a given time. The telephone company installs equipment in the classroom which allows each student to hear the lecture and also provides for students to question the lecturer. A question might be raised as to the advantage of such a procedure over the printed page—especially when the cost is taken into consideration.

Picturephones

A sophisticated refinement of the Telelecture is to be found in the Picturephone, which combines a televised picture of the speaker with the Telelecture. It is doubtful that the benefit derived from actually seeing a picture of the speaker as he talks justifies the added expense inherent to this added feature of the Telelecture.

Remote Blackboard

An adaptation of the Telelecture is the remote blackboard in which the instructor, using a handwriting transmitter, a dataphone link, and a headset for audio communication, can provide instruction to widely separated classrooms. Each classroom is equipped with a handwriting receiver mounted on an overhead projector, speakers for receiving the lecture, and a microphone to permit students to converse with the instructor. Material written by the instructor in his office is projected on screens located at the front of each classroom.

Simulation

Although simulation is being given a great deal of publicity as something new in education, the fact is that it has been an integral part of business education for many, many years. The practice sets of bookkeeping, office practice, and secretarial practice are attempts to simulate actual experience in the office.

There appears to be a definite trend toward further development of simulation of various business experiences in business education. Publishers are making a concerted effort to provide simulated experiences which are being introduced in the classroom at an unprecedented rate. Undoubtedly, the increased use of simulated experiences in business education relates to the emphasis now being given to individualized instruction.

Other Aids to Teaching

Other aids should be considered which do not fall neatly into the package but which we might regard as "educational media." Some of these are listed below. It is the teacher in his classroom who must be the final judge as to their efficacy in his work.

Copying machines have been developed to the point that they can reproduce copies which have every appearance of the original. Their use in the classroom is unquestioned, but the teacher must exercise care to avoid conflict with copyright laws.

Flash reading equipment is available in many forms of which probably the oldest is the tachistoscope. In most cases, this type of equipment is used to force reading speeds to higher levels whether the material be shorthand outlines, straight typewriting copy, numbers, or other material. Such equipment presents the material on a screen for a designated length of time determined by the teacher. For example, a series of numbers may be flashed on the screen at fraction-of-a-second intervals with the student asked to recall the numbers he has seen.

Various forms of "controlled readers" are found which may be set to project reading material at a designated rate (for example, 300 words per minute). A mechanical device moves over the page exposing the written matter at the prescribed rate, thus forcing the student to higher and higher reading rates.

The introduction of paperback books has opened wide the resources available to the teacher and the student in that a good reference library may be established at a relatively low cost when compared to hard bound books. In view of the vast generation of knowledge, the paperback book represents a logical answer to reference material which goes out of date so quickly today.

The daily newspaper contains a wealth of material that can be utilized in all classes.

In conclusion, there is no one answer nor

one single system that will do the whole job. In the final analysis, it is still the teacher in the classroom, making judicious use of the many types of media available to him, who will determine the success or failure of the instruction that is given in today's business education. The creative teacher will constantly experiment with those devices and materials that are available to him (within the limits prescribed by the budget and the time under which he operates) retaining for use those which he finds actually do make instruction more meaningful and purposeful.

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GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

Section 5-H

Evaluating the Business Education Program

GENERAL RESPONSIBILITIES OF BUSINESS EDUCATION

SECTION 5-H

EVALUATING THE BUSINESS EDUCATION PROGRAM

Business education must be aware of the socioeconomic and technological change in the world of which it is a part. Thus to keep in step with society, business education must change its programs in order to update and improve them. However, change in itself is not always the answer. The change should be based on valid research and evaluation.

As the program of change is started, based on research and evaluation, it is well to consider the meaning of evaluation. For the purpose of this handbook, evaluation may be considered as "the process of ascertaining or judging the value or amount of something by careful appraisal."¹

The term "careful appraisal" indicates that evaluation cannot be accomplished in a haphazard manner—it must be carefully planned and conducted on a sound basis. Any evaluative design is based on clearly defined and predetermined outcomes which are largely determined by the needs of society. These needs vary with changes occurring in the local, national, and international environment. Technological and scientific development determine methods and activities of today's business world, and even greater change will appear in the world of the future. Therefore, it is the responsibility of a school system to prepare tomorrow's citizens so that they will be capable of earning a living for themselves as well as contributing to public agencies through contributions and legal taxes.

The school administrators, the business teacher, and the business program are normally intentionally or unintentionally being judged by the product (graduate) that they have produced. Many times the most critical evaluator of a business department is the employer in the community. Such an employer,

who hires the business student, can often make a better evaluation of the student than can the teacher. He will evaluate the student's skills, his attitude toward work, his ability to get along with people, and his personality traits. If the student is an efficient and successful worker, the employer evaluates the department as being adequate; if the student does not fit into the work situation, the department is rated as inadequate.

Another strong evaluator is the community in which the student lives. The community will be eager to determine answers to such questions as: Does the student take an active part in civic affairs of the community? Does he promote the welfare of the community? Is he a wise consumer of goods? If the answers to these and other related questions are in the affirmative, then the business department can be considered to have performed a basic and valuable function in the development of good citizens as well as of effective business workers.

The study of the various programs in this publication should aid the individual teacher and administrator in determining if the business department is following effective practices in present-day business education. However, it might be beneficial to list a few guidelines, extending beyond the handbook, for the administrator and teacher to follow in a careful approach of evaluating the business department. (A sample "Educational Program Check Sheet" is included as Figure 5H-1.)

First, who should make the evaluation? This task can be assigned to many different people; the business teacher of the school, former business students, local businessmen, supervisors of business education, or representatives from teacher-education colleges or universities. Perhaps the first group to be considered should be the teachers of the department to be evaluated. It is well for teachers to take a careful, objective look at

1. Carter V. Good, ed., *Dictionary of Education* (New York: McGraw Hill Book Company, 1945), p. 156.

Figure 5H-1

The Educational Program Check Sheet			
EVALUATIVE CRITERIA	Always	Sometimes	Never
1. The educational philosophy of the school is carefully studied and considered in planning business programs.			
2. In planning the business education program, the needs of the student are considered.			
3. An advisory committee is consulted in regard to business education program planning.			
4. The business department considers suggestions offered by the advisory committee.			
5. The facilities existing in the community are considered in the educational program of the business department.			
6. The guidance department is incorporated in making program plans for the business department.			
7. The business education students are encouraged to participate in the extra curricular activities of the school and provision is made for this in planning their educational program.			
8. The business department provides a printed curriculum guide indicating the sequence of offerings of the various programs.			
9. The business education curriculum is reviewed regularly for improvement and updating.			
10. The curriculum reviews are based upon community surveys.			
11. Follow-up surveys are made periodically to upgrade the business program.			
12. The needs of the labor market are considered in regard to program planning.			
13. Provision is made for the low-level student in regard to need and occupational training.			
14. Specialized instruction is offered at various levels.			
15. The students' career objectives are considered in the program planning.			



The evaluation of the business department by a committee of teachers, administrators, and businessmen can be a valuable method of maintaining an effective program.

their work, ask themselves questions, and determine realistic answers. The teacher is currently "on the firing line" and should have the greatest concern as to the outcome of his students. After the business teacher has made a thorough investigation of his department, a group of people composed of representatives from the above-named groups could then make a more comprehensive evaluation of the departmental programs.

Additional help, suggestions, and criteria for evaluating a department may be supplied by the Department of Public Instruction, by the National Business Education Association and by the North-Central Evaluation Criteria.

Second, the items to be evaluated must be determined. The following comments and questions might be helpful in determining these items.

1. **Philosophy and Objectives.** The two main objectives of business education are: (1) to prepare students for gainful employment (vocational); and (2) to help students acquire the necessary knowledge for their individual business experiences (personal use). Thus, a philosophy of business education is concerned with the "whole" of education

for the students. Each department must first establish its ideals before a program can be built, and, additionally, the program objectives that the teacher wishes to achieve must be known before the curriculum can be developed.

The school philosophy should be considered in making an evaluation, and the business department must incorporate this philosophy into the preparation of the department's objectives. The two must complement each other. In writing program objectives business teachers should ask:

- a. Does the business department philosophy coincide with the educational pattern of the school and community?
- b. Are the objectives a composite of the views of all members of the department?
- c. Do the objectives meet the needs of the student entering the world of work?
- d. Are terminal objectives defined for

- students enrolled in career and general business classes?
- e. Do the objectives provide for changing occupational requirements?
 - f. Has the age of automation been considered, and accordingly have students been prepared to continue their education for jobs not now in existence?
 - g. Are the department objectives reviewed periodically and updated to reflect changing business conditions and educational practices?
- 2. The Educational Program.** Research of the community and projections into future occupations are two topics to be considered before a business program for any secondary, post-secondary, or technical school is established. However, the needs of the general business student must not be overlooked; emphasis must be placed on both basic business and career business education. The total business curriculum should consist of a series of related offerings for a total program. In analyzing the program the teacher should ask these questions:
- a. Are the school philosophy and the needs of students considered in planning?
 - b. Is an advisory committee utilized in formulating the educational program of the school?
 - c. Are the facilities of the community utilized in carrying out the educational program?
 - d. Does the educational program extend beyond the classroom walls to include extracurricular activities, guidance and counseling services, and the judicious use of community facilities and personnel?
 - e. Does the business education department provide a printed curriculum guide which indicates the sequence of offerings necessary to achieve the stated goal of the student?
 - f. Are the curriculums in a state of continuous revision and improvement based upon surveys and other sources of information that relate to the educational program?
 - g. Does the program provide for the needs of the student at the time when he is in need of such training?
 - h. Does the program meet the demands of the labor market?
 - i. Does the program provide occupational training to meet the needs of the low-level students?
 - j. Is specialized instruction offered at various levels?
- 3. The Instructional Staff.** The philosophy of the teaching staff must coincide with the philosophy of the school in order to build a successful department. The instructional activities, methods, procedures, and the qualifications of the staff should be examined, and the teacher must be able to stimulate students' interest and be able to use a variety of techniques that will develop a variety of skills within the student. The instructor and his methods of instruction have an important effect on the personal development of the student as well as his ability to learn new skills. The following questions are examples of those that should be asked in an evaluation:
- a. Is the preparation of faculty members adequate and appropriate to the subject matter they teach?
 - b. Does the faculty represent a reasonable balance in teaching experiences?
 - c. Is there provision for adequate in-service training for the faculty?
 - d. Do faculty members assume membership and participation in professional organizations?
 - e. Have the members of the staff been adequately instructed in effective methods of teaching?
 - f. Is the teacher aware of changes in the behavior of students?
 - g. Is the teacher at ease in the business world and does he assume an active part in the community?
 - h. Is the teacher knowledgeable about the economic sector of society?
 - i. Is provision made for individualized instruction?

- j. Are well-defined behavioral objectives provided for each class?
 - k. Do the instructors utilize a long-range plan for their offerings?
 - l. Do the teachers vary their classroom procedure?
 - m. Is there good rapport between teacher and students?
 - n. Do the teachers use various instruments for testing and evaluating students?
 - o. Are teaching methods related to the subject being taught?
4. **Administration.** A large business department requires formal organization and should be headed by a department chairman. This individual must work closely with, and establish rapport among, the administrators of the school, department members, students, and the community. To evaluate carefully a business department, an evaluator should ask these questions concerning the department chairman and his staff:
- a. Does the chairman recognize the need to periodically review and revise the curriculum to meet the manpower needs?
 - b. Does the department chairman provide proper supervision for the improvement of instruction and professional growth of individual members of the department?
 - c. Does each department member clearly understand his duties, rights, and responsibilities?
 - d. Is each teacher aware of the standards by which his work is evaluated, and is this evaluation discussed with the individual teacher?
 - e. Do department members participate in faculty meetings and extracurricular school activities?
 - f. Do department members assist in department planning such as: equipment, purchases, development of curriculum, selection of students, and placement of students?
 - g. Are provisions made for in-service training for new or inexperienced teachers?
5. **Instructional Material.** The classroom teacher should be thoroughly familiar with the kinds of materials published in his particular area of teaching. New instructional materials are being produced each day in order to keep abreast of the changing times. An evaluator of a business program should ask these questions about such materials:
- a. Is the classroom material current?
 - b. Does the teacher select textbooks that fulfill the needs of the students in their chosen career?
 - c. Are teaching aids such as newspapers, magazines, and reference books used in the classroom?
 - d. Is there a valid rating scale for selecting textbooks?
 - e. Are the library facilities modern and broad enough in scope to serve the educational needs of the program?
 - f. Does the school or department possess necessary audio and audio-visual equipment, and is it used by the business teacher? (The instructional media center is discussed in another part of the General Responsibilities section of this handbook.)
 - g. Does the teaching load allow the instructor adequate time for planning and preparation of materials?
 - h. Is the teaching load reasonable in regard to number of preparations, student-teacher ratio, and extra-curricular assignments?
6. **Physical Facilities.** The classroom facilities represent another very important area of the business department to be considered in evaluation. The equipment used should be comparable to that of the business world. The department chairman should provide answers to these questions concerning the adequacy of his department's physical facilities:
- a. Are periodic surveys made to be sure the classroom equipment is as modern as that used in local business establishments?
 - b. Does the department carefully select the company from which equipment is purchased?

- c. Are records kept showing dates of purchase and repairs for each machine?
 - d. Is there a rotation plan of trade-in for machines in order to keep modern equipment in the classroom?
 - e. Is provision made for prompt repair or replacement of defective equipment in the department?
 - f. Do classrooms provide adequate space for effective instruction?
 - g. Are the classrooms well lighted, clean, and conducive to the work carried on within the classrooms?
 - h. Have plans been made for expansion as the department grows?
 - i. Are safety measures taken in regard to electrical outlets, wiring, and other potential hazards?
 - j. Does the department have a variety of machines in order to provide students with a broad knowledge of equipment?
 - k. Is attention given to types of supplies such as stationery and duplicating supplies that are used in business?
 - l. Are students taught to clean each of the office machines, to change ribbons, and to become familiar with other forms of machine maintenance in order to keep them in workable condition?
- 7. Student Personnel Services.** Careful counseling can do much to guarantee the student's success after graduation. Close cooperation between the guidance department and the business department will improve the guidance services to the student. To establish rapport between the two departments, positive answers should be obtained to the following questions:
- a. Are inventory tests given to help the student know himself as an individual?
 - b. Is the student informed of his weaknesses and also informed of his strengths to compensate for his limitations?
 - c. Is there an orientation program for students entering the business department?

- d. Are complete scholastic and interest records kept for each student?
 - e. Are student records used by teachers to guide the student and structure program instruction?
 - f. Are handicapped students encouraged to plan a career in which they may experience optimum success?
 - g. Are good health habits and cleanliness included as a part of the educational program?
 - h. Are the students encouraged to participate in extracurricular activities so they may become a part of the entire school system?
 - i. Does the department provide placement service for the student?
 - j. Are follow-up studies made frequently?
- 8. Business Standards.** It is the responsibility of the business department to devise instructional standards that meet the entry job standards required by business. Students vary in intelligence, interest, and in their social, cultural, and emotional backgrounds. However, even though the specific standards will vary with each school and within each department, standards chosen must be flexible and be geared to provide a marketable skill or a desirable level of economic understanding for each individual's capabilities and desires. The standards established by manpower needs and economic demands of the nation also must be met.
- 9. Supportive Characteristics.** Skills should be measured and evaluated, but success in any career such as business is dependent upon the development of positive attitudes, good personal qualifications, appropriate behavior, and values. (Character traits and attitudes are discussed in the part on "Developing Leadership and Personal Traits in the Business Student" in this section.)

The evaluation of the department should be a continuous process; it should be based on what has been done and what should be done; and it should be based on facts rather than on the opinion of any one evaluator. In the final analysis it is what is done to and for the school's product (the student) that really evaluates the department. The productive

student with a healthy attitude is the outcome desired by every business department.

In the words of O. J. Byrnside, Jr., "The process of evaluation should act as a stimulus to improve programs and by improving the quality of programs, close the gap between

what is being done and what should be done."²

2. O. J. Byrnside, Jr., "Principles for Evaluation of Business and Office Education." in Harry Huffman and others, **Criteria for Evaluating Business and Office Education**, National Business Education Yearbook, No. 7 (Washington, D.C.: National Business Education Association, 1969), p. 13.

Section 6

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section

- 6-A The Business Curriculum**
(Coordinators: Connie Feist and Mary Ann Ochs)
- 6-B The Basic Business Program (Coordinator: J. E. Gratz)**
- 6-C The Data Processing Program**
(Coordinator: Darrell K. Lind)
- 6-D The Distributive Education Program**
(Coordinator: Lyle Natvig)
- 6-E The Office Occupations Program**
(Coordinator: Jack C. Reed)
 - Part 1 The Clerical Occupations Program**
 - Part 2 The Secretarial Program**
 - Part 3 The Bookkeeping / Accounting Program**
 - Part 4 Equipment and Facilities for Office Occupations**
 - Part 5 Cooperative Office Occupations Programs in the Secondary School**

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SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - A

The Business Curriculum

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Roosevelt High School
Des Moines**

**Mary Ann Ochs
East High School
Des Moines**

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

SECTION 6-A

THE BUSINESS CURRICULUM

The goal of all school curriculums is to provide the best possible learning opportunities for the students. The best curriculum in the area of business is one that meets the needs of the students in the community. It should be intelligently and carefully planned by the business teachers, administrators, and by advisors from the business community.

Many factors should be considered in planning the business education curriculum. Some of the key factors include:

1. Size of the school
2. Size of the community
3. Type of employment available in the surrounding area
4. General economic conditions of the vicinity
5. Goals of the students (general education and career)

Small High School

A small high school business education department with one or two business teachers may need to limit its offerings to relatively unspecialized areas such as typewriting and general business. The individual needs of the students in the small school must, therefore, be met by combining classes in some instances. An example of this "merger" would be a combination of Clerical and Secretarial Practice.

Another method of meeting the students' needs is to offer subjects in alternate years, thus making it possible to have more subjects included in the curriculum. For example, the pattern of offerings in a one-teacher department might be as follows:

1st Year

Typewriting
Beginning Shorthand
Bookkeeping
General Business

2nd Year

Typewriting
Advanced Shorthand (1st sem.)
Office Practice (2nd sem.)
Consumer Economics (1st sem.)
Business Law (2nd sem.)
Bookkeeping

3rd Year

Repeat offerings of
1st Year

4th Year

Repeat offerings of
2nd year

Medium-Sized High School

The medium-sized high school with three to five business teachers offers opportunity for a more diverse offering in the various areas of business education. Both career-oriented and noncareer-oriented programs of study may be emphasized in this type of school setting.

Large High School

The business education department in a large high school with six or more business teachers is usually able to organize its offerings for students of homogeneous interests and abilities. Sequences for all groups, including the college-bound and the disadvantaged youth, should be included in such a business program.

Frequent evaluation and revision of the business curriculum is necessary in order to retain its value in both the comprehensive and career-oriented school programs.

Tables 6A-1, 6A-2, and 6A-3 illustrate typical offerings in Iowa high schools of various sizes and suggest the grade levels at

which subjects may be taught. The information in these tables should be considered only

as a guide for setting up a business education program.

TABLE 6A-1
A Typical Business Curriculum for a Small-Sized High School
 (One or two business teachers)

Business Curriculums	Year Offered and Course Length							
	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Basic Business-Bookkeeping								
General Business		x		x				
Bookkeeping-Recordkeeping						x		x
Clerical-Secretarial								
Typewriting I	x		x		x		x	
Typewriting II			x		x		x	
Shorthand (1st year)						x		x
Shorthand (2nd year)								x
Office Practice								x
Office Education								x

TABLE 6A-2
A Suggested Business Curriculum for a Medium-Sized High School
 (Three to five business teachers)

Business Curriculums	Year Offered and Course Length							
	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Basic Business								
General Business		X						
Business Law					X		X	
Business Math			X		X		X	
Consumer Education			X		X		X	
Bookkeeping-Data Processing								
Bookkeeping (1st Year)				X		X		X
Bookkeeping-Accounting (2nd Year)						X		X
Recordkeeping			X		X		X	
Intro. to Data Processing					X		X	
Distributive Education (D. E.)								
Salesmanship					X			
Retailing					X			
D. E. Problems								X
D. E. Work Experience								X
Clerical-Secretarial								
Personal Typewriting	X		X		X		X	
Typewriting (1st year)				X		X		X
Typewriting (2nd year)						X		X
Clerical Practice								X
Notehand					X		X	
Shorthand (1st year)						X		X
Shorthand (2nd year)								X
Secretarial Practice								X
Office Occupations Problems								X
Office Occupations Work Experience								X

TABLE 6A-3
A Comprehensive Business Curriculum for a Large-Size High School
(Six or more business teachers)

Business Curriculums	Year Offered and Course Length							
	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Basic Business								
General Business		X						
Business Law					X		X	
Business Mathematics			X		X		X	
Consumer Education			X		X		X	
Business Organization			X		X		X	
Bookkeeping-Data Processing								
Bookkeeping (1st Year)				X		X		X
Bookkeeping-Accounting (2nd Year)						X		X
Recordkeeping				X		X		X
Intro. to Data Processing					X		X	
Distributive Education (D. E.)								
Salesmanship					X			
Retailing					X			
D. E. Problems								X
D. E. Work Experience								X
Clerical-Secretarial								
Secretarial Orientation			X					
Personal Typing	X		X		X		X	
Typewriting (1st year)				X		X		X
Typewriting (2nd year)						X		X
Clerical Practice								X
Office Machines					X		X	
Business Communications					X		X	
Notehand					X		X	
Shorthand (1st year)						X		X
Shorthand (2nd year)								X
Secretarial Practice								X
Office Occupations Problems								X
Office Occupations Work Experience								X

The sections which follow include:

1. Descriptions of four programs in the business education curriculum (Basic Business, Data Processing, Distributive

Education, and Office Occupations);
and

2. Descriptions of offerings within these programs.

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SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - B

The Basic Business Program

**Program Coordinator: J. E. Gratz
The University of Iowa
Iowa City**



Basic Business Is Everywhere



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SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

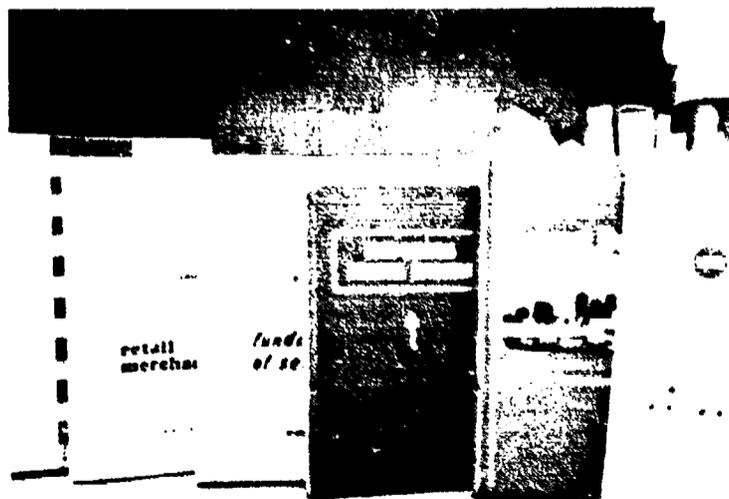
SECTION 6-B

THE BASIC BUSINESS PROGRAM

General Description

In the secondary school the basic business subjects are generally defined as those areas of business education which are available to all students as opposed to the areas in business education which are primarily career oriented. A number of terms are used by business educators to designate this area. *Social business, general business, and basic business* are probably the most commonly used terms. For the purposes of this section, basic business will be used.

The subjects in the secondary school which are normally associated with basic business are economics, consumer education or consumer economics, business law, and general business. In addition, other basic business courses might be business English, economic geography, introduction to advertising, salesmanship, and business mathematics. This section of the handbook is limited to the most commonly taught basic business courses at the high school level, namely: general business, business mathematics, business law, consumer economics, and economics. See Table 6B-1 for recommended grade placement.



The basic business program includes the study of the functional areas in business, such as retailing, economics, and general business.

Reasons for Basic Business Education

History tells us that the early high school business educator was recruited from the private business school and was generally a vocational, skills-oriented teacher. In many instances he did not have a college degree and often was looked down upon by his liberal arts-oriented colleagues.

As time passed and more business educators received college degrees, a realization came that there was more to educating a person than merely training him in a skill. With this realization, business teachers began to give increased attention to the nonskill "basic-to-business" courses such as consumer education, economic geography, and business English. In particular, the aim of the early business educator was to offer something more than a "skills-only" curriculum. To this day, however, there still lingers on a widespread basis the image of business education's curriculum as being composed only of shorthand, typewriting, and bookkeeping subjects.

While these skill subjects are certainly of great value in today's business curriculum, most business educators agree that the objectives of the basic business courses are also extremely important in our society. Similarly, most teachers of business subjects agree that the primary objective of the basic business program is to develop in the student an understanding and appreciation of our economic system at the personal, consumer, and societal levels.

A number of basic business courses have been taught from a purely personal or consumer viewpoint, while others, particularly economics, have been taught from largely factual or from largely theoretical viewpoints. What is needed is a proper fusion of both viewpoints, rather than an elimination of one or the other.

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TABLE 6B-1
Recommended Grade Placement for Basic Business Subjects

Course Name	Grade Level and Semester					
	10th		11th		12th	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
General Business	x	x				
Business Mathematics		x				
Consumer Education			x	x		
Business Law				x		
Economics					x	x

Authorities in the field of business education have suggested that perhaps the basic business program could be strengthened and given more continuity by offering only two courses in basic business rather than a number of courses. This program would include one course called "Introduction to American Business" (or some similar title) at the 10th or 11th grade level and another course called "American Business Problems" at the 11th or 12th grade level. By offering only these two courses, it is contended much of the repeti-

tive material now covered in separate courses such as business law, consumer education, general business, and salesmanship could be avoided. Relevant units from those separate courses could be incorporated into the two courses suggested, with consequent strengthening of the basic business program in both course content and continuity.

Courses which are primarily identified in the basic business program and their recommended grade levels are listed below.

Suggested Basic Business Course Titles

General Business (one or two semesters)

Other Titles

Basic Business
 Business and Society
 Business Fundamentals
 Exploratory Business
 Introduction to American Business Problems
 Introduction to Business
 Our Business Environment

Business Mathematics (one semester)

Other Titles

Applied Business Mathematics
 Business Arithmetic
 Consumer Mathematics
 Mathematics for Business

Consumer Education (one or two semesters)

Other Titles

Consumer Economics
 Consumer Problems
 The American Consumer
 The Consumer in our Society

Business Law (one semester)

Other Titles

Business Law Problems
 Commercial Law
 Introduction to Business Law
 Law and Society
 Legal Problems of Consumers
 Our Legal Environment
 Social Jurisprudence

Economics (one or two semesters)

Other Titles

Consumer Economics
 Contemporary Economics (Problems)
 Current Economic Problems
 Economic Problems
 Economics in Our World (Society)
 Our Economic Environment
 Personal Economics
 Principles of Economics
 Societal Economics

Course work in the areas of basic business beyond the secondary school will be found in the Post-Secondary section of this handbook.

Suggested Offerings in the Basic Business Program

The course descriptions appearing in this section are intended only as guidelines for the teacher. Because of the varying length of courses in different schools, certain units may have to be limited or even omitted from the instruction. However, an attempt has been made to suggest content that is considered of prime importance if the student is to meet the objectives listed.

In setting objectives for any business course, the business teacher should determine first what is sought as terminal behavior for the student. Terminal behavior is, of course, the behavior a teacher would like his students to exhibit by the end of the course.

While setting these terminal objectives, the teacher should observe a note of caution. Terminal objectives lend themselves readily to measurable and observable performances on the part of students. Too easily, though, teachers may fall into the habit of educating

students in only those areas which can be measured. However, there are many other worthwhile objectives which are difficult to measure in a "terminal-performance" fashion. For example, a teacher instructing a class in business law may be trying to instill a respect for the laws of society, a relatively intangible objective. One could then ask, "How can this be measured in a performance manner?" Perhaps business teachers should set up two sets of objectives for each course in the basic business education program; one in the cognitive domain and another in the affective domain.

The *cognitive* objective covers the recall of knowledge. An example of this objective would be:

Given a chart showing The Consumer Price Index from 1918-1971 with the base year 1967 = 100, the student will be able to answer correctly a series of questions relating to this chart.

The *affective* objective, on the other hand, is concerned mainly with emotions. This objective would indicate changes in interests, attitudes, values, and appreciation. An example of an affective objective would be:

The student will show a marked change in attitude toward what is considered "good business ethics" as measured by observable behavior and pre- and post-attitudinal tests.

General Business

Description

The General Business course is the first exposure to formal business education for many students. Because of this fact, the instructor should strive to make this course one of the outstanding experiences in a student's life. There should be no prerequisite for this course, and all students should be encouraged to take it.

The primary purpose of the General Business course is to build a firm understanding of the American economy in the students. Furthermore, the course should prepare students to understand the broad and basic economic concepts which underlie the business world. Time permitting, further development of economic generalizations is encouraged.

Specifically, the student should understand the major types of business organiza-

tions and their effect on the lives of Americans in the social-economic-political sectors. In addition, he should also understand the technological changes and conservation of human and natural resources. Also to be included in this course is career orientation in the world of work, a unit that should serve as a guidance function for these young people. The instructor is encouraged to select judiciously from the typical contents of the textbook in General Business and from the multitude of other excellent references in the business field.

While planning the General Business course, the instructor should keep in mind that a number of units taught in the General Business course are often also covered in other courses. Interdepartmental as well as intradepartmental planning is required if business education is to have the type of basic business curriculum that will be of outstanding value to the entire student body in the secondary school.

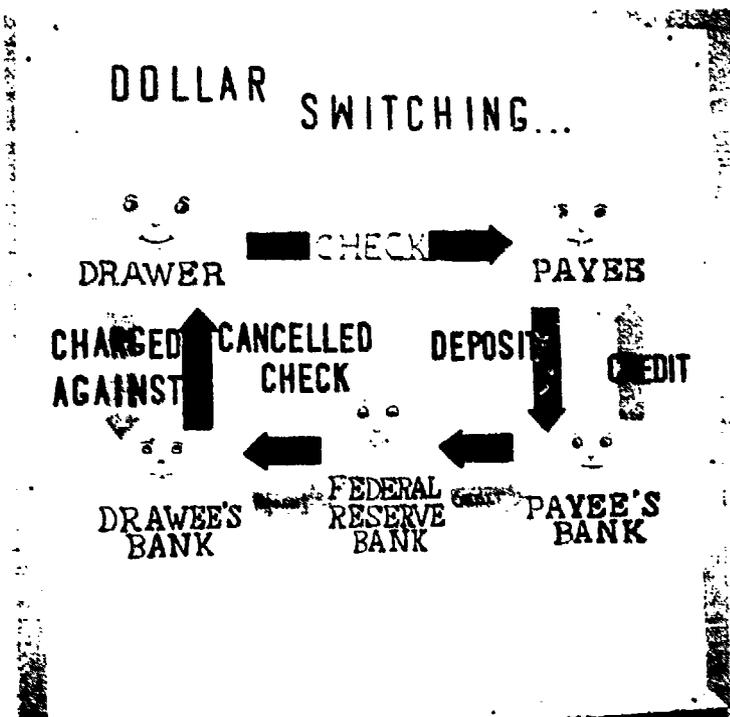
Terminal Objectives

The following *minimal* terminal objectives listed for the General Business course are intended to serve as a guide for the instructor. They should not, therefore, be considered as all-inclusive but are consistent with the description of the course previously outlined.

1. Given a comprehensive list of common business terms, the student will be able to identify and define at least 90 percent of the terms.
2. The student will be able to list the differences between and the advantages and disadvantages of corporations, partnerships, and sole proprietorships.
3. Given a current business problem taken from current periodicals or the news media, the student will arrive at a logical decision by using the five-step plan. (The five-step plan is described in this section under "Methods of Teaching Basic Business Subjects.") He will then present his decision to the class, with the class questions and general reaction to the decision being a major factor in evaluating how well the student handled the decision-making process.
4. Shown examples of government spending in such areas as defense, pollution

control, or poverty programs, the student will be able to give the basic cause-and-effect relationship of these government expenditures.

5. The student will be able to discuss, in writing, the pros and cons of labor unions and the relationship of unions to management.
6. The basic operations and functions of the Federal Reserve System will be explained, in writing, by the students. The student will be able to show how the functions of the Federal Reserve System affect the monetary policy of our economy.
7. Given the proper bank forms, the student will be able to fill out properly and correctly these forms, write checks, endorse checks, and correctly describe the most important bank services.



Attractive bulletin boards help brighten a room as well as serve to develop teaching-learning themes in the classroom.

8. The student will be able to explain, in writing, the basic economic cost that must be paid to satisfy human wants and that goods and services produced by a society depend upon its resources.

Business Law

Description

A well-taught course in business law will

give the student insight into the legal rules and regulations that benefit mankind. However, the course should not be designed to make the student a lawyer but rather to promote his understanding of the importance of law to both society and to the individual.

From this viewpoint then, business law instructors should consider relating their teaching of law to economics, sociology, and government, using those topics which have significant social implications at a given time. Examples of significant legal areas include civil rights, urban problems, and ecology. Motor vehicle laws and insurance should be covered, with some attention given to laws and insurance governing motorcycles.

Terminal Objectives

The *minimal* terminal objectives listed for business law are not intended to be all-inclusive but rather to serve as a guide for the instructor. The instructor is encouraged to develop other objectives which may appear to be relevant for his particular classes.

1. Given the following list, the student will be able to correctly explain these terms:
 - a. Constitutional law
 - b. Statutory law
 - c. Common law
 - d. Case law (precedent)
 - e. Administrative law
2. Given a set of samples of contracts and noncontracts, the student will be able to identify correctly the samples that are legal contracts and be able to tell why the remaining samples are not legal contracts.
3. From a list of legal terms, the student will be able to define and interpret correctly in writing, a minimum of 80 percent of the list.
4. The student will be able to list the various types of automobile and motorcycle insurance coverage and explain correctly what each coverage encompasses.
5. Given a series of case problems with varying legal implications which might normally involve students, the student will correctly decide which cases require legal aid and which cases could be handled on a personal basis.

6. Given a series of legal case problems, the student will be able to recognize and identify, orally or in writing, the moral and ethical issues involved in our legal environment as portrayed by these cases. These issues should be identified correctly and should be in keeping with the general mores of our society.
7. The student will be able to discuss the important current events in our legal environment. In discussing these problems, the student will specifically be able to point out the legal features of the problem, and the possible implications of the problem, as well as the societal problems, if any, that are involved.
8. The student will be able to list the main features of governmental regulations which protect him as a citizen and consumer. An example of some of the main features are the workman's compensation laws and the social implications of social security.
9. Given appropriate forms of commercial paper, the student will be able to determine correctly whether or not the paper meets the requirements of negotiability.

Consumer Education

Description

It is suggested that the Consumer Education course be taught from a comprehensive personal, consumer, and societal approach. For example, the various types of insurance policies and the protection they offer an individual represent a personal concept. On the other hand, the various costs of insurance versus the coverage obtained represents a consumer concept; and finally the security provided to large groups of people by insurance represents a societal concept.

The instructor should include in the Consumer Education course, units on forces that affect consumer demand—the customs of society and the needs and wants of people in that society. To bolster these units, the teacher should include the management of income and the proper use of credit as correlated units. Other course units include insurance, housing, taxes, and the effects of governmental actions on the consumer.

The instructor should realize that student attitudes may have to be changed. It is therefore recommended that pre-tests, both in the areas of knowledge as well as of attitudes, be given to lend direction to the course. At the conclusion of the course, attitudinal tests may again be given to measure any change of attitude that may have taken place on the part of the student.

Integration of course content should be carefully provided. For example, if a school offers courses in General Business, Business Law, and Consumer Education, it would be possible and desirable for all three courses to include units on insurance. Close correlation of course coverage would be necessary to prevent unintentional or excessive overlapping of course content.

Vertical and horizontal integration with other departments, such as Social Studies and Home Economics, is also encouraged to prevent excessive overlapping of course content.

Terminal Objectives

The *minimal* terminal objectives listed for the Consumer Education course are not intended to be all-inclusive, but rather to serve as a guide for the instructor. The instructor is encouraged to define more objectives in the related areas.

1. Given a specific amount of money to live on for a given period of time, the student will demonstrate his knowledge of the principles of personal budgeting by setting up an actual budget in keeping with the principles covered in the course.
2. Given a list of the various means of investing money, the student will be able to explain, in writing, with 80 percent accuracy, how each investment works and which would be best for long-term and short-term personal investment.
3. Given the basic facts of a problem in installment buying, the student will be able to figure accurately the true interest rate.
4. The student will be able to list with 100 percent accuracy the major types of life insurance policies and explain the basic features of each policy.
5. The student will demonstrate his knowledge of opening a charge account

by actually filling out an application for credit.

6. Given a list of consumer goods, the student will demonstrate his knowledge of the difference between wants and needs by correctly identifying each.
7. Given a sample of both poor and good advertising (as predetermined by the instructor) the student will be able to identify (orally or in writing) the weaknesses and strengths of each advertisement.
8. The student will be able to list correctly the sources of credit available to him as a consumer and will be able to analyze which source would be the most practical and beneficial to him in a number of situations. For example, ("Which credit source would be most beneficial if you would like to purchase an automobile?")
9. The student will be able to list the major consumer aids and agencies that are available for his benefit.
10. The student will be able to analyze a number of current problems in consumer education and will be able to predict possible future problems in the area of consumerism. These areas might include planning for income in the later nonworking years. Such planning would involve retirement plans, inflation, and government regulations to mention a few of the problems.
11. Given a list of taxes collected by various agencies of government (local, state, and federal), the student will be able to explain why the tax is collected and what effect the tax has on consumer buying power and on society as a whole.
12. Given a number of the major laws that affect consumers, the student will be able to explain how these laws affect persons, consumers, and society.

Economics

Description

Economics is important to any society. The instructor must consider the idea of instilling in his students just how important economics is to everyone.

Part of the Economics course should in-

clude an analysis of the operation of the American economy and the different roles the individual, the producer, and the consumer play in this economy. The current economic issues in the socio-political sector of our society also should be considered. One phase of the course should include the measurement of the performance of our economy, as well as some of the basic problems of economic growth such as technology, employment, and population.

In addition, the role of each level of government in our economic society as well as the role of the government in international economics might well be included. Finally, attention should be given to career opportunities in the field of economics.

No prerequisite is suggested and enrollment by all students is encouraged.

Terminal Objectives

The instructor should decide for himself just what the terminal objectives should be for his class in Economics. A number of *minimal* terminal objectives, both in the affective and cognitive areas, have been suggested, but the instructor may want to adjust these objectives to fit his own needs.

1. Given a problem in economics, the student should be able to analyze it logically. He should be able to identify the problem and list rational alternatives for solving the problem. He should also be able to logically analyze these alternatives and then make a rational, logical, defensible decision.
2. In addition to being able to identify the major causes and effects of economic instability, the student should know the role of the Federal Reserve System in its efforts to avoid economic instability. He should be able to define the fiscal policy of the government and then, taking all of this knowledge into account, decide what can be done to minimize fluctuations in the economy.
3. The student should be able to contrast the differences between reason, emotion, and value judgments as they apply to economic problems.
4. The student should be able to construct an outline of the role of government in our economy. This outline should include the extent of government con-

- cern, (historically its ever-increasing role) the major regulatory activities, government spending, and taxation. The student should then be able to evaluate this role of government and its impact on our economic system.
5. Given a list of countries comprising the major economic societies of the world, the student will be able to identify the various methods used by these societies to satisfy human needs and wants.
 6. Given the factors of natural resources, labor resources, capital goods, technology, and growth in total output, the student should be able to explain how these factors operate in the national economy.
 7. The student will be able to compare the economic problems facing the United States and those faced by an underdeveloped nation.
 8. The student will be able to identify the basic conflict between producers and consumers and explain its effect on our economic system.
 9. Given statistical data in the form of graphs, tables, and other media which are directed to normal public usage, the student will be able to interpret this material in an economic context.
 10. Given a list of different kinds of taxes, the student should be able to classify these taxes as regressive or progressive and indicate why they are this type. He should also be able to correctly identify at least 80 percent of this list.
 11. Given a problem in personal economic security, the student should be able to make rational decisions in planning a career, using his savings, and protecting himself against economic fluctuations.
 12. Given a list of vocabulary terms that are common to the economics area—such as gross national product, law of supply and demand, monopoly, constant dollars, aggregate demand, recession, “tight” and “easy” money, dialectic materialism, and planned economy—the student should be able to define these terms with at least 90 percent accuracy and understand their implications.

Business Mathematics

Description

The business world makes increasing use of mathematics in its long-run planning and in its day-to-day operations. Business employees, therefore, are required to assemble, manipulate, and interpret all kinds of numerical data. In order to prepare themselves for careers using numerical information, students will find it helpful to take a course in business mathematics.



The New Business Math? Mathematics is expanding its role in both the business classroom and the business community.

A solid foundation in the fundamentals of mathematics is one of the prerequisites of this course. The student needs both speed and accuracy in working with basic numeric data in order to be successful in making other applications of mathematical skills.

Topics to be included in the business mathematics offering will vary from teacher to teacher, depending upon local circumstances. For an overview of the typical topics covered in such a course, the teacher is referred to the terminal objectives section. The teacher of business mathematics should bear in mind the several purposes for which such a course is designed. In addition to the points mentioned previously, the teacher should devote considerable attention to both problem definition and analysis as well as to the specific techniques for problem solving (that is, not only *how* a problem is solved but *why* it is solved in this way). Only by using this dual emphasis can a teacher adequately

prepare students to cope with a variety of mathematical applications on the job.

Terminal Objectives

Pages could be written on terminal objectives in business mathematics since this course lends itself in a great degree to the cognitive domain. Each business mathematics instructor is encouraged to consider and improve upon the *minimal* terminal objectives which follow.

1. Given a list of problems, the student should be able to add, subtract, multiply, and divide integers, decimals, and fractions, with a high degree of accuracy. The student should be able to apply these mathematical skills to practical applications; for example, preparation of bank reconciliation statements, maintaining a checkbook, determining *means* and other *averages*. He should be able to estimate answers by approximation and compare the answers with the actual, calculated solutions. He should be able to read a problem carefully, select the mathematical process or processes necessary for proper solution, and then solve the problem correctly.
2. The student should be able to change percents to fractions, write percents as decimals, write decimals as percents, represent fractions as percents, and apply this knowledge to business transactions.
3. The student should be able to solve practical problems which arise in an individual's daily economic life, such as determination of cash discounts, simple interest, compound interest, bank discounts, maturity date and maturity value of notes, installment plan carrying charge, and actual costs of owning a home or a car.
4. Given examples of graphic data, the student should answer a list of interpretative questions with 80 percent accuracy. The student should be able to differentiate between bar graph, line graph, and circle graph by writing a definition of each and showing an example. Given graph paper and specific business data to be shown in graphic form, the student should be able to prepare the type of graph requested.
5. Terminology used in merchandising will be correctly defined by the student. He will also correctly compute markups, markdowns, selling prices, gross profit, and trade discounts in accordance with standards set by the teacher.
6. The student should be able to compute interest on a savings account, determine premiums and cash value of a life insurance policy, determine cost of an investment in stocks, bonds, or real estate. The student should be able to compare methods of depreciation that might be used in determining income from real estate investments. From these computations and comparisons, the student will identify and compare investment possibilities.
7. The student should be able to describe the binary number system, and its relationship to the computer, and write the binary equivalent of decimal numbers or vice versa.
8. The student should be able to list the conversions of measurements from English to the metric system of the units of length and weight and correctly answer simple questions such as:
 - (a) How far is 100 m in the English system?
 - (b) It is 20 km between 2 villages in France. How far is this distance in miles?
 - (c) How many centimeters should there be in a 12-inch ruler?
9. Given time cards or narrative information, the student should be able to complete a payroll register, which includes computing regular and overtime pay for hourly and salaried employees, determining deductions an employer is required to make, listing deductions an employee may authorize, and identifying gross pay and net pay. Tax tables should be used.
10. Given narrative problems pertaining to daily living, the student should be able to compute the perimeter and area of a rectangle and triangle, the volume of a rectangular solid, and the circumference of a circle. The student should be able to solve problems involving use of common tables of weights and measures.

Methods in Teaching Basic Business Courses

The methods utilized in teaching basic business courses vary greatly. In general, however, it is suggested that instruction proceed from *facts to concepts to generalizations*. At the same time students should be instructed to approach problems in a rational, analytical manner. For example, a five-step approach similar to the following might be used:

1. Obtain the facts.
2. Define the problem from the facts.
3. Identify alternative solutions to the problem.
4. Analyze each alternative.
5. Make a decision and defend the decision.

In teaching a nonskill subject such as the offerings included in the basic business program, the business teacher should keep in mind the following steps in presenting a lesson. In following these steps, the teacher should then select from the wide variety of methods available in order to make the most effective teaching situation.

Phases in Teaching a Basic Business Subject

1. *Directionality*. The teacher must direct the behavior of the student in all classes. In a basic business class the task of directing a student's behavior is often considered more challenging than it is in a shorthand or typewriting class. This situation exists because the basic business teacher will be concerned with changing attitudes, concepts, and generalizations rather than improving a tangible, measurable skill.
2. *Exhibition*. In this teaching phase, the teacher must make a decision concerning the presentation of his material. He may do it by using audio-visual equipment, or by a lecture or discussion.
3. *Drill*. The drill is the "learning activity" phase of teaching a basic business course. When a teacher gives a tabulation problem in typewriting or dictation for mailable transcripts in shorthand, the students are engaged in a learning activity. The basic business teacher must provide the same type of

activity in his courses. He must use such techniques as case studies, socio-dramas, or equally appropriate methods to get the students actively involved in learning and incorporating the principles that have been taught. This drill, or learning activity phase, is one to which the basic business teacher must give his utmost attention.

4. *Evaluation*. One of the greatest difficulties for any business teacher is the evaluation of students. Naturally, problem tests, objective tests, and essay-type tests can be given. But for the teacher to measure whether a student has learned or not, the student must exhibit behavior changes involving a change of knowledge, a change of skill, or a change of attitude. Pre-attitudinal and post-attitudinal tests may help, but the teacher must also develop terminal objectives and situations in which the student is called upon to demonstrate mastery of these terminal objectives.
5. *Assimilation*. Assuming that no remedial teaching is necessary after the evaluation phase has been completed, the teacher should place the students in situations which will allow them to use the principles they have learned in increasingly sophisticated but realistic problems.

As a teacher reviews these phases in teaching the basic business subjects, it should be pointed out that each phase is not separate and distinct, but rather all phases tend to blend with one another. The exhibition phase may well be the best motivational device that can be used in a particular situation. In other situations, the drill, or learning activity phase, is not only a learning activity but a motivational one as well as an evaluation of the student's work in an assimilated problem.

Methods in Teaching a Basic Business Subject

Some of the methods that can be used with these phases are briefly discussed below:

1. *Discussion*: The basic business teacher should build his class around student discussion. Once rapport with his class has been established, he will find that the discussion technique is an extremely valuable method of teaching. The teacher must, of necessity, know more about the subject than that presented

in the textbook in order to challenge and arouse the curiosity of his students.

2. **Lecture:** Using example after example, a skillful business education teacher can stimulate and hold his students' interest. A lecture should not be a recitation or repetition of the textbook material but rather should be full of relevant illustrations that students can understand. Realistic problems can be used as examples to relate the material learned to actual practices in the business world.
3. **Guest Speakers:** If he is capable of interesting presentations, a guest lecturer can be an important addition to basic business classroom learning. One possible technique to consider is to have each student prepare three to five questions that he would like the guest speaker to answer. These questions should then be edited to prevent repetition and given to the speaker prior to the day of his presentation. Presentations of speakers can also be video taped for possible use in the future.
4. **Socio-Dramas:** In the basic business course there is considerable opportunity to use short skits usually limited to one typewritten page in length. In a business law class, for example, several students may read their "skit" parts from the script, and at the conclusion the class can be allowed to discuss the outcome of the situation.
5. **Games:** "Stocks and Bonds" and "Acquire," to name but two games published by the 3M Company, can be used to advantage in a basic business class. By actually playing these games, the student uses the terminology of business and gains new insight into the workings of business.
6. **Brainstorming:** The rules for brainstorming (that is, unstructured idea-creation sessions) can be explained to a class. At intervals during the school year certain problems can then be "brainstormed." An example of a question which can be brainstormed is, "What are the possible implications on



Business games, such as those used in the purchase and sale of stocks and bonds, serve as useful motivating and learning devices for business students.

- our society of women outnumbering men?"
7. **Case Studies:** The five-step approach explained at the beginning of this section will aid the student in analyzing case problems. The teacher should be aware that the case study approach is best used with individuals who have some depth in that particular subject matter field. If not, the discussion of the case may well be superficial and ineffective.
 8. **Team Teaching:** The basic business subjects are amenable to the use of team teaching. This may well mean that the English teacher, the art teacher, and the health teacher could all be involved with the basic business teacher in a unit covering insurance.
 9. **Miscellaneous Methods:** The procedures outlined above cover but a few of the successful teaching methods available to the instructor, but these major ideas correlated with other media and the teacher's ingenuity should make for interesting courses in basic business. Demonstrations, buzz sessions, debates, taped interviews, and micro-teaching are other methods which can be used to provide additional variety in the basic business classes.

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The Iowa Code, State of Iowa, Des Moines, Iowa.

Black, Henry Campbell. *Black's Law Dictionary*, Fourth Edition, St. Paul: West Publishing Co., 1961.

Periodicals and Materials

Latest edition of Social Security pamphlets from nearest Social Security office.

Latest edition of *Workmen's Compensation Act* for use in the employer-employee unit. This may be obtained from the Iowa Industrial Commissioner, State House, Des Moines, Iowa 50319.

Latest edition of *Handy Reference Guide to the Fair Labor Standards Act* available from Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402.

Latest edition of *Information for Workers about Unemployment Insurance in Iowa*,

available from Iowa Employment Security Commission, 1000 East Grand Avenue, Des Moines, Iowa 50319.

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Merrill Lynch, Pierce, Fenner, & Smith, New York, New York (Investments).

Institute of Life Insurance, New York, New York.

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Hanna, J. Marshall and Arthur L. Walker. *College Business Mathematics*. Baltimore: The H. M. Rowe Company, 1960.

Piper, Edwin B. and Joseph Gruber. *Applied Business Mathematics*. Cincinnati: South-Western Publishing Co., 1965.

Rosenberg, R. Robert and Harry Lewis. *Business Mathematics*. New York: McGraw-Hill Book Company, Gregg Division, 1968.

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Rowe, Jack L. and Rodney G. Wessman. *College Business and Personal Mathematics*. New York: Harper & Row, 1963.

Economics

Monographs

Barron, J. F. and Marilyn L. Hoff. *Some Concepts Essential to a Basic Understanding of Economics*. Monograph 110. Cincinnati: South-Western Publishing Co., 1964.

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A Primer of Economics:

- No. 1, "What are Economic Problems?" by Lewis E. Wagner, 1963
- No. 2, "How the American Economy is Organized," by Clark C. Bloom, 1966
- No. 3, "Measuring the Performance of the Economy," by Lewis E. Wagner, revised 1971
- No. 4, "Income, Employment, and Prices," by Lewis E. Wagner, 1963, revised 1972

- No. 5, "Economic Development and the Role of the United States," by Albert Y. Badre, 1966

Iowa City, Iowa: Bureau of Business and Economic Research, College of Business Administration, The University of Iowa.

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Suggested Procedures and Resources for a Minimum Course in Economics. Curriculum Development, Series No. 4. Harrisburg, PA: Commonwealth of Pennsylvania, Department of Public Instruction, 1962.

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SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6-C

The Data Processing Program

**Program Coordinator: Darrell K. Lind
Mason City High School
Mason City**

SECTION 6-C

THE DATA PROCESSING PROGRAM

General Description

Data processing, in the span of a few short years, has become a household word. In education, as well as in the workaday world, it has achieved universal recognition. Authorities in the field of data processing often are asked to prescribe a formula for educating students in the "ways" of data processing. Such a "prescription" follows:

Children today must be allowed to meet rather than confront computers. We must be the last generation with fears and phobias from respect and awe for computers. Everybody must have a basic understanding of computers and how to use them and of their dependence on human power.

This statement was made at the 1970 national convention of the Association for Educational Data Systems by the Honorable William Davis, Minister of Education, Province of Ontario, Canada.

The implication of the above statement for business educators has been well phrased by Bangs and Hillestad:

The extensive introduction of electronic computers for data processing and other applications in business has created a critical need for greater numbers of more highly skilled personnel. To meet these requirements more people need to be trained and many of the present management and operative personnel need to be retrained.¹

The computer in the office made obsolete business education as it had been known and taught. A new dimension, business data processing, was added to the sphere of training for business. The need for training young people for living and working in a computerized world is with us. With the ever-growing number of automated data processing installations in business offices, the educa-

tion and training of workers for these jobs becomes a major concern to those persons responsible for preparing people for those positions.²

The previous quotations support education in its quest for offering more programs in automated data processing and information systems. This same reasoning obviously applies to the inclusion of data processing courses in the business education curriculum.

The scope of a data processing program in a school setting will range from a single unit in an existing course, such as bookkeeping or office practice, to a two-year program at a post-secondary school. In this section of the handbook, information is presented which will be useful to business educators in designing a unit, a course, or a sequence of courses in data processing.

Program Objectives

A complete data processing program will have the following general objectives:

1. *General education* objective—to provide relevant information so that students will understand and appreciate the contribution of automated data processing and the processes employed.
2. *Career education* objective—to provide preparatory opportunities necessary for students to become employable in unit record (punched-card) and/or computer installations.
3. *Exploratory* objective—to provide students with an appreciation and a basis for further study in computer science.

Not all schools will find it feasible to offer a complete data processing program;

1. F. Kendrick Bangs and Mildred C. Hillestad, *Curricular Implications of Automated Data Processing for Educational Institutions* (A United States Office of Education Research Study, 1968), p. 14.
2. *Ibid.*, pp. 20-21.

therefore, educators in those schools need not be dissatisfied because not all the objectives are met. For example, it may not be feasible for a particular school to meet the career objective for various reasons such as lack of equipment. However, all high schools can offer some instruction in data processing, even though expensive equipment is not available.

Student Selection

The concern over student selection will be dependent on whether the data processing course is general education oriented or career oriented. A general education course in data processing may be offered to all students in a school whereas a career-oriented course in data processing may require a specific grade point in selected courses and successful completion of an appropriate data processing aptitude test. Each teacher must determine the reason(s) for offering a particular course or unit and then set appropriate entrance standards, realizing that in all probability such standards will need to be adjusted at a later time.

Teacher Education

The required amount of education and experience for data processing teachers will vary depending on the nature of the course being taught. Business education teachers wishing to teach a unit in data processing or a one-semester introductory course without equipment would, of course, need a minimum amount of formal training. A data processing workshop or a one-semester college or university course should be adequate. It must be assumed, however, that a teacher would study on his own and by such self-study compensate for any lack of formal education in this specific area.

When more advanced courses are considered, the desirability of both additional education and work experience becomes apparent. Preparation may also be available in the schools of the various machine company manufacturers. It should be kept in mind that emphasis today centers around the computer and its related peripheral equipment. At the same time, punched-card systems are gradually being deemphasized.

Equipment Selection

Data processing equipment is very expen-

sive—so expensive, in fact, that some teachers must develop and teach a unit or course in data processing without the benefit of equipment. While it is possible to do so, the availability of equipment will normally result in a more meaningful course.

Schools having an instructional need for unit record (punched-card) equipment and/or a computer should give adequate consideration to the following factors before making a final decision on the selection of equipment:

1. Recommendations of a data processing advisory committee
2. Recommendations of more than one machine company representative
3. Shared time with others on data processing equipment
4. Lease or purchase plans
5. Available funds

Media for Teaching Data Processing

In addition to the general instructional media discussed in the General Responsibilities section of this handbook, the following instructional media are noteworthy:

1. Tapes. *Computers and Data Processing: An Introduction* (Four-Tape Set) Imperial International Learning, Pratt Educational Media, Inc., 200 Third Ave. S.W., Cedar Rapids, Iowa 52404.
2. Transparencies. *Data Processing Course Transparencies* (Prepared transparencies or printed originals available) 3M, Visual Products Division, 3M Center, Box 3344, St. Paul, Minnesota 55101.

Many good films are also available.

Associations

A number of progressive professional associations are available to the data processing teacher. All these associations have educational objectives and resources of value to the data processing teacher. Membership in one or more of these associations is recommended in order that the instructor and the data processing program in his school may remain current.

Association for Educational Data Systems
(AEDS)
1201 Sixteenth Street, N.W.
Washington, D.C. 20036

Data Processing Management Association
(DPMA)

505 Busse Highway
Park Ridge, Illinois 60068

Iowa Association for Educational Data
Systems

112 Eleventh Street
Des Moines, Iowa 50309

Society of Data Educators
Box 76

RD 2
Union Brook Road,
Northfield, Vermont 05663

**Recommended Sequence of Offerings in
Data Processing**

The following sequence (Table 6C-1) is recommended in larger schools with sufficient enrollment and access to the necessary hardware. Again, it should be emphasized that even though the complete program cannot be offered, that part of the program that can be made available should be offered to the students.

Table 6C-1

Recommended Sequence of Offerings for a Data Processing Program

Offering	Grade Level and Semester							
	9		10		11		12	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Typewriting I ^a	x	x						
General Business ^b	x	x						
Algebra			x	x				
Office Machines ^a			x					
Introduction to Data Processing ^c				x				
Bookkeeping ^d					x	x		
Unit Records ^c					x			
Introduction to Computers ^c						x		
Accounting ^d							x	x
Computer Programming I ^c							x	
Computer Programming II ^c								x
Related Work Experience							x	x

^aCourse description may be found in the Clerical Program section of the Office Occupations Program.

^bCourse description may be found in the Basic Business Program section.

^cCourse description may be found in the Data Processing Program section.

^dCourse description may be found in the Bookkeeping/Accounting Program section of the Office Occupations Program.

Suggested Offerings in the Data Processing Program

The following are suggested offerings for a modern business data processing program. Teachers may want to use the offering in its entirety, or they may want to select sections from the courses as outlined here to use as units in other courses such as bookkeeping and office practice.

Introduction to Data Processing

Description

This course is intended to introduce a student to data processing and the information system it serves. It may also be called Data Processing Concepts, Data Processing I, or some other equivalent title. A course of this nature does not require the use of expensive, automated data processing equipment; in fact, it may be taught without equipment on the school site. It can and should be considered a part of the business education curriculum even in the smallest secondary schools.

The following topics or units should be included as content in an introductory course:

1. History of data and data handling (see Figure 6C-1)
2. Definition of key terms
3. Unit record card format
4. Unit record equipment
5. Data processing numbering systems
6. Introduction to computers
7. The social impact of the computer
8. Current and future computer applications

The coverage of each of the topics will vary according to the time devoted to the course, the background of the instructor, the community, and employment opportunities.

Terminal Objectives

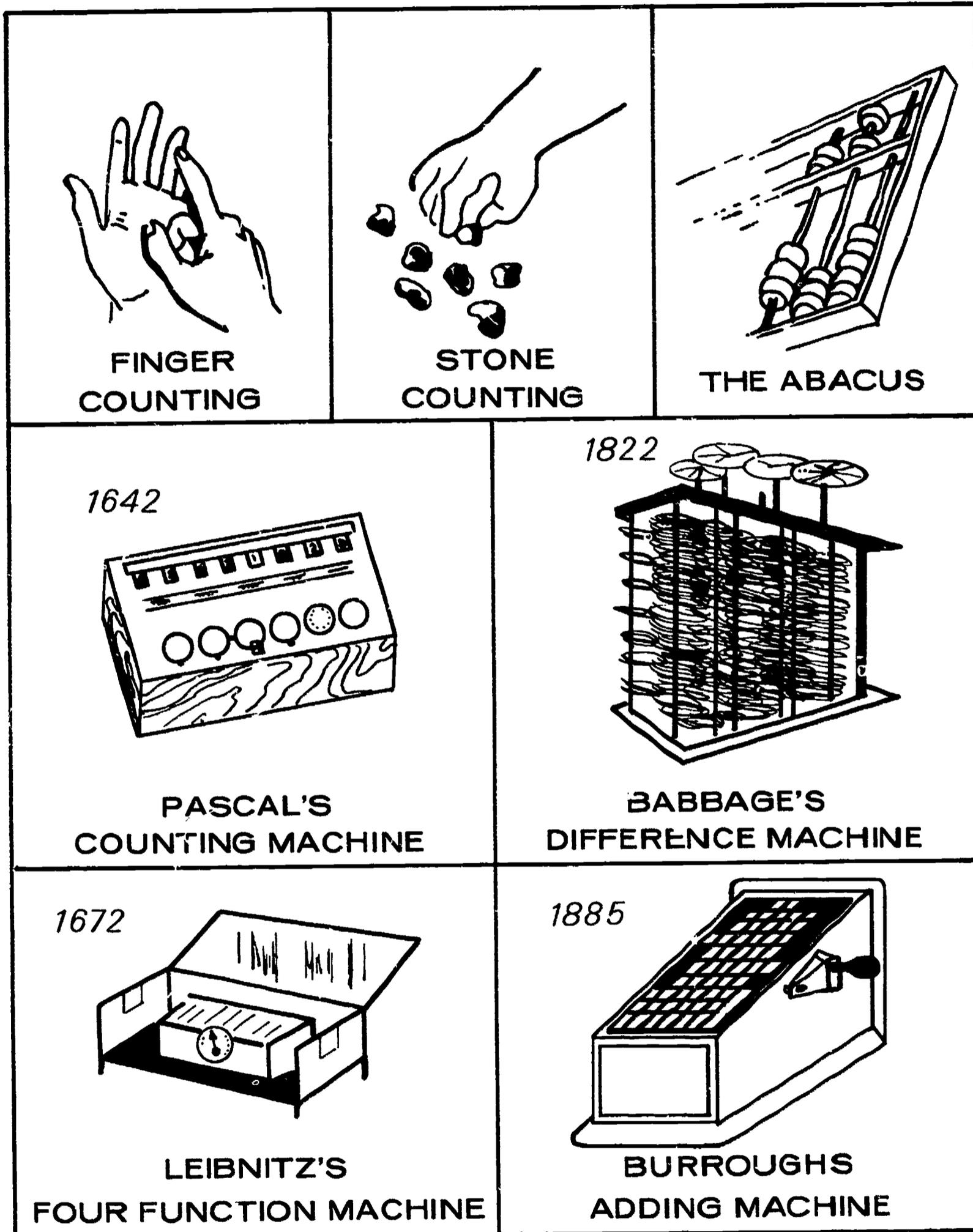
The *minimal* objectives listed for the Introduction to Data Processing course are intended to serve as a guide for the instructor. These objectives, therefore, should not be considered as all-inclusive.

1. The student will list five examples of unprocessed data, define the desired

end result, and specify the steps involved to process the data.

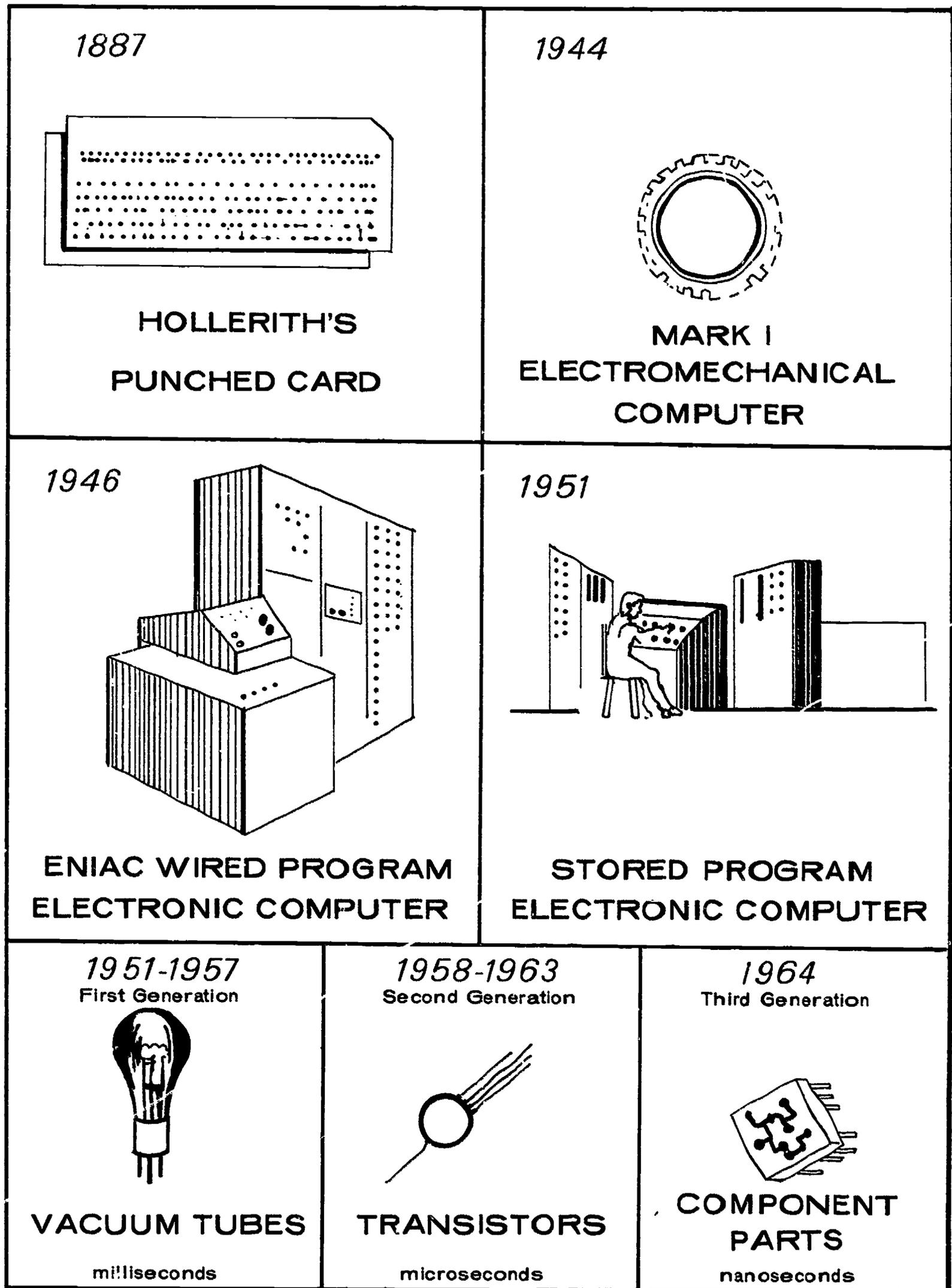
2. Given a series of data processing applications, the student will indicate by which method of data processing each application would best be handled (by manual, mechanical, electro-mechanical, or electronic means).
3. The student will review in writing three major problems encountered by an organization when data processing systems are changed.
4. Given a list of five developments in the area of data processing, the student will indicate the order in which they occurred.
5. The student will list five men who played significant roles in the development of data processing methods and indicate the specific contribution of each.
6. Given specific information, the student will indicate, using pencil marks for punches, how the information would be represented on an IBM card.
7. Presented with an excess of data to be included on a card (some significant and some insignificant), the student will select the significant data and will design the card format in keeping with the best data processing practices.
8. The student will list seven unit record machines and one key function of each machine.
9. Given a list of ten items, the student will classify each as computer hardware or computer software.
10. The student will list the five functions of any computer system.
11. Given a list of ten devices, the student will classify them as either analog or digital.
12. Given three decimal numbers, the student will represent them in binary notation.
13. The student will list five unsolved problems or goals of the computer industry.
14. The student will list five manufacturers of computers.
15. The student will visit five computer installations located in or near his

Figure 6C-1



"It is unworthy of excellent men to lose hours like slaves in the labor of calculation."
GOTTFRIED LEIBNITZ — 1671

Figure 6C-1 (page 2)



home community and describe in writing each installation as to equipment used, personnel required, etc.

16. The student will list three commonly used programming languages and an application for which each would be well suited.
17. Given three data communication situations, the student will suggest an appropriate medium for moving the information to the user.
18. Given a data processing problem, the student will list the procedures to be used in solving the problem.
19. The student will give the approximate monthly rental rates for small, intermediate, and large size computers.
20. The student will illustrate "how fast computers are."

Unit Records

Description

This offering is designed for schools having unit-record equipment. The main purpose of this course is to prepare students for employment as unit-record equipment operators, but it may also be used as a background course for further study in computer operation and computer programming. Other titles for this course might be Tabulating Equipment Course or Electro-Mechanical Machines. With the great expansion of small-scale computers into applications formerly designed for unit-record systems, it can be expected that unit-record employment will be replaced to a great extent by more automated systems employing the computer.

The following topics or units should be included as course content:

1. Definition of key terms
2. History of the unit record and of unit-record systems
3. Card format and report forms design
4. Basic control panel wiring
5. Lab activities on the unit-record equipment

The coverage of each of the topics will vary according to the time devoted to the course, the background of the instructor, the community, and employment opportunities.

Terminal Objectives

The *minimal* objectives listed below are intended to serve as guides for the instructor. These objectives, however, should not be considered as all-inclusive.

1. The student will be able to list a minimum of seven input media used in automated data processing systems.
2. Given the necessary data specifications, the student will prepare a card layout.
3. Given the use of a keypunch machine and data specifications, the student will punch and test a program card.
4. Given the use of a keypunch machine and alternate programming specifications, the student will punch and test a program card.
5. Given a diagram of a keypunch machine, verifier, interpreter, collator, reproducer, sorter, or accounting machine, the student will list the numbered parts.
6. The student will list the steps to be followed in the event of a card jam in the keypunch, verifier, collator, interpreter, reproducer, sorter, or accounting machine.
7. Given a list of tasks, the student will give the unit-record machine or machines that would be used to complete the task assigned in the most efficient manner.
8. Given a number of cards, the student will be able to keypunch by touch numeric data in 77 columns of each card with 98 percent accuracy on a 10-minute timing by the end of a semester on practice material. (Percent of error is determined by dividing the number of cards that have an error by the number of cards punched. Minimum speed standard: 18 cards in 10 minutes.)
9. Given a number of cards, the student will be able to keypunch by touch new numeric data in 77 columns of each card with 95 percent accuracy on a 10-minute timing by the end of a semester. (Percent of error is determined by dividing the number of cards that have an error by the number of cards punched. Minimum speed standard: 15 cards in 10 minutes.)

10. Given a number of cards, the student will be able to keypunch by touch alpha-numeric data in 74 columns of each card with 98 percent accuracy on a 10-minute timing by the end of a semester. (Percent of error is determined by dividing the number of error cards by the number of cards punched. Minimum speed standard: 16 cards in 10 minutes.)
11. The student will be able to verify all punched cards by touch with 100 percent accuracy.
12. The student will be able to sort a deck of 500 cards in alphabetic sequence.
13. The student will be able to sort a deck of 500 cards in numeric order according to invoice number.
14. Given a deck of cards, the student will reproduce another deck using a reproducer.
15. Given two decks of cards, the student will merge these decks into one on the collator.
16. Given a deck of at least 100 cards, the student will check the sequence according to invoice or payroll check numbers on the collator.
17. Given two appropriate decks of cards, the student will match the decks according to invoice or payroll check numbers on the collator.
18. Given a deck of cards punched on a nonprinting card punch, the student will interpret the specified columns on the cards on the interpreter.
19. Given a list of 25 data processing terms related to a particular machine, the student will recall and write a brief description of 20 of the terms.

Equipment

The following items of unit-record equipment should be available to provide "hands-on" experience for the students:

1. Keypunch
2. Verifier
3. Sorter
4. Collator
5. Interpreter

6. Reproducer
7. Accounting Machine

Introduction to Computers

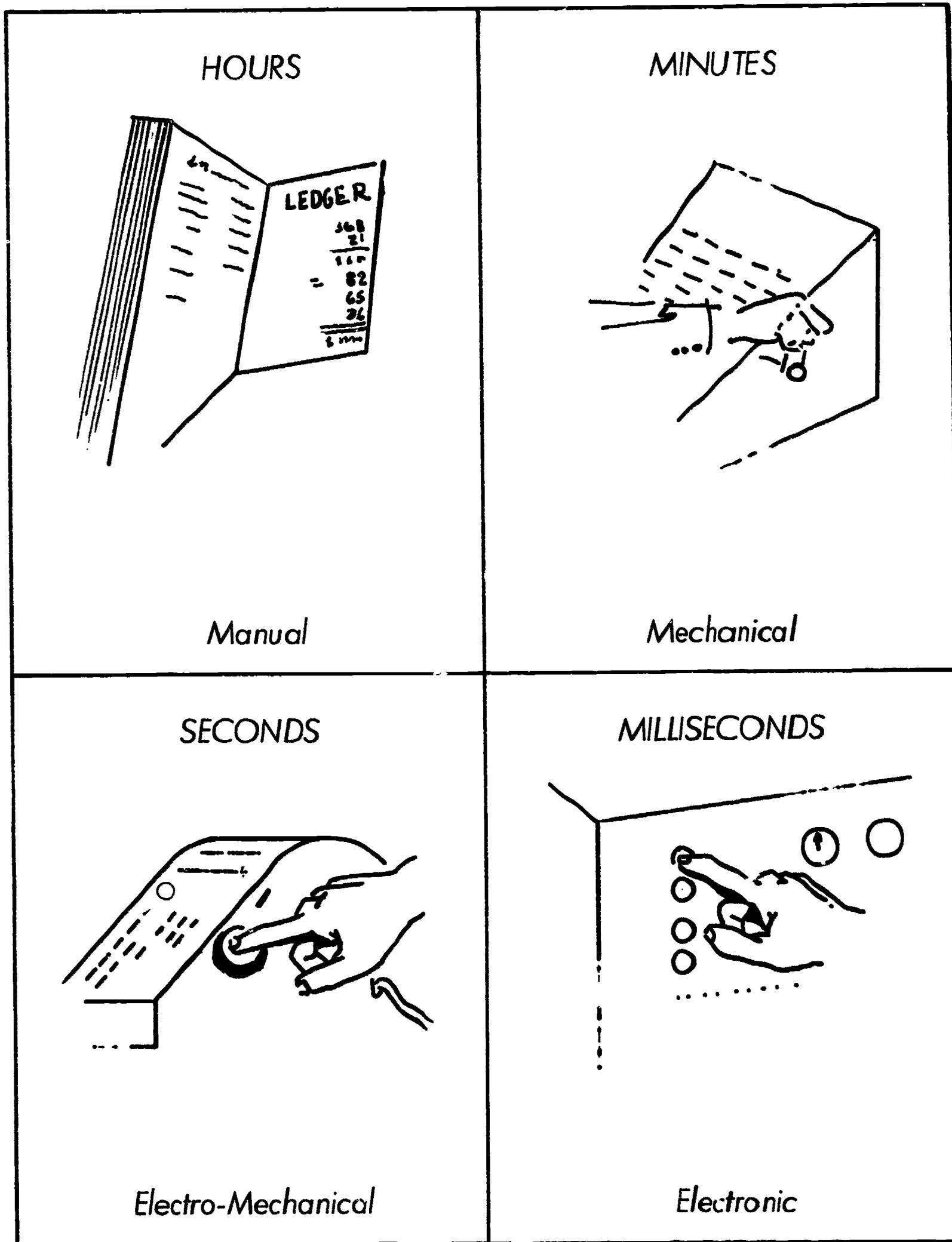
Description

This course offering deals with both computer principles and with the basic instructions on how to direct them to perform their functions (programming). The basic approach recommended for such an offering is to discuss the evolution of processing business information (data) from manual methods, familiar to the teacher and high school student, and then proceed to mechanical and electro-mechanical methods, and finally to electronic computer methods. (See Figure 6C-2.) If this material has been covered thoroughly in any previous courses in the sequence of data processing courses, a review of these techniques should be sufficient, and more time can then be spent on the fundamentals of computer programming.

After general discussions of the physical and conceptual elements of computers, the student is assisted in developing a more thorough understanding of computer functions by using a computer language to illustrate how the computer is programmed. Students should be assigned simple business application programs that will enable them to learn the fundamental computer commands such as how to input and output information, how to manipulate data, how to perform the arithmetic functions, how to instruct the computer to make decisions, and how to control its own operations internally. Student programs will normally deal with card input and with card and line printer as output media.

The computer language used to illustrate and explain the computer should be a language that is commonly used by business programmers in the geographic area where the course is taught. The instructor will need to be familiar with the nature of data processing applications and employment needs in the community. From such familiarity he will be able to choose an appropriate programming language for his course. Whether dealing with manual or electronic methods of problem-solving in the course, great emphasis should be placed on the use of the block diagram or flowchart (see Figure 6C-3) as a

Figure 6C-2



THE EVOLUTION OF PROCESSING BUSINESS INFORMATION (DATA)

communication tool for logically solving the problem.

Terminal Objectives

In the introductory computer course, these minimal terminal objectives should be met:

1. The student will be able to write a brief history of the development of data processing equipment from the first mechanical adding machines to the early commercially used computers.
2. The student will list the names of five of the important people in the development of data processing and their major contribution to data processing.
3. The student will be able to describe the situations that caused the major changes in data processing methods (for example, the increased number of government reports required).
4. The student will discuss five electro-mechanical machines and at least one major function of each.
5. Given the numbers from 0 through 20 written in decimal notation, the student will write the equivalent numbers in binary, octal, and hexadecimal notation.
6. By the use of a flowchart and written description, the student will name the five conceptual components of a computer (input, output, control, storage, arithmetic/logic) and describe how the computer functions.
7. The student will list four types of input and four types of output devices.
8. The student will explain by illustration and/or description how information is stored within a computer.
9. Given the words "input," "output," "decision," "process," "connector," and "display," the student will draw the flowcharting symbols to match the words.
10. Given a narrative description of such problems as the following, the student will write the computer flowchart solution to each:
 - a. social security deduction procedure of a payroll problem
 - b. income tax withholding computations of a payroll problem
11. The student will be able to explain how a computer is able to translate a program written in a computer language into an executable language that can be used directly by a computer to solve a problem.
12. The student will illustrate that he knows how to write instructions in a computer language to do the following:
 - a. read a card

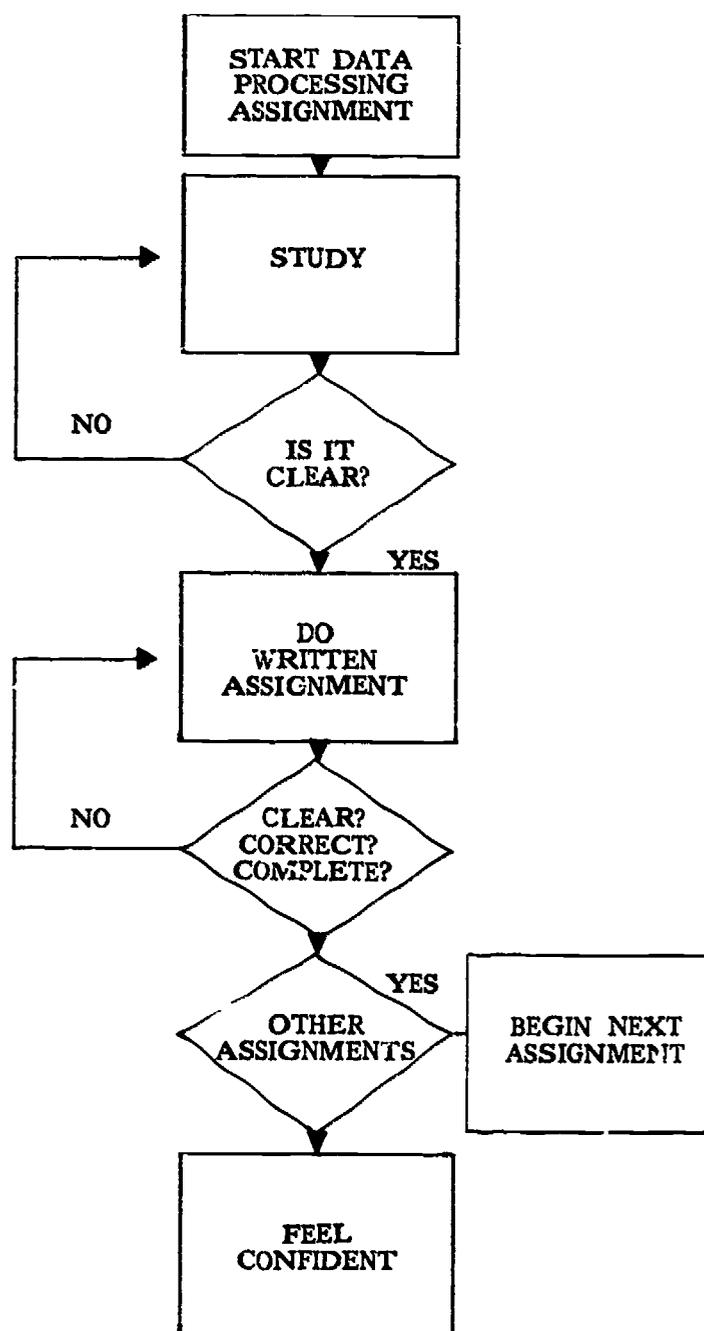


Figure 6C-3

The flowchart is an excellent form of task and procedure documentation. It provides a map of logic from which a program may be written.



An electronic data processing systems installation with the central processing unit, the computer, and the tape and disk units for storing information.

- b. write a line on a line printer
 - c. add, subtract, multiply, and divide
 - d. direct the computer to go to a certain place in the program
 - e. make a decision as to where to proceed in a program based on a comparison
 - f. how to move data from one place in memory to another
13. Given a narrative description, the student will be able to develop a flow-chart and write a program in a computer language to solve such problems as the following:
- a. a listing of names, identification

and amounts, with a total of the amounts

- b. similar to 13a above, with the average amount computed
- c. similar to 13b above, with headings
- d. more difficult problems as time will allow

Computing Equipment

Although computing equipment is not essential on the school site, the data processing instructor should have an agreement with a data processing service organization to key punch student-written programs and data and

to compile and execute the programs on an appropriate computer system.

In addition, students should be taken on field trips (see Figure 6C-4) to data processing installations where they can view a

modern computer system in operation. Personnel from computer manufacturers as well as from data processing installations in the community will often be available to the data processing teacher as resource persons.

Bibliography for Data Processing

Today's data processing educators have a wide selection of printed materials from which to choose. Beyond the large number of computer textbooks available today, the following bibliography is considered basic. With time and more experience, the searching instructor will find many more valuable items to use for instruction.

Books

Computer Education Directory (latest edition). South Pasadena, CA 91030: Data Processing Horizons, Inc., Box 99.

Guide to Data Education Films. Northfield, VT 05663: SDE Publishing Office, R2-76 Union.

Monographs (free)

Wenner, James F. *A High School! Orientation Course in Data Processing*. Monograph 114. Cincinnati: South-Western Publishing Co.

Wood, Merle W. *The Teaching of Automated Data Processing in the High School*. Monograph 116. Cincinnati: South-Western Publishing Co.

Electronic Business Data Processing Peripheral Equipment Occupations: Suggested Curricula. Washington, DC: U.S. Department of Health, Education, and Welfare; Office of Education (OE—86010).

Periodicals

AEDS Journal. Washington, D.C. 20036: Association for Educational Data Systems, 1201 16th Street, N.W.

AEDS Monitor. Washington, D.C. 20036: Association for Educational Data Systems, 1201 16th Street, N.W.

Business Automation. West Elmhurst, IL 60126: Business Press International, Inc., 288 Park Avenue.

Computer Education. South Pasadena, CA 91030: Data Processing Horizons, Inc., Box 99.

Computers and Automation. Newtonville, MA Berkley Enterprises, Inc., 815 Washington Street.

Data Processing Magazine. Philadelphia, PA North American Publishing Co., 134 North 13th Street.

Datamation. Greenwich, CT 06830: F. D. Thompson Publications, Inc., 35 Mason Street.

IBM Data Processor. White Plains, NY 10601: International Business Machines Corporation, Data Processing Division, 112 East Post Road.

Journal of Data Education. Northfield, VT 05663: Society of Data Educators, R2-76 Union.

Data Management. Park Ridge, IL 60068: Data Processing Management Association, 505 Busse Highway.

Audiovisual Material

See the part of this section entitled "Media for Teaching Data Processing."

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - D

The Distributive Education Program

**Program Coordinator: Lyle Natvig
Kirkwood Community College
Cedar Rapids**

SECTION 6-D

THE DISTRIBUTIVE EDUCATION PROGRAM

General Description

Distributive education may be defined as a program of education offering training in the selling, marketing, and merchandising of goods and services for the purpose of improving distribution and upgrading distributive workers, including employees, managers, and owners engaged in distributive occupations. The distributive education program is designed for students of all abilities and educational goals. It is a program designed to meet the needs of the student who has a vital interest in distribution.

The first distributive education (DE) program in Iowa began in 1937 with the passage of the George-Dean Act. As a result of this Act, trade and industrial education funds were provided to reimburse evening classes in distributive education. During the 1944-45 school year, the Des Moines school system had the first Iowa high school day program to be reimbursed from distributive education funds. With the passage of the George-Barden Act in 1946, distributive education programs were placed under their own supervisors and were reimbursed from distributive education funds.

Currently, most of the distributive education programs in Iowa are reimbursed, having met the conditions for reimbursement set up by the State Department of Public Instruction. Qualifications and conditions for reimbursement may vary from year to year. Information pertaining to reimbursement may be obtained by contacting the Career Education Division of the State Department of Public Instruction, Des Moines.

In general, there are two types of DE programs offered by Iowa high schools at the present time—Plan A and Plan B. These programs may be one or two years in length. The two-year program, described as Plan A, is open to high school juniors and seniors.

This program provides a minimum of 200 minutes per week of instruction plus on-the-job training. Such on-the-job training must be the equivalent of 900 minutes per week, half of which must be on school time. The one-year program, described as Plan B, is open to high school seniors. This program provides a minimum of 350 minutes per week of instruction plus on-the-job training. The work experience must be the equivalent of 900 minutes per week, half of which must be on school time.

The units of instruction to be covered in either plan will vary from program to program; however the following units are usually included:

1. Introduction and orientation to distributive education
2. Salesmanship
3. Human relations
4. Advertising
5. Marketing process
6. Business mathematics
7. Operating a business
8. Career planning

See Table 6D-1 for illustrative samples of a typical distributive education student's course schedule.

Distributive education students enroll in required courses for juniors and seniors in addition to their participation in the program.

As previously stated, in either Plan A or Plan B, each student is employed in a business firm in the local community and spends a minimum of 900 minutes per week on a job related to distributive education. The job experiences are many and varied but usually include the areas of sales, stock control, inventory, sales promotion, and in some cases, buying and management procedures.

It is the responsibility of the teacher-

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Table 6D-1
Suggested Schedule of Courses for a Distributive Education Student^a

Plan A		
Grade 10	Grade 11	Grade 12
Language Arts American Studies Physical Education Mathematics Science	Language Arts World Studies Physical Education General Business ^b (1 semester) Personal Typewriting ^c (1 semester) Distributive Practice ^d (1 period) On-the-Job Training ^d	Language Arts Government Physical Education Distributive Practice ^d (1 period) On-the-Job Training ^d
Plan B		
Grade 10	Grade 11	Grade 12
Language Arts ^a American Studies Physical Education Mathematics Science	Language Arts World Studies Physical Education General Business (1 semester) Personal Typewriting ^c (1 semester) Bookkeeping ^e	Language Arts Government Physical Education Distributive Practice ^d (2 periods) On-the-Job Training ^d

^aAll courses are two semesters in length unless otherwise indicated.

^bCourse description will be found in the Basic Business Program section of this handbook.

^cCourse description will be found in the Clerical Program section of the Office Occupations Program.

^dProgram description will be found in this section of the handbook.

^eCourse description will be found in the Bookkeeping/Accounting Program section of the Office Occupations Program.

coordinator to locate positions for the distributive education student. That is, it is the teacher-coordinator's task to determine where and what positions are available in a community that will meet the student's career objectives. Before the student is hired for a position, he must be interviewed by the firm that has the available position. If he completes the interview and other pre-employment requirements satisfactorily, he will be hired on a part-time basis. When the student is hired, a training agreement is signed by the student, employer, parent, and teacher-coordinator. This agreement contains such items as salary and hours of work. Although the agreement is non-binding, it does place some obligation upon the parties involved to live up to the terms.

Each student is assigned to a job supervisor at his place of employment, and a training plan for each student is developed jointly by the teacher-coordinator and the job supervisor. Included in the training plan are the various job activities that the student should encounter while on the job. The student is evaluated periodically by the teacher-coordinator and by the job supervisor and receives credit toward graduation for his work experience. Failure of the student to maintain proper job performance and/or acceptable academic performance at school usually results in his dismissal from the program and loss of academic credit. The students are compensated for the time spent on the job, the amount varying with local economic situations.



Salesmanship is an important part of the distributive education program gained in the classroom through student on-the-job training.

Terminal Objectives

The following *minimal* terminal objectives are listed at this point because they are the overall objectives of the distributive education program and do not, necessarily, relate to any particular unit. These objectives are attained through the interaction of the total program operation—that is, the interaction of the classroom work, the club program, and the on-the-job training. It should be reiterated that these are the *minimum* objectives. In many cases, the student will have acquired a higher competency upon completion of the program than is required for an entry-level occupation in distribution.

1. The student will be able to satisfactorily perform in his chosen career upon entering the world of work; that is, he will have a salable skill.
2. The student will be able to perform successfully in a retail occupation.
3. The student will be able to perform merchandising activities in a retail occupation at the job-entry level.
4. The student will have acquired the social skills necessary to perform at the job-entry level.
5. The student will be able to communicate orally in a manner that is readily understood and acceptable to customers and associates.
6. The student will be able to communicate in writing in a manner that is readily understood and acceptable to customers and associates.
7. The student will be able to perform satisfactorily the mathematical computations that are necessary in a marketing occupation.
8. The student will be able to understand correctly the terminology used in a retail occupation.
9. The student will be able to understand and correctly use the terminology used in the field of marketing.
10. The student will know how to dress appropriately.
11. The student will have the opportunity

to develop leadership qualities through his local chapter of the Distributive Education Clubs of America organization.

Physical Facilities

In designing a distributive education classroom, the teacher should be aware that the space required will be greater and more special-purpose than that necessary for a conventional classroom. The activities involved in the program require that the furniture and equipment be of such a design and/or shape that it can be easily moved for small groups and for informal discussion. The classroom should have an adequate number of conveniently placed electrical outlets. These outlets are necessary for the proper location of display cases and equipment.

Adjacent to the classroom should be an office for the coordinator. This office should be large enough for student-teacher conferences and at the same time should be so designed that the instructor may have eye contact with the classroom while in his office. It is imperative that the office be equipped with a telephone, because the coordinator has many contacts with the parents and business community. A storage room should also be provided for the housing of display equipment, such as mannequins and other display props.

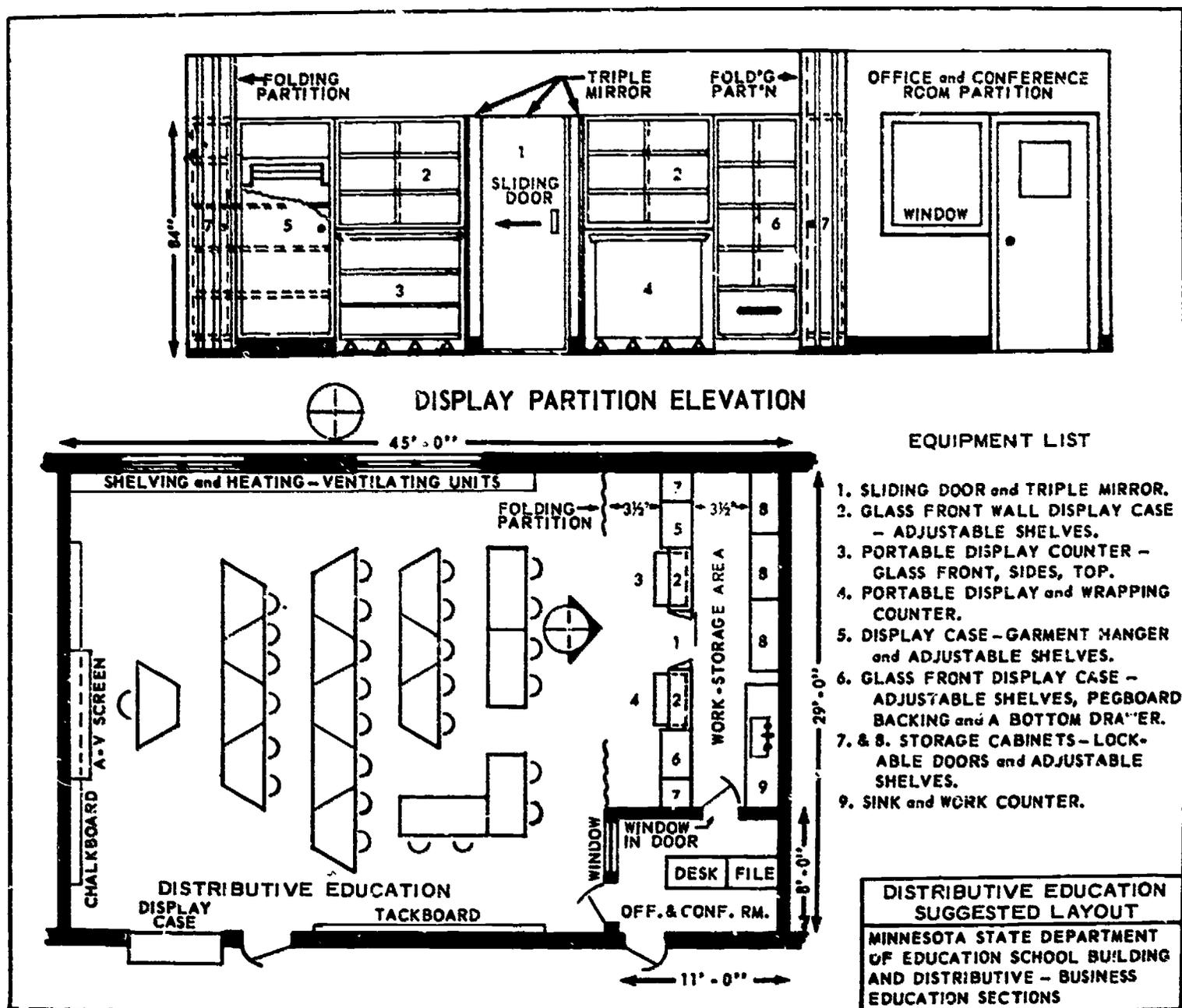
See Figures 6D-1 and 6D-2 for illustrative samples of distributive education classroom facilities.

Following is a list of some of the specific types of equipment and furniture recommended for a distributive education program:

1. Cash register
2. Sign-making machine
3. Magazine rack
4. Mirror(s)
5. Display cases—various manufacturers have catalogs available describing display equipment
6. Sink
7. Mannequins
8. Overhead projector
9. Video tape recorder

Figure 6D-1

A Sample Layout of a Special-Purpose Distributive Education Classroom

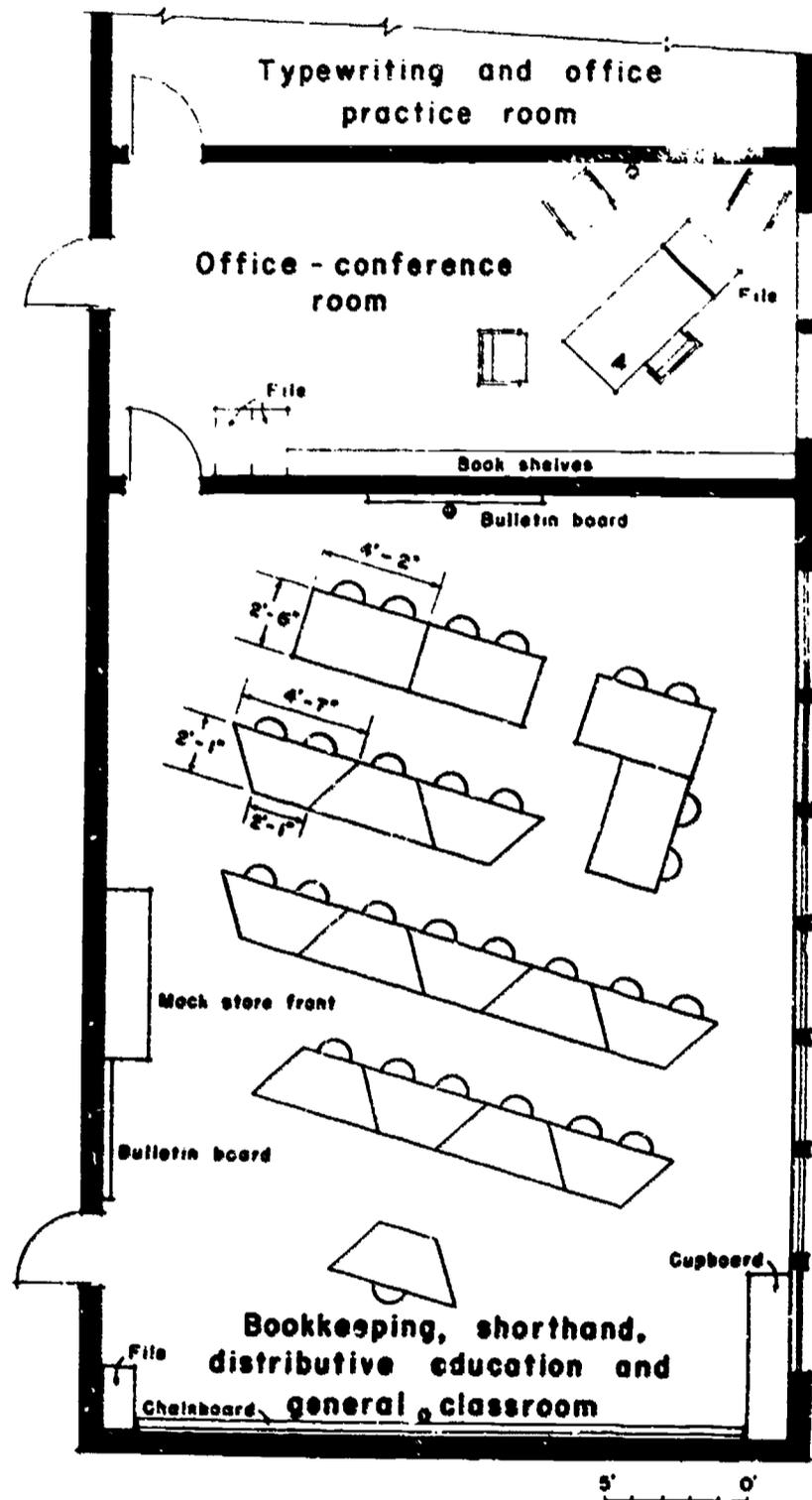


Adapted from Monograph 112, South-Western Publishing Company, p. 33. This layout originated from the Minnesota State Department of Education.

Figure 6D-2

Sample Layout of a General-Purpose Classroom

(including Distributive Education)



Adapted from School Building Planning Series Part IV, *Guide for Planning Business Education Departments in Iowa*, by Agnes Lebeda, Bulletin 127-4, Engineering Extension, Iowa State University, Ames.

Standards of Achievement

The standards of achievement for the distributive education student must be developed for the following areas with the student's career objective in mind: (1) oral and written communications, (2) merchandising activities and problems, and (3) the social competencies necessary for successful employment in this area of distribution. The distributive education program approach should recognize the inherent differences in competency levels in students enrolling in the program (i.e., some students may have more rapid learning capacities than others; other students may have had previous work experience); however, certain competency standards must be set in order that the student may achieve success in distributive work. Students further develop these competencies at their individual learning rates. Such competencies will allow the student to pursue his career objective at the entry level or at a higher job level.

Student Selection

The selection of students for distributive education programs is accomplished by following general guidelines concerning the

characteristics of the students who will enter such programs. Such factors as the following should be considered:

1. The needs of the community for personnel in certain career areas.
2. Student career goals.
3. Basic distributive occupation entry level requirements in such areas as personal appearance and communication ability.
4. Recommendations of the Distributive Education Advisory Committee for student selection, such as scholastic record of students.
5. Availability of training stations and related resources.

In most cases, student selection is viewed as the combined determination of the needs and potential of the students and the opportunities the program presents.

Distributive Education Advisory Committee

For information on advisory committees, see the discussion on advisory committees in the General Responsibilities section of this Handbook.



The Distributive Education Club provides students with experiences in leadership development, parliamentary procedure, and committee functions as well as developing an awareness of the social skills necessary for success in the business world.

Club Program

DECA, an acronym for Distributive Education Clubs of America, is the official, approved youth organization of the distributive education program. It is organized on local, state, and national levels and is the "showcase" for student achievement and progress. Through DECA activities, students with an interest in marketing and distribution careers may be attracted to the distributive education program. Most chapters plan activities which include social, civic, professional, and various benevolent activities, and in addition adopt projects which provide for school and community improvement. DECA activities teach DECA members to serve as leaders and followers and at the same time give them an opportunity for state and national recognition which they might not achieve otherwise.

The club function of each distributive education program is a vital element for student development. Leadership development and social intelligence are important elements in our modern business world. By channeling the student's efforts into services and committee events, such as the ones available in DECA, each student can develop a professional attitude toward his career goal in a distributive occupation.

A strong DECA chapter at the high school level can develop a feeling of pride and unity in the students. DECA activities provide an opportunity for DECA members to be a part of an in-school group. Here, however, he can participate with fellow students interested in similar goals and may have an opportunity to lead for the first time. Along with this type of social development, the student will gain a knowledge of parliamentary procedure through formal club meetings. The specific distributive learning experiences which are available are seen in the contests in which students may participate. These DECA contests include advertising display, job interviewing, public speaking, sales demonstration, merchandising manuals, distribution manuals, studies in marketing, and creative marketing projects. Participation in the contests enable the student to mature and progress in this field. DECA's goal is clearly summarized in its tagline: "Developing future leaders for marketing and distribution."

Teaching Requirements

Information on the certification of the teacher-coordinator for DE programs will be

found in the Certification of Business Teachers section in the Appendix.

Distributive Education Teacher-Coordinator Activities

The role of the distributive education coordinator is more diversified than that of the typical classroom teacher of business subjects. For the DE teacher the traditional classroom activities are only one phase of his occupational tasks. In addition to his classroom teaching, the coordinator serves as a close link between the business community and the school. Not only does the coordinator perform a public relations function for his program, but he also promotes the school in the community.

In his role as teacher, the coordinator has a closer relationship with his students than that found in most typical student-teacher situations. He spends a considerable amount of time counseling each student on such matters as job performance and classroom performance, as well as occupational and educational plans. In his role as counselor, the coordinator does not replace the school counselor; but the amount of contact that he has with his students provides a natural setting for such counseling to take place.

In addition to the responsibilities previously discussed, the coordinator is also responsible for executing the following duties in connection with the distributive education program:

1. Recruiting students
2. Interviewing and selecting students
3. Selecting training stations
4. Placing students
5. Coordinating students
6. Advising the Distributive Education Club

Units of Study

The units of study presented in this section are most applicable to a "Plan B" high school distributive education program, the type most prevalent in Iowa high schools. Local needs will necessitate that some of these units be deleted or modified and perhaps others added. However, the following units are representative of those offered by Iowa high schools.



In distributive education programs both individual and group instruction are given in order to develop the student's knowledge and skills toward a variety of distributive education career objectives.

DE Orientation

Description

In the orientation phase, the student is introduced to the overall operation of the distributive education program. The units of instruction, on-the-job responsibilities, and evaluation procedures will be identified and the importance of the club program stressed. It is hoped that through the orientation activities the students will become acclimated to the year's program of operation.

Terminal Objectives (minimal)

1. The student will be made aware of his responsibilities to his employer in the areas of attendance and job performance.
2. The student will be made aware of the work experience activities that he will encounter on the job.

3. The student will be introduced to the evaluation criteria used in the classroom and on the job.

4. The student will be made aware of the "mechanics of operation" of the distributive education program in the classroom and on the job.

Salesmanship

Description

The salesmanship unit is the key to an excellent distributive education program. Most distributive education students will be involved in selling activities during their on-the-job training, so it is important that they have salesmanship skills in order to succeed.

In the introductory phase of the salesmanship unit, the student must be made aware of the responsibilities of a salesman and must gain an appreciation of the professionalism

required of a good salesman. Following the introductory material, the student should become familiar with the sales process; that is, he should learn the steps in the sale, the importance of product knowledge, the forces involved in consumer motivation, and the types of customers he may encounter.

As the student becomes familiar with the sales process, he should also make sales presentations to the class. Such presentations will provide the instructor with an opportunity to evaluate the student's progress.

Terminal Objectives (minimal)

1. The student will be able to complete a personal sale from the greeting to the customer to the closing of the sale.
2. The student will be able to greet every prospect in a friendly manner.
3. The student will be able to assist the customer in determining the wants and preferences of the prospect.
4. The student will learn key sources of product knowledge.
5. The student will be able to follow up sales and service to insure customer satisfaction.
6. The student will be able to identify and use correctly the terminology used in the field of selling.

Additional units involving the use of the cash register, change making, and in writing sales slips, etc., may be incorporated into this unit or in individual instruction, as local needs demand.

Human Relations

Description

The human relations unit applies broadly to the interaction of people in all types of business. Each student needs preparation in this area and should understand that all individuals are different and that each person must be understood on his standards, not ours.

Terminal Objectives (minimal)

1. The student will be able to express knowledge of human relations in business, social, and government relationships.
2. Each student will be able to intelli-

gently discuss case problems presented to him. (There may be several solutions to each case problem.)

3. The student will write up a human relations situation that he has encountered at his training station, using the critical incident method.
4. The student will be able to set up a training session using class members as employees.

Advertising

Description

The student will become acquainted with the historical background of advertising and its function in the business environment. Information will also be presented on the various advertising media and their frequency of use. As part of this unit of instruction, the student will lay out newspaper advertisements and write radio and television commercials. Field trips to the local newspaper, radio, and television stations should also be included in this unit.

Terminal Objectives (minimal)

1. The student will be able to define advertising and sales promotion.
2. The student will be able to lay out ads for newspapers.
3. The student will be able to write radio commercials.
4. The student will be able to judge the quality of a variety of advertisements, newspapers, and magazines according to the principles of advertising layout.
5. The student will be able to plan a sales promotion campaign for a product.

Marketing Process

Description

In this unit the student will become familiar with the role of marketing in the purchase of goods and services by the ultimate consumer. The student will study the various functions of marketing as well as the institutions that serve the marketing function in our economy. Considerable emphasis will be placed on discussing the final step in the marketing process—retailing. Retailing history and various methods of retailing will be emphasized, along with the classification of the various types of retail establishments.

Terminal Objectives (minimal)

1. The student will be able to identify the channels of distribution.
2. The student will be able to list the channels of distribution utilized by his training stations.
3. The student will be able to classify the types of retailing.
4. The student will be able to list in writing the similarities and differences between various types of retail establishments.

Business Mathematics

Description

In this unit, the student will become acquainted with those basic mathematical computations necessary to operate a retail firm. As each student will have varying math skills upon entering the distributive education program, some review of mathematics may be necessary in order to bring each student's skills to an acceptable level. An integral activity in retailing is the use of sales slips and the need for competence and accuracy in computing sales tax and unit price. The student will also be instructed in bank reconciliation procedures for personal and business use. Other areas which will be included are computation of salaries and salary plans; and pricing policies and markon and markdown procedures. Additional information on making change, figuring discounts, operating a cash register, and taking inventory may be included in this unit at the instructor's discretion.

More information on a related business mathematics course is included in the section on the Basic Business Education Program.

Terminal Objectives (minimal)

1. The student will be able to compute sales taxes on merchandise and services.
2. The student will be able to reconcile bank statements.
3. The student will be able to compute salary compensation plans, such as straight salary, salary plus commission, and straight commission.
4. The student will be able to perform markon and markdown procedures.

5. The student will be able to compute employee, trade, and cash discounts.

Operating a Business

Description

In this unit the student will utilize information obtained from both his training station and the classroom to develop his own plan for starting a business. In order to complete this plan, the student will become familiar with the various shopping areas within a community; that is, the stores that make up the core business district. The secondary business district, shopping centers, and string streets will also be identified and the advantages and disadvantages of the various types of ownership discussed. The student will also decide whether or not a building for business should be purchased or leased. The various methods of financing a business will be observed along with procedures to be practiced in the operation of a business.

Terminal Objectives (minimal)

1. The student will identify the types of store locations as they pertain to community layout.
2. The student will be able to list the advantages and disadvantages of sole proprietorships, partnerships, and corporate forms of business ownership.
3. The student will identify the types of financing and insurance problems that face all businessmen.
4. The student will be able to list the advantages and disadvantages of buying an existing business and starting a new business.
5. The student will define in writing the following terms:
 - a. Goodwill
 - b. Accounts receivable
 - c. Accounts payable
 - d. Fixed capital
 - e. Working capital
 - f. Stock turnover
 - g. Liabilities
 - h. Insured
 - i. Insurer
 - j. Premium
 - k. Risk

Career Planning

Description

The importance of career planning for the student cannot be stressed enough. Each student must be able to complete an application form and participate in an interview. He should realize that the personal data sheet is an item that every employed person must have on file. In addition, it is necessary that a student have a plan of action for seeking a position. Therefore, he must be aware of the various sources of employment information and how to use them.

Terminal Objectives (minimal)

1. Each student will be able to list the six key sources of employment information.
2. Each student will be able to prepare a personal data sheet.
3. Each student will be able to interview for a position using the correct procedures as taught in the distributive education program.

A discussion of programs at the post-secondary level related to distributive education will be found in the Post-Secondary section of this handbook under "Marketing Programs."

Bibliography for Distributive Education

There are many sources of materials that are available for high school distributive education teacher-coordinators. The following list contains a sampling of the materials available.

Books

Ernst and DaVall. *Salesmanship Fundamentals*. New York: McGraw-Hill Book Company, Gregg Division.

Nolan and Warmke. *Marketing Sales Promotion and Advertising*. Cincinnati: South-Western Publishing Co.

Richert, Meyer, and Haines. *Retailing Principles and Practices*. New York: McGraw-Hill Book Company, Gregg Division.

Tonne, Simon, McGill. *Business Principles, Organization and Management*. New York: McGraw-Hill Book Company, Gregg Division.

Wingate and Nolan. *Fundamentals of Selling*. Cincinnati: South-Western Publishing Co.

Periodicals

Advertising Age. Chicago: Crain Communications, Inc., 749 Rush Street.

Chain Store Age. New York 10016: Lebharr-Friedman, Inc., Two Park Avenue.

Department Store Management. New York 10017: Concept Publishing Corporation, 60 East 42nd Street.

Display World. Cincinnati, Ohio 45202. Display Publishing Co., 407 Gilbert Avenue.

Marketing Communications. New York: Decker Communications, Inc., 501 Madison Ave.

Sales Management. New York 10017: 630 Third Avenue.

Stores. New York 10001: 100 West 31st St.

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - E

The Office Occupations Program

- Part 1 The Clerical Occupations Program**
- Part 2 The Secretarial Program**
- Part 3 The Bookkeeping / Accounting Program**
- Part 4 Equipment and Facilities for
Office Occupations**
- Part 5 Cooperative Office Occupations Programs
in the Secondary School**

**Program Coordinator: Jack C. Reed
University of Northern Iowa
Cedar Falls**

SECTION 6-E

THE OFFICE OCCUPATIONS PROGRAM

General Description

Office occupations programs offer students an opportunity to prepare for entry-level office employment in the area of their choice—clerical, secretarial, or bookkeeping/accounting—or to develop a foundation to pursue specialized training at the post-secondary level. These programs are designed to include basic general education plus more specialized business education offerings specifically related to the ability, interest, and career objective of each student.

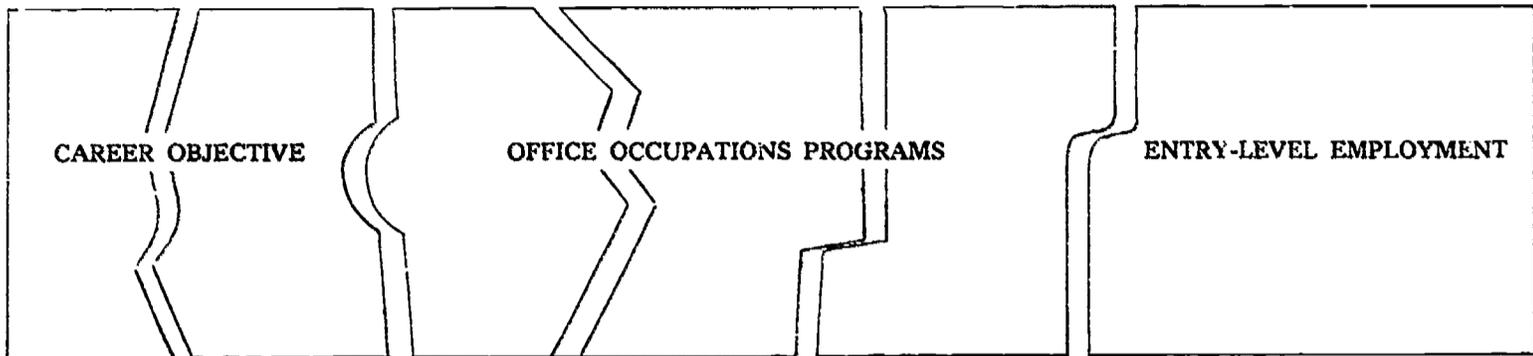
Flexibility within the program is necessary in order to provide training that will equip all students, whether of high or low ability, with skills and abilities that will lead to employment. The program content should be analyzed periodically through visits to offices and follow-up studies of students to assure the continuation of a relevant quality education. Although the programs remain basically course-oriented, students are encouraged to progress individually in order to develop skills and abilities to their greatest potential in pursuit of their occupation objectives. (See Figure 6E-1)



A student has attained her objective--office employment.

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OFFICE OCCUPATIONS PROGRAMS
provide
Education for the World of Work
not
"How to Run a Machine"^a



TOGETHER -- A Planned Pattern of Education¹
SEPARATELY -- A Fragmented Effort

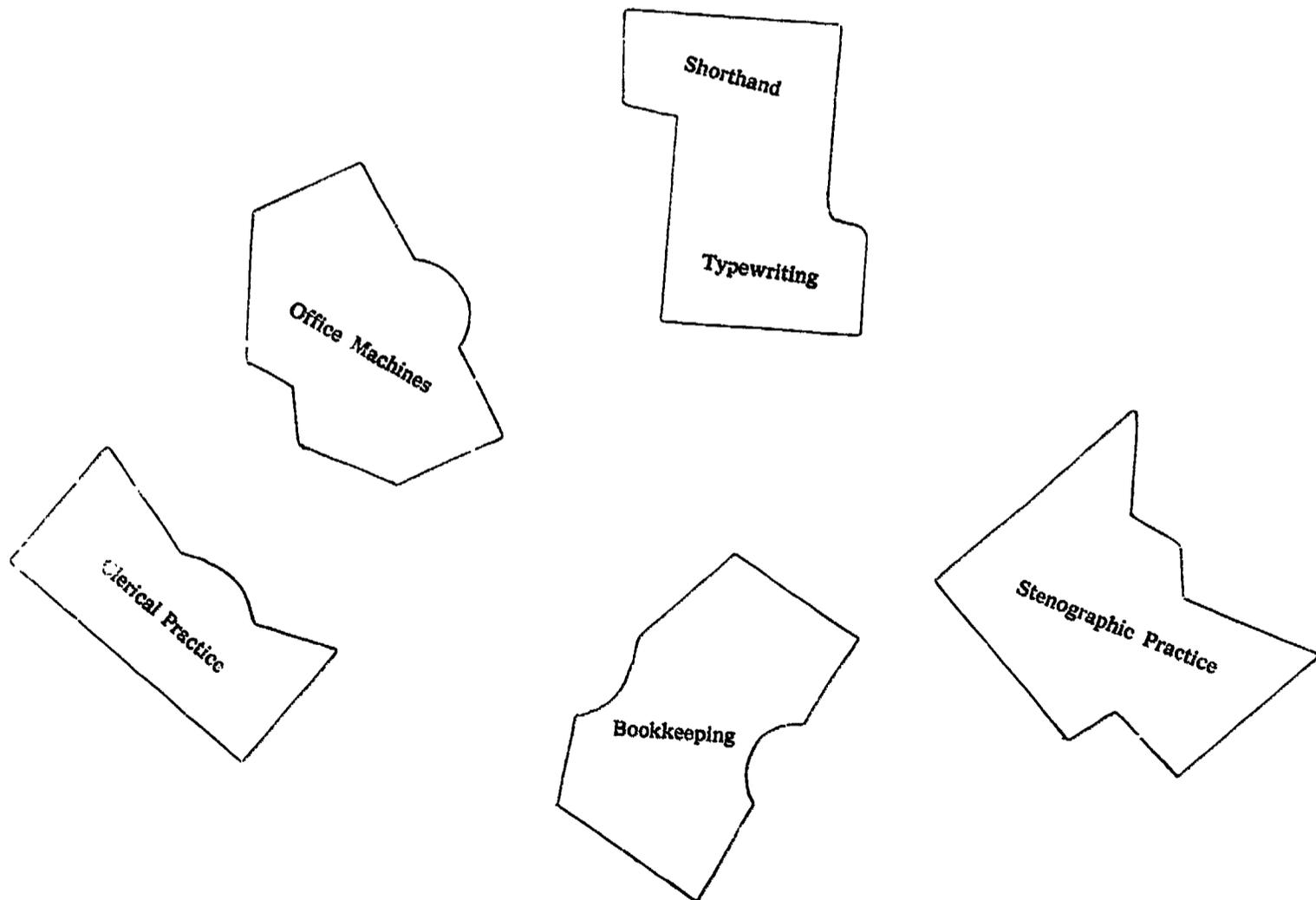


Figure 6E-1

^a Developed by Dr. Bruce I. Blackstone, Head, Office Occupations, U.S. Office of Education, 1966. (Revised)

Lectures and discussions should be kept to a minimum in skill development courses in order to provide maximum time for practice on the equipment. In nonskill areas, role playing, case studies, and a variety of presentations motivate participation and learning. Since the programs will usually provide employees for the immediate geographic area, local community resources should be used for field trips and guest speakers. Terminal objectives are established for each program, and students are evaluated according to their ability to meet these standards.

Just as the high school programs provide a basis for further study, either immediately or following a period of employment, the junior high and elementary levels should provide a progressive orientation to these programs as

illustrated in Figure 6E-2. A discussion of the Office Occupations Program at the post-secondary level will be found in the Post-Secondary section of this handbook.

Suggested Curricula

Table 6E-1 illustrates a typical sequence of offerings at the senior high level for the three office occupations programs—clerical, secretarial, and bookkeeping/accounting. The offerings shown in all capitals are suggested requirements; the others are electives that are strongly recommended.

The offerings taken as electives can usually be taken at any level but are recommended for the 11th and 12th years; therefore, with the exception of the required courses the sequence shown in Table 6E-1 can be adjusted to meet the needs of individual students.

Table 6E-1

Typical Sequence of Offerings for the Office Occupations Program

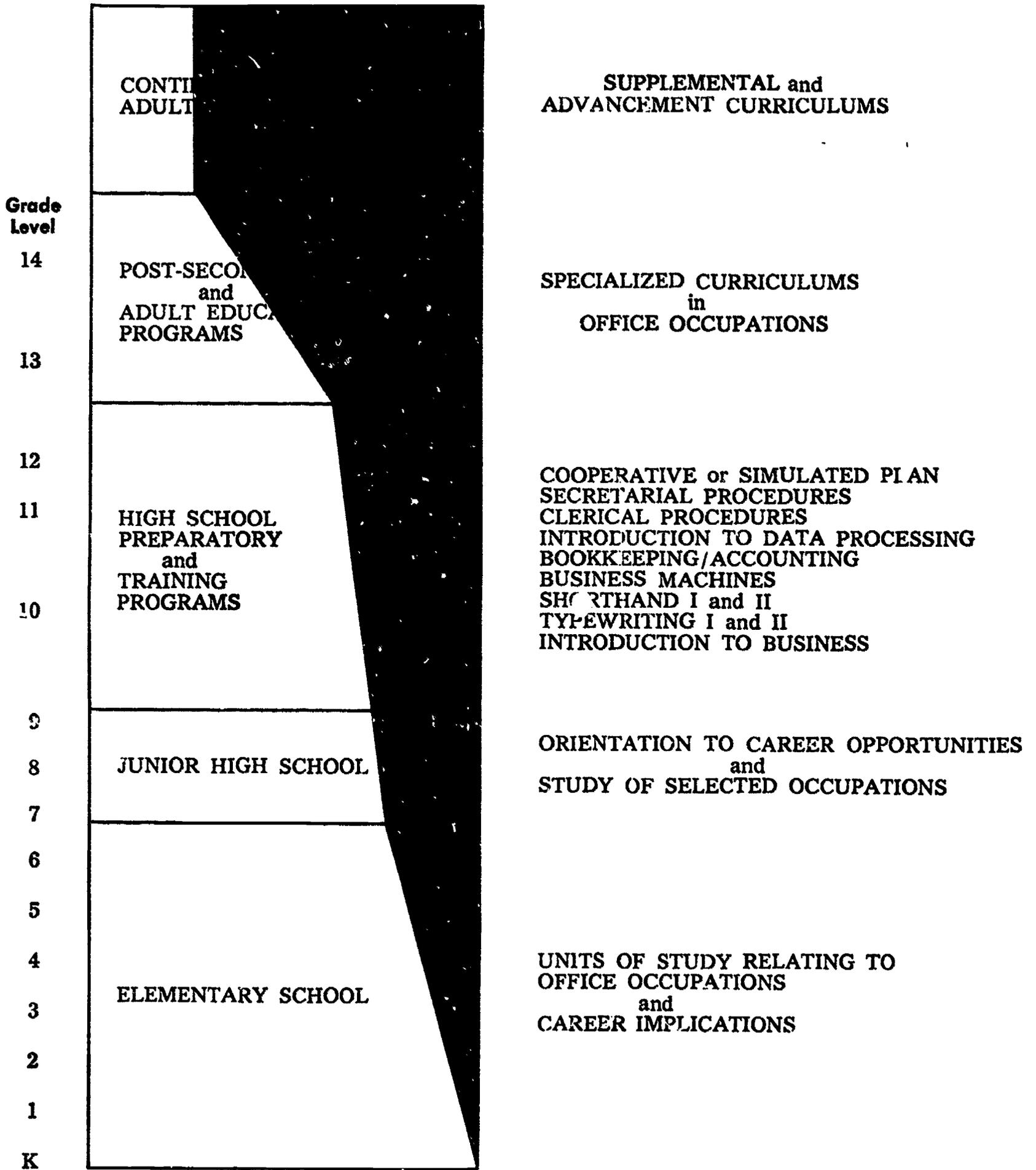
GRADE	CLERICAL	SECRETARIAL	BOOKKEEPING/ ACCOUNTING
10th	TYPEWRITING I, II ^c General Business ^a	TYPEWRITING I, II ^c General Business ^a	General Business ^a Typewriting I, II ^c
11th	TYPEWRITING III ^c Office Machines ^c Bookkeeping I, II ^c	SHORTHAND I, II ^{c,d} Typewriting III ^c Office Machines ^c Bookkeeping I, II ^c	BOOKKEEPING I, II ^c Office Machines ^{*c}
12th	CLERICAL PROCEDURES ^c	SECRETARIAL PROCEDURES ^c	Data Processing ^b Business Law ^a *Calculators, adding machines—omit transcription machines and possibly duplicators

^a Description found in Basic Business Section.

^b Description found in Data Processing Section.

^c Description found in this section.

^d May be written or machine (touch) shorthand.



**Training for a Vocation in Office Occupations:
A Progression Chart**

Figure 6E-2

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - E

The Office Occupations Program

Part 1 The Clerical Occupations Program

The Office Occupations Program

SECTION 6-E — Part I

THE CLERICAL OCCUPATIONS PROGRAM

The overall objective of the Clerical Occupations Program is to prepare students to obtain entry-level, non-secretarial jobs. These jobs usually range from the very routine lower-level clerical jobs such as those of messenger, mail clerk, or timekeeper to the more specialized tasks such as typist, duplicating machine operator, or receptionist, for which a higher level of achievement is required.

Terminal Objectives

The following are *minimal* terminal objectives for the program. Specific criteria for measurement are given in the terminal objectives of the individual offerings included in the program.

1. The student will be able to type at a minimum straight-copy rate of 40 *gwam* (gross words a minute) for 5 minutes with a maximum of 3 errors and at a minimum production rate of 15 *n-pram* (net production rate a minute).
2. The student will be able to type mailable letters and usable copies of reports and business forms at a minimum production rate of 15 *n-pram* for 30 minutes.
3. The student will be able to compose simple business correspondence using correct grammar, spelling, punctuation, and business vocabulary.
4. The student will be able to proofread and annotate copy using correct proofreader's marks and be able to type a correct copy from a rough draft.
5. The student will be able to demonstrate

proficiency in performing basic arithmetic calculations and be able to compute such items as simple payroll, invoice extensions, interest, and discounts.

6. The student will be able to perform simple record-keeping tasks such as routine journalizing, posting, and petty cash reports.
7. The student will be able to index, file, and retrieve materials using alphabetic, geographic, numeric, or subject methods.
8. The student will be able to do handwritten work in a neat, legible style.
9. The student will be able to prepare copy for, and efficiently operate, at least one type of duplicating machine.
10. The student will be able to perform all the processes, with speed and accuracy, on at least one type of 10-key and full-keyboard calculator.
11. The student will be able to handle correctly and efficiently all incoming and outgoing mail.
12. The student will be able to handle incoming and outgoing telephone calls with correct telephone techniques and courtesy.
13. The student will display in classroom situations correct office behavior and appearance.
14. The student will be able to care for equipment— clean machines, change ribbons when necessary, change tape on adding machines, and replenish fluid or ink supply on duplicators.

Suggested Offerings in the Clerical Occupations Program

Suggested courses or offerings for the Clerical Program are listed in Table 6E-1 under "Suggested Curricula" in the introductory part of this section on the Office Occupations Program. For the convenience of the reader, the listing of these courses is repeated below, along with the name of the section in which the course description may be found.

The following are suggested offerings for a modern business clerical occupations program. Teachers may want to use the offering in its entirety or they may want to pull sections from the offerings as outlined here to use as units in other phases of the business program.

Courses Recommended	Discussed in
Typewriting I, II	Clerical Program section
General Business	Basic Business Program section
Office Machines	Clerical Program section
Bookkeeping I, II	Bookkeeping/Accounting Program section
Clerical Procedures	Clerical Program section

Typewriting I

Description

Typewriting I usually implies that it is the first or initial course in typewriting. Occasionally it is referred to as Beginning or Basic Typewriting or as Introduction to Typewriting.



Typewriting courses may satisfy a student's personal need or may lay a foundation for further career work.

Generally speaking, Typewriting I is a one-semester course open to students in high schools or in junior high schools. Students tend to enroll in this course for one of two reasons: (1) either they are seeking to satisfy a need for personal use in typewriting, or (2) they are laying the foundation for further career work in the field of typewriting.

The early emphasis in the course should be on typewriting technique. After this technique phase has been completed, a "push" is made for speed building. This phase is followed by a shorter period where the main concentration is on accuracy. Later, emphasis in Typewriting I should be on teaching the student to produce an end product typed at a good rate of speed with reasonable accuracy and good technique.

The units in this course should include the following: names and functions of the typewriter mechanisms, the typing of short letters, correct techniques of erasing and correcting errors, vertical and horizontal centering, correct placement when typing on lines and printed forms, the use of acceptable strikeouts, manuscript typing, full-page letters and the various letter styles, carbon copies, punctuation styles, and simple tabulation problems.

Terminal Objectives

The following are *minimal* terminal objectives for the Typewriting I course:

1. The student will be able to type unfamiliar sentence material for 1 minute at a minimum rate of 26 gwam with 0-1 error.
2. The student will be able to type paragraph material for 3 minutes at a minimum rate of 18 gwam with 0-3 errors.
3. The student will be able to center a problem both vertically and horizontally and type it accurately.
4. The student will be able to arrange a business letter on a letterhead and type it accurately.
5. The student will be able to arrange a manuscript, following directions given with the problem, and type it accurately.
6. The student will be able to clean his typewriter and change the ribbon when necessary.

Typewriting II

Description

Typewriting II refers to the second-semester course; however, some schools use the term as a title for their third- and fourth-semester courses when two years of typewriting are offered. It is sometimes called Vocational Typewriting because training for career competency is stressed much more than during the first semester and because the course provides a good background for Typewriting III and/or additional clerical-training offerings. Although Typewriting II is generally considered a career offering, it is often taken by students who desire greater skill for their personal use than they have been able to build in one semester.

The Typewriting II course begins with a brief inventory of the students' basic skills which are normally acquired in Typewriting I. Typical units covered in the course are: basic skill; manuscripts and reports; business letters; tabulations; rough drafts; business forms; composition at the typewriter; and related learnings, including spelling, punctuation, capitalization, and word division. Careful proofreading and neat, accurate, usable copy are standards to be achieved on all units.

Terminal Objectives

The following are *minimal* terminal objectives for the Typewriting II offering:

General Terminal Objectives:

1. The student will be able to arrange and type a left-bound manuscript with footnotes, title page, and bibliography.
2. The student will be able to arrange neatly and type accurately tabulated material.
3. The student will be able to type letters in block and modified-block styles, with open or mixed punctuation, and include such special lines as attention, subject, postscript, enclosure, and carbon copy notation.
4. The student will be able to type index cards, postal cards, interoffice memos, and ruled forms.
5. The student will be able to proofread his work and correct all errors.

Objectives for Timed Work:

Since the amount of time required for typing is highly important in judging typing work, more specific terminal objectives for timed work are given below:

1. The student will be able to type straight-copy material for 5 minutes at a minimum rate of 30 gwam with 0-5 errors.
2. The student will be able to type from rough-draft copy for 5 minutes at a minimum rate of 15 gwam with 0-5 errors.
3. The student will be able to type from statistical copy for 5 minutes at a minimum rate of 20 gwam with 0-5 errors.
4. The student will be able to type business letters with carbon copies and envelopes for 20 minutes at a minimum rate of 10 n-pram.
5. The student will be able to type a 3- or 4-column table containing both words and numbers, with time given for planning and preparing, for 20 minutes at a minimum rate of 10 n-pram.
6. The student will be able to address envelopes from a standard mailing list

for 5 minutes and complete a minimum of 6.

7. The student will be able to type correctly in 10 minutes a minimum of 6 sentences from a group of 10 requiring the application of "related learning" such as spelling, punctuation, capitalization, and number usage.

Typewriting III

Description

Third-semester typewriting, often referred to as Typewriting III, has as its main objective the training of competent, skilled typists for work in business offices. It is, therefore, basically a vocational course.

Typewriting III may be the final course of the school's typewriting sequence, or it may be followed by offerings in clerical or secretarial procedures. It may also be the beginning of second-year typewriting in a two-year program. Generally, only students interested in using typewriting as a career tool enroll in the course, even though they may not always be following a strict business education curriculum.

Since Typewriting III is an advanced course, the students should progress to new levels of skill. They should reach high levels of production, increase their understanding of essential related knowledge, continue to improve their work habits, and generally develop their typewriting competence to the maximum.

In order to help the students develop the capabilities required in today's businesses, the teacher should include in the course the drives to increase basic skill in frequent, well-planned units. In addition, when giving timed writings, he should frequently refer to the subject matter regarding office work. Exercises and drills should be used to teach related knowledges, and problem lessons should be built around typical business jobs. Many of the units covered in Typewriting II should be repeated in the Typewriting III course and may be expanded to include more complicated problems which are typed under the pressure of time.

Terminal Objectives

The following are *minimal* terminal objectives for the Typewriting III course.

General Terminal Objectives:

1. The student will be able to type mailable copies of all types of business letters and chain feed and address envelopes.
2. The student will be able to type, with all errors corrected, all types of tabulated reports containing any number of columns (usually 4 or 5), statistical material, ruled or unruled, from rough draft, handwritten, or typed copy.
3. The student will be able to type, with all errors corrected, business communication forms such as inter-office memoranda, business-reply messages, postal cards, Desk-Fax, and Telefax.
4. The student will be able to type, with all errors corrected, business forms such as invoices, purchase orders, bills of lading, purchase requisitions, credit memos, checks, and legal documents.
5. The student will be able to type, with all errors corrected, business reports in either manuscript or tabulated form.

Terminal Objectives for Timed Work:

1. The student will be able to type straight-copy material for 5 minutes at a minimum rate of 40 gwam with 0-3 errors.
2. The student will be able to type business letters not previously set up in letter form with carbon copies and envelopes for 30 minutes at a minimum rate of 15 n-pwam.
3. The student will be able to chain feed envelopes or index cards and type a name and address on each card for 15 minutes and complete a minimum of 20.
4. The student will be able to type 4- or 5-column tables, containing statistical material and column headings, for 30 minutes at a minimum rate of 10 n-pwam.
5. The student will be able to type manuscripts with footnotes for 30 minutes at a minimum rate of 20 n-pwam.
6. The student will be able to type business forms for 30 minutes at a minimum rate of 10 n-pwam.

Office Machines

Description

Office Machines is a terminal course or in some cases a unit in a course usually offered in grade 12. In this offering students operate the most widely used business machines and attain minimum marketable skills for entry employment based on their career objectives. In large high schools separate courses are sometimes offered for each type of machine.

An office machines course typically includes calculating units in addition, subtraction, multiplication, and division on the full-keyboard adding-listing machine, ten-key adding-listing machine, rotary calculator, printing and electronic calculators, and units using transcribing machines. The units of instruction for duplicating include preparation of masters and stencils and the operation of the following machines: offset duplicator, liquid duplicator, and stencil duplicator.



Operating a stencil duplicator is a familiar task for a student in the office machines class.

Terminal Objectives

The following are *minimal* terminal objectives for the Office Machines course:

1. The student will be able to handle problems involved in the use of an

offset duplicating machine, including line copy and half-tones, masking typing paper masters; photographing and producing aluminum plates; and masking copy for single, double, or triple colored reproduction.

2. The student will be able to produce a neat, accurate stencil and operate a stencil duplicator.
3. The student will be able to produce a neat, accurate master and operate a liquid duplicator.

The following terminal objectives apply at the end of a ten-day cycle of instruction:

1. The student will be able to operate a full-keyboard, adding-listing machine for 5 minutes at a minimum rate of 40 digits per minute with 0-4 errors.
2. The student will be able to operate a 10-key adding machine with the touch system for 5 minutes at a minimum rate of 50 digits per minute with 0-4 errors.
3. The student will be able to operate a rotary calculator for 5 minutes at a minimum rate of 30 digits per minute with 0-4 errors.
4. The student will be able to operate the 10-key printing calculator with the touch system for 5 minutes at a minimum rate of 50 digits per minute with 0-4 errors.
5. The student will be able to transcribe from a transcribing machine for 30 minutes at a minimum rate of 15 words per minute.
6. The student will be able to duplicate 20 copies of a prepared master or stencil with proper tone, alignment, balance, and other traits of appearance within 5 minutes; 10 minutes for offset duplicating.

Clerical Procedures

Description

Clerical Procedures, also called Clerical Practice or Office Practice, is usually a one-year course offered in the senior year as the terminal training of the Clerical Program. This may, however, be a one-semester offering following Typewriting III. The students taking this course normally have had two or three semesters of typewriting and are inter-



A student completes computation for a clerical assignment with the aid of a calculator.

ested in employment in nonstenographic work. The main emphasis in this offering is on typewriting, filing, office machines, and the development of good work habits. Shorthand is *not* included.

Terminal Objectives

The following are *minimal* terminal objectives based on recommended minimum occupational entry-level goals of achievement (which may be adjusted by local employment standards):

1. The student will be able to type from straight-copy material at the rate of 40 *gwam* for 5 minutes with 0-3 errors.
2. The student will be able to type at a production rate of 15 words per minute for 30 minutes.

3. The student will be able to operate a calculator at a rate of 50 digits per minute for 5 minutes.
4. The student will be able to type correspondence material from a transcription machine at a minimum rate of 20 words per minute for 30 minutes.
5. The student will be able to duplicate 20 copies of a prepared master or stencil with proper tone, alignment, balance, and other traits of appearance within 5 minutes; 10 minutes for offset duplicating.
6. The student will be able to post mechanically a minimum of 60 ledger cards of one posting date per hour.
7. The student will be able to file alphabetically a minimum of 60 pieces of correspondence per hour.
8. The student will be able to match a minimum of 15 listed descriptions of materials under the proper name of a subject folder in 10 minutes.
9. The student will be able to arrange a mixed deck of 3 x 5 index cards in chronological order at the minimum rate of 20 cards per 5 minutes.
10. The student will be able to assemble, punch holes, and staple 3-page sets of material at the minimum rate of 4 sets per minute.
11. The student will be able to obtain information for the answers to 30 questions within an hour, using common office reference sources.

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - E

The Office Occupations Program

Part 2 The Secretarial Program

The Office Occupations Program

SECTION 6-E — Part 2

THE SECRETARIAL PROGRAM

The Secretarial Program is designed to prepare students to enter and succeed in the business world by equipping them with the skills, knowledges, and attitudes required to fill entry-level jobs, such as stenographer, receptionist, or correspondence clerk, and later advance to secretarial positions such as executive secretary or administrative assistant.

The offerings making up the total secretarial program normally provide sufficient educational background for secretarial work; however, since most high school students lack the required experience and maturity to find initial employment as secretaries, the term "stenographic" is sometimes used to describe the opportunities open to students completing the program.

The program must be kept relevant and flexible to keep pace with the expansion of office functions, the change in types of jobs, and the career objectives of the students. However, despite rapid change in some areas, the levels of jobs tend to remain the same; and basic skills of typewriting, shorthand, and transcription, plus good personal qualities, continue to be the core of the program requirements. Although the program's prime objective is to help students develop employable skills, it is also structured to provide a foundation for specialized training at the post-secondary level.

Terminal Objectives

The following are *minimal* terminal objectives for the secretarial program. Additional objectives are included in the specific courses of the program.

Suggested Courses in the Secretarial (Stenographic) Program

The following are suggested offerings for a modern business secretarial (stenographic)

1. The student will be able to type at a minimum straight-copy rate of 50 gwam for 5 minutes with a maximum of $\frac{1}{2}$ error per minute.
2. The student will be able to take shorthand dictation at a minimum rate of 80 wpm.
3. The student will be able to transcribe from shorthand notes mailable correspondence for 30 minutes at a minimum rate of 18 wpm. using the standard shorthand word count (1.4 syllables equal 1 word).
4. The student will be able to operate at least one type of adding machine, calculator, and duplicator.
5. The student will be able to file and retrieve records according to alphabetic, subject, and simple geographic rules.
6. The student will be able to handle incoming and outgoing telephone calls and greet callers who come to the office in a businesslike and courteous manner.
7. The student will be able to care for equipment and use supplies correctly and economically.
8. The student will be able to create a favorable impression by his behavior, attitude, and appearance.
9. The student will be able to transcribe from belts, tapes, or records mailable memos and reports for a period of 30 minutes at a minimum rate of 25 wpm.

program. Teachers may use the offering in its entirety, or in some cases they may select

sections from the courses as outlined here to use as units in other offerings.

Suggested courses or offerings for the Secretarial Program are listed in Table 6E-1 under "Suggested Curricula" in the intro-

ductory part of this section of the Office Occupations Program. For the convenience of the reader, the listing of these courses is repeated below, along with the name of the section in which the course description may be found.

Courses Recommended	Discussed in
Typewriting I, II	Clerical Program section
General Business	Basic Business Program section
Shorthand I, II	Secretarial Program section
Typewriting III	Clerical Program section
Office Machines	Clerical Program section
Bookkeeping I, II	Bookkeeping/Accounting Program section
Secretarial Procedures	Secretarial Program section

Shorthand I and II

Description

Shorthand I and II refer to the sequence of shorthand courses offered in the first and second semesters. The main emphasis in these offerings involves theory, dictation, and transcription techniques.



Individual practice from recorded dictation develops shorthand skill.

The first semester emphasizes shorthand theory, rapid reading of shorthand outlines, writing familiar material from dictation, and key elements of punctuation, spelling, and grammar. The second semester stresses speed development in taking new-matter dictation, reviews shorthand outlines and brief forms, continues punctuation and vocabulary development, and introduces transcription.

Terminal Objectives

The following *minimal* objectives may be considered guidelines for the shorthand offerings. Teachers who reject word-list testing or the reading approach to the teaching of shorthand may find these particular objectives inappropriate to their method.

1. During the first semester the student will be able to pass periodic theory tests with a minimum of 70 percent accuracy by writing the correct outline next to the longhand word. This should not be a timed test.
2. At the end of 9 weeks of instruction, a student will be able to transcribe from the text into longhand or typewritten form at a minimum rate of 60 words in a period of 3 minutes with a maximum of 5 errors, not including errors in punctuation or spelling. The student knows beforehand a group of three lessons from which the test material will be chosen.
3. At the end of the first semester, the student will be able to write all the



Manual dexterity, mental alertness, and conscientious practice combine to develop a marketable skill in machine shorthand, commonly used by court and convention reporters.

brief form outlines, dictated one every 3 seconds, with a minimum of 95 percent accuracy for outline formation.

4. At the end of the first semester, the student will be able to write the brief forms dictated at a rate of one every 3 seconds and transcribe with a minimum of 95 percent accuracy on the longhand response.
5. At the end of the first semester, the student will be able to write the outlines for a comprehensive longhand theory test with a minimum of 95 percent accuracy on outlines. This should not be a timed test.
6. At the end of the first semester, the student will be able to read orally from shorthand homework notes at a minimum rate of 60 words in $\frac{1}{2}$ minute.
7. At the end of the second semester, the student will be able to read orally from shorthand homework notes at a minimum rate of 90 words in $\frac{1}{2}$ minute.
8. At the end of the second semester, the student will be able to take dictation over unpreviewed, new material for 3 minutes at a minimum rate of 60 words a minute and transcribe for 30 minutes at a minimum rate of 20 wpm with 95 percent accuracy.

Machine Shorthand

Description

Machine Shorthand (now popularly called Touch Shorthand) is a complete shorthand system that is written phonetically on a paper tape by the operation of a shorthand machine keyboard. Through touch control of keys, all the sounds that make up the English language can be written. In a single, light keyboard stroke, a syllable, word, or phrase may be written in plain, easy-to-read English letters, printed on a paper tape.

The main units in an introductory offering in machine shorthand are usually the following:

1. Introduction of the keyboard (letters, sounds, and basic theory)
2. The theory (abbreviations, derivatives, and basic rules for writing all word sounds and punctuation)
3. Speed development
4. Vocabulary development
5. Development of English skills
6. Transcription
7. Introduction to specialized dictation (technical/scientific, medical, and legal)

For students desiring a higher degree of skill, a second year of study is recommended. Such a two-year program of study is suggested for the junior and senior years but may be pursued on a one-year basis—depending, of course, on the goals and aptitudes of the student.

General Terminal Objectives:

The general objectives for the machine shorthand offering are the same as those for manual shorthand—that is, providing the secretarial student with a vocational shorthand skill that will permit the accurate recording of dictation in the business office and the transcription of shorthand notes into acceptable (mailable) form.

Specific Terminal Objectives:

The specific objectives and standards of achievement by semesters are recommended as follows:

First semester. Introduction of keyboard and the machine shorthand theory, plus an introduction to speed development with

dictation rate of 60 words a minute (minimum for passing grade—exploratory level).

Second semester. Record dictation at a rate of 80 to 120 words a minute and a straight-copy transcription rate, with 95 percent accuracy or better, at 60 percent of straight-copy typing rate (minimum for passing grade—general level).

Third semester. Record dictation at a rate of 100 to 140 words a minute and straight-copy transcription rate, with 95 percent accuracy or better, at 70 percent of straight-copy typing rate (minimum for passing grade—prevocational skill level).

Fourth semester. Record dictation at the rate of 110 to 160 words a minute and straight-copy transcription rate, with 95 percent accuracy or better, at 80 percent of straight-copy typing rate (minimum for passing grade—vocational skill level).

Physical Facilities and Equipment for

Machine Shorthand

Machine Shorthand can be taught and learned effectively in the business education classrooms equipped with flat-surfaced typewriter-height desks or tables and chairs. If tables of typewriter height are not available, tripods should be used. Typewriters should be readily available for transcription purposes.

Usually the following equipment should be available:

1. Shorthand machines (one for each student station)
2. A dust cover for each machine (optional)
3. Tripods available from the machine manufacturer (if typewriter tables are not available)
4. Steno paper tapes for the machines
5. Ribbon ink
6. Transcribing box (optional)
7. Textbooks (one set per student)
8. Classroom practice tapes (optional)
9. Practice records (optional)

In addition to those items mentioned under *Teaching Methods*, learning materials provided by the machine manufacturer will

be necessary. After the theory has been completely learned, materials for any other shorthand system can be used.

Teaching Methods

Methods used for instructing a machine shorthand class would be very similar to the teaching of typewriting and manual shorthand combined. The keyboard and theory must be learned and practiced from textbook materials and teacher dictation. Much dictation from the instructor or an audio machine is also necessary. In addition, English and punctuation skills must be developed and reviewed. Finally, transcription at the typewriter must be taught to adequately prepare the student.

Other Recording Systems

Description

Just as there are several shorthand systems available (such as Gregg, Pitman, and Thomas, to name a few), there are several other recording systems available which probably cannot be classified as shorthand systems but rather are short or abbreviated recording systems. Among them are Speedwriting, Stenoscript, and Notehand. These systems utilize either shorthand symbols, the alphabet, or a combination of both, and the course in which the systems are taught includes integrated instruction in how to listen, how to comprehend what is read, and how to take notes. Unlike shorthand, these systems are not generally taught for vocational use, although there may be exceptions.

The material that follows is based on the Gregg Notehand system as representative of those short recording systems which are available. However, with a few minor changes, the following terminal objectives, teaching methods, and teaching media could just as easily apply to any of the recording systems being taught for personal use. If, however, the offering is being taught with a career-oriented purpose, the following material will not apply; and, in that case, the instructor will have to develop his own set of objectives or modify those given in the preceding shorthand section.

Notehand

Terminal Objectives

The following objectives should be con-

sidered guides for the Notehand offering:

1. The student, shown the alphabet of Gregg Notehand, will be able to say the sound of each character with 100 percent accuracy.
2. After being shown the notehand outline of abbreviated words, the student will be able to read each outline with 100 percent accuracy.
3. The student will be able to write all high-frequency words, phrases and sounds with 100 percent accuracy, thus giving him an efficient and rapid writing tool.
4. After being given an article to read, the student will be able to make well-organized and comprehensive notes from the reading matter.
5. The student will be able to make useful, well-organized notes from a lecture.

Teaching Methods

Notehand is designed for the college-bound student; therefore, the students often possess above-average intelligence. The teacher must at all times be certain the course is interesting and challenging to the student. The Notehand teacher must be creative; he must use many and varied outside sources of information from which the students can take notes. Some sources would include current magazines, newspapers, radio, tapes, and television.

Considerable stress should be made on the importance of writing and reading the Notehand outlines, which can best be done by providing the student with an opportunity to practice this skill. The art of organizing material also must be taught. The interest and ability of the student may determine the type of material on which notes will be made.

Other teaching suggestions are available from the **INSTRUCTOR'S GUIDE FOR GREGG NOTEHAND** (by Leslie, Zoubek, Poe, and Deese), which gives a fine day-by-day outline and should prove most helpful to the teacher. Many workshops and methods offerings are available—often during summer sessions at colleges and universities—for helping the teacher to learn more about the Notehand system.

Teaching Media, Equipment, and Materials

The following are suggested teaching media, equipment, and materials: chalkboard, textbook, tape recorder, lecture tapes, cards for taking notes, notebook, overhead projector, films, and filmstrips.

Secretarial Procedures

Description

Secretarial Procedures, which is also called Stenographic Practice, Secretarial Practice, or Secretarial Office Practice, is usually a one-year course designed for students who have completed two or more semesters of shorthand and typewriting and who hope to be prepared for immediate employment upon completion of the offering. This offering might also be a one-semester offering following third-semester shorthand and typewriting. Whatever its length, it is normally offered in the senior year.

This course offers students an opportunity to master office procedures and techniques through textbook study, discussion, individual work, and practical experience whenever possible. The typewriting and shorthand skills already acquired are reviewed and, hopefully, improved. Emphasis is placed on transcription skill, especially in spelling and punctuation in order to develop skill in producing mailable transcripts. In addition to these skills and the knowledge of office procedures,



The receptionist combines the receiving of callers with such clerical tasks as typewriting and filing.

the course provides an opportunity to develop good work habits and the personal qualities that are necessary for success on the job.

Units usually covered are: qualifications of a stenographer and a secretary, including skills required and personal qualities that are desirable; transcription of mailable letters and memos from written or machine shorthand notes, or from transcription machines; typing manuscripts, reports, legal papers, and minutes from typed, handwritten, or draft copy; composition of letters; mail and telegraphic services; telephone; travel; receptionist duties; copying and duplicating; secretary's financial duties, such as petty cash records, checkbook and bank records, and possibly payroll and tax records; adding machines and calculators; filing—alphabetic, subject, and geographic; and occupational information and job application procedures. The length and thoroughness of the units on machines depends largely upon whether the students have had an opportunity to take a separate course in Office Machines.

Terminal Objectives

The following are *minimal* terminal objectives of the Secretarial Procedures offering:

1. The student will be able to type straight-copy material for 5 minutes at a minimum rate of 45 gwpm with 0-3 errors.
2. The student will be able to type a variety of problems such as letters, tables, and manuscripts for 30 minutes at a minimum production rate of 15 n-pram.
3. The student will be able to write in shorthand new-material dictation for 5 minutes at a minimum rate of 80 wpm and transcribe with a minimum of 95 percent accuracy.
4. The student will be able to write in shorthand new-material dictation for 3 minutes at a minimum rate of 90

wpm and transcribe with a minimum of 95 percent accuracy.

5. The student will be able to write in shorthand new-material dictation for 1 minute at a minimum rate of 100 wpm and transcribe with a minimum of 95 percent accuracy.
6. The student will be able to transcribe mailable copies of letters dictated at a minimum rate of 80 wpm.
7. The student will be able to transcribe mailable copies of letters dictated in "office-style" dictation (spurts of rapid dictation, time out to "think", insert changes, etc.), having a minimum spurt speed of 100 wpm at a minimum rate of 18 wpm (standard shorthand word count). If transcription machines are used instead of shorthand, the objective to replace Numbers 3-7 would be: The student will be able to transcribe mailable letters, memos and reports using a transcription machine for a period of 30 minutes at a minimum rate of 18 wpm (standard shorthand word count).
8. The student will be able to file, with a minimum of 98 percent accuracy, cards and correspondence according to alphabetic, geographic, and subject rules.
9. The student will be able to prepare a master for a liquid duplicator, a stencil, and an offset master and to run acceptable copies.
10. The student will be able to find and correct all errors in his own work.
11. The student will be able to care for all equipment and supplies that he uses.
12. On units requiring measurement by a question-answer test, the student will be able to answer correctly a minimum of 75 percent of the questions asked.

Note: Minimum standards as indicated in the objectives normally refer to the grade of C.

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - E

The Office Occupations Program

Part 3 The Bookkeeping / Accounting Program

The Office Occupations Program

SECTION 6-E — Part 3

THE BOOKKEEPING/ACCOUNTING PROGRAM

Bookkeeping is the systematic recording of the financial operations of a business; while accounting is the planning, summarizing, and analyzing of bookkeeping records upon which business decisions are made. However, the student who has a good background knowledge of bookkeeping and who learns quickly on the job has every opportunity to rise to a higher-level position in the accounting area.

The Bookkeeping/Accounting Program at the high school level has as its prime objective the preparation of students for entry-level employment in the bookkeeping/accounting field. Jobs open to inexperienced high school graduates typically include performing only one or two phases of the bookkeeping system of a business, and these duties are generally of a bookkeeping rather than an accounting nature.

It is recommended that the bookkeeping/accounting student take a course in Office Machines in order to be familiar with the basic operation of adding machines and calculators. From such an offering he can also develop finger dexterity to enable him to learn the operation of new equipment on the job if necessary.

With the continued increase in automated bookkeeping, the total bookkeeping/accounting program should include an introduction to data processing. Although the knowledge of bookkeeping is not necessary for the mastery of the technical operation of automated equipment, it is essential for the person who is seeking promotional opportunities beyond mere technical operation.

Terminal Objectives

The following are *minimal* terminal objectives of the Bookkeeping/Accounting Program:

1. The student, after developing an understanding of the procedures currently recommended, will be able to record journal entries and/or post to a ledger in a bookkeeping system already in operation.
2. After becoming familiar with the business and its bookkeeping system, the student will be able to prepare simple financial statements, using previous fiscal period reports for reference.
3. The student, after receiving on-the-job instruction, will be able to prepare payroll records.
4. The student will be able to perform routine financial transactions such as making bank deposits, reconciling bank statements, keeping a checkbook in order, and handling a petty cash fund.
5. The student will be able to use correct bookkeeping vocabulary, ask clearly stated questions about bookkeeping procedures with which he is unfamiliar, and follow directions carefully in adjusting to the bookkeeping system in use in the business where he finds initial employment.
6. The student will be able to operate at least one type of adding machine and calculator and will be able to apply this skill and knowledge if it is necessary to learn the operation of a machine on which he has had no previous training.

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Suggested Offerings in the Bookkeeping/Accounting Program

The following are suggested offerings for a modern business bookkeeping/accounting program. Teachers may want to use a course in its entirety, or they may want to pull sections from the course as outlined.

Suggested courses or offerings for the Bookkeeping/Accounting Program are listed

in Table 6E-1 under "Suggested Curricula" in the introductory part of this section on the Office Occupations Program. For the convenience of the reader, the listing of these courses is repeated below, along with the name of the section in which the course description may be found.

Courses Recommended	Discussed in
General Business	Basic Business Program section
Typewriting I, II	Clerical Program section
Bookkeeping I, II	Bookkeeping/Accounting Program section
Office Machines	Clerical Program section
Data Processing	Data Processing Program section
Business Law	Basic Business Program section

Bookkeeping I and II

Description

Bookkeeping I and II, which is also called Bookkeeping/Accounting or Accounting I and II, refers to a two-semester offering that includes basic accounting theory and principles but places main emphasis on the bookkeeping or recording phases of accounting.

Typical high school schedules offer this course in the junior or senior years, and generally no pre-requisites are required. Students who enroll usually do so for one of the following reasons: (1) to explore the possibility of pursuing this area as a career (2) to increase their opportunity for immediate employment or to provide a background for advanced post-secondary study if they have already determined their career objective; or (3) to develop a better understanding of business activity and to be able to keep personal records.

The units usually covered during the first semester are: a general introduction to bookkeeping, which includes the need for financial records; the role of the bookkeeper; the role of the accountant; skills required and opportunities in the field of bookkeeping and ac-

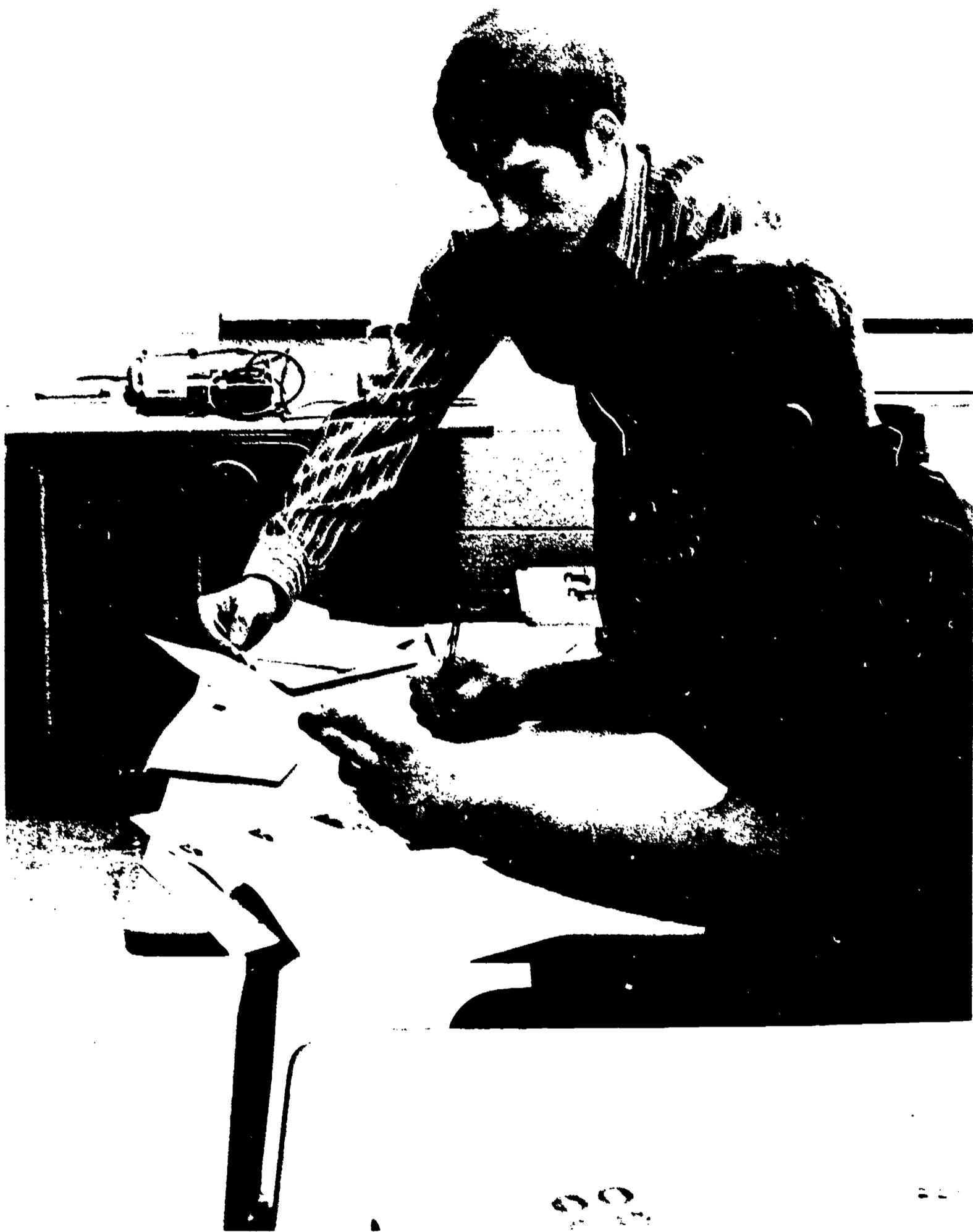
counting; the fundamental bookkeeping equation and its application in bookkeeping procedures; the basic steps of the bookkeeping cycle for service and retail businesses; and related activities, such as banking services and a brief introduction to automated data processing.

Units usually covered during the second semester are: special problems included in the purchase and sale of merchandise, such as discounts, transportation, sales tax, returns and allowances, and bad debts; notes and interest; depreciation; accruals and prepaid items; and payroll records. Units on income tax, partnerships, and corporations are optional and included according to apparent need and time available.

Terminal Objectives

The following are *minimal* terminal objectives for Bookkeeping I and II:

1. The student will be able to state correctly the fundamental bookkeeping equation.
2. The student will be able to journalize transactions in combination, special, and general journals.



Students pool their knowledge in recording a transaction in a practice set.

3. The student will be able to post to general and subsidiary ledgers.
4. The student will be able to prepare a trial balance.
5. The student will be able to complete a worksheet with simple adjustments.
6. The student will be able to prepare elementary financial statements such as operating statement, balance sheet, capital statement.
7. The student will be able to record simple adjusting and closing entries in a journal, post to the ledger, rule the accounts that are closed, and balance and rule the accounts that remain open.
8. The student will be able to prepare a post-closing trial balance.
9. The student will be able to identify basic source documents such as invoices, checks, receipts, and credit memos.
10. The student will be able to prepare business forms such as checks, deposit tickets, receipts, petty cash vouchers, and payroll records.
11. The student will be able to interpret elementary financial statements.
12. The student will be able to maintain a petty cash record.

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - E

The Office Occupations Program

Part 4 Equipment and Facilities for Office Occupations

Suggested Business Programs and Courses for Secondary Schools in Iowa

The Office Occupations Program

Section 6-E — Part 4

EQUIPMENT AND FACILITIES FOR OFFICE OCCUPATIONS

It is difficult to outline the ideal classroom in terms of equipment and facilities for office occupations offerings because the nature of the rooms and the amount of equipment available will depend primarily on the size of the school and the enrollment in office occupations programs. However, the following equipment in sufficient numbers for the individual school is suggested:

1. Typewriters, both manual and electric
2. Adding machines and calculators, listing and non-listing, 10-key and full keyboard
3. Transcribing machines
4. Duplicators, liquid, stencil, and offset
5. A shorthand dictation lab, permanently wired stations or a wireless set.

In determining the kinds of typewriters and business machines for class use, the teacher would be wise to select those machines most commonly used in the geographic area where students are likely to be employed after completing the program.

Where enrollment is small, classes can be taught successfully in a well-planned, one-room department; larger enrollment may require separate rooms for each subject area. However, in addition to the minimum equipment requirements for each class, arrangements should be made for the following:

1. Typewriters available to shorthand classes for transcription
2. Typewriters, business machines, and a shorthand lab available for practice during the school day
3. Adding/calculating machines available to students in bookkeeping/accounting classes

If an audiovisual center is not available and/or the school schedule does not lend itself to meeting for large-group instruction, all classrooms should have adequate wiring for machine usage, a permanently mounted screen, and an overhead projector.

See Figures 6E-3 through 6E-7 for suggested classroom layouts and equipment lists recommended by the State Department of Public Instruction.

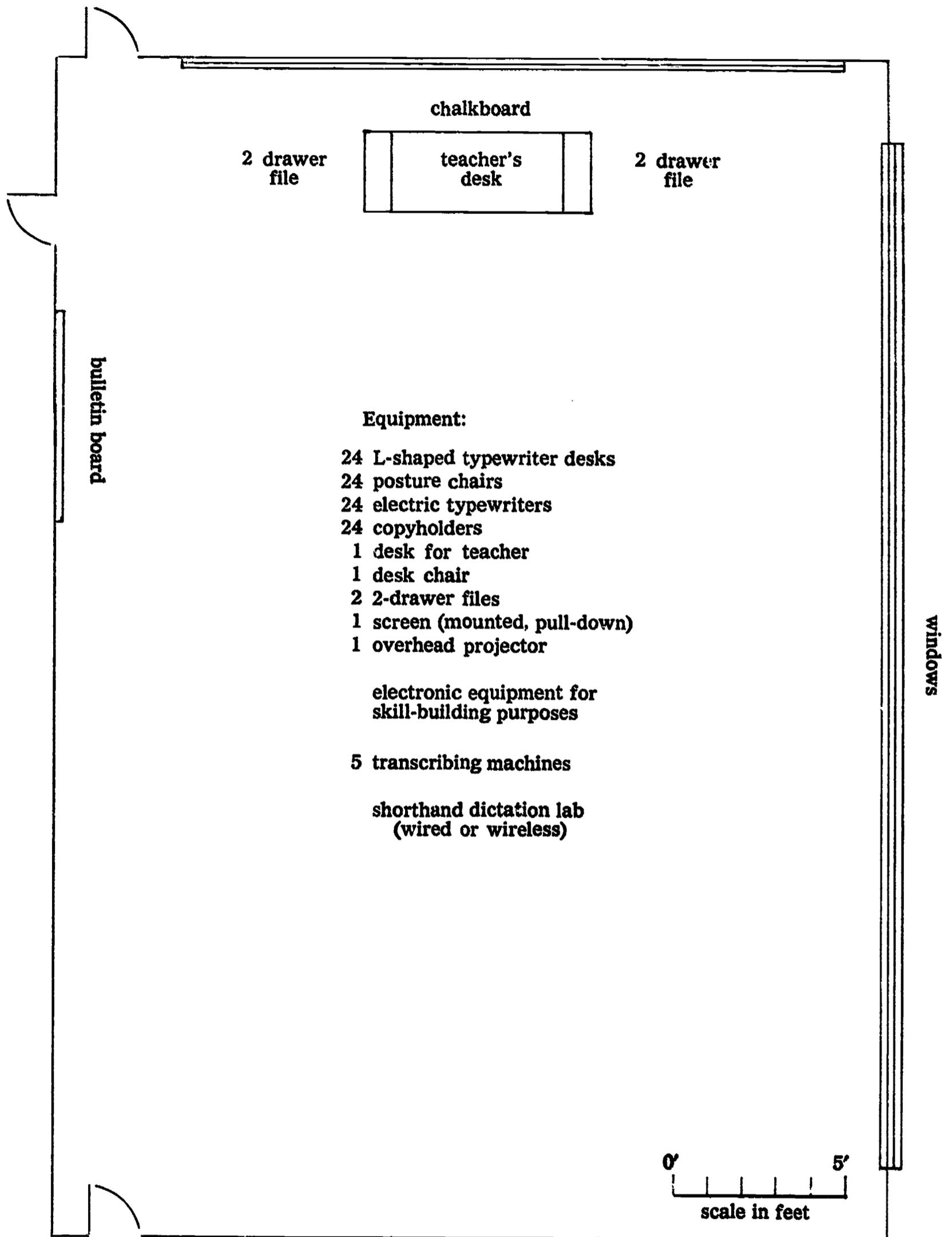


Figure 6E-3
Suggested Layout for a Clerical/Secretarial Procedures Classroom
Size 24' x 34'

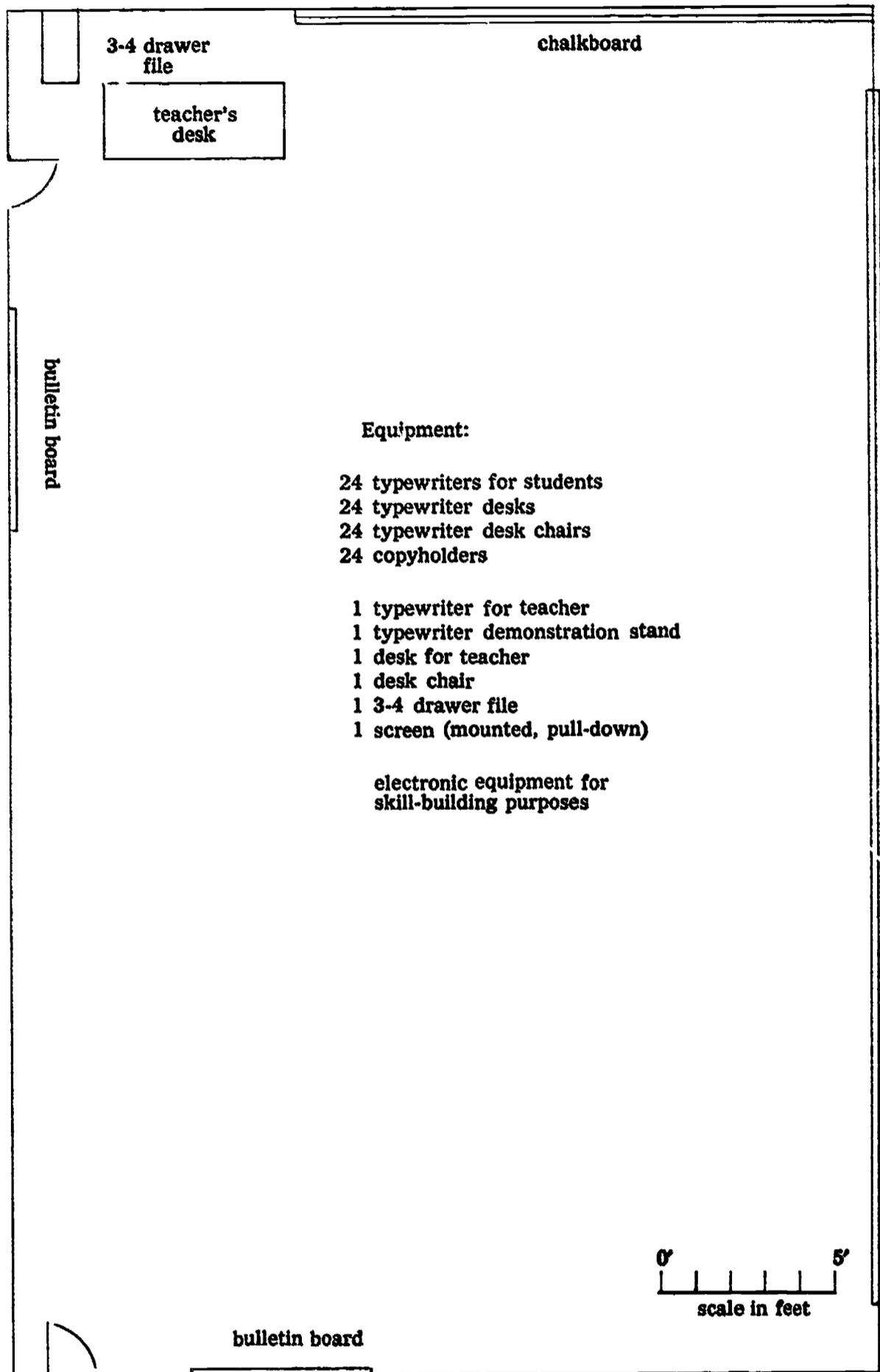
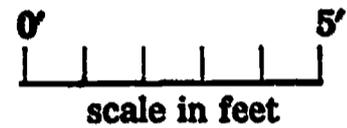
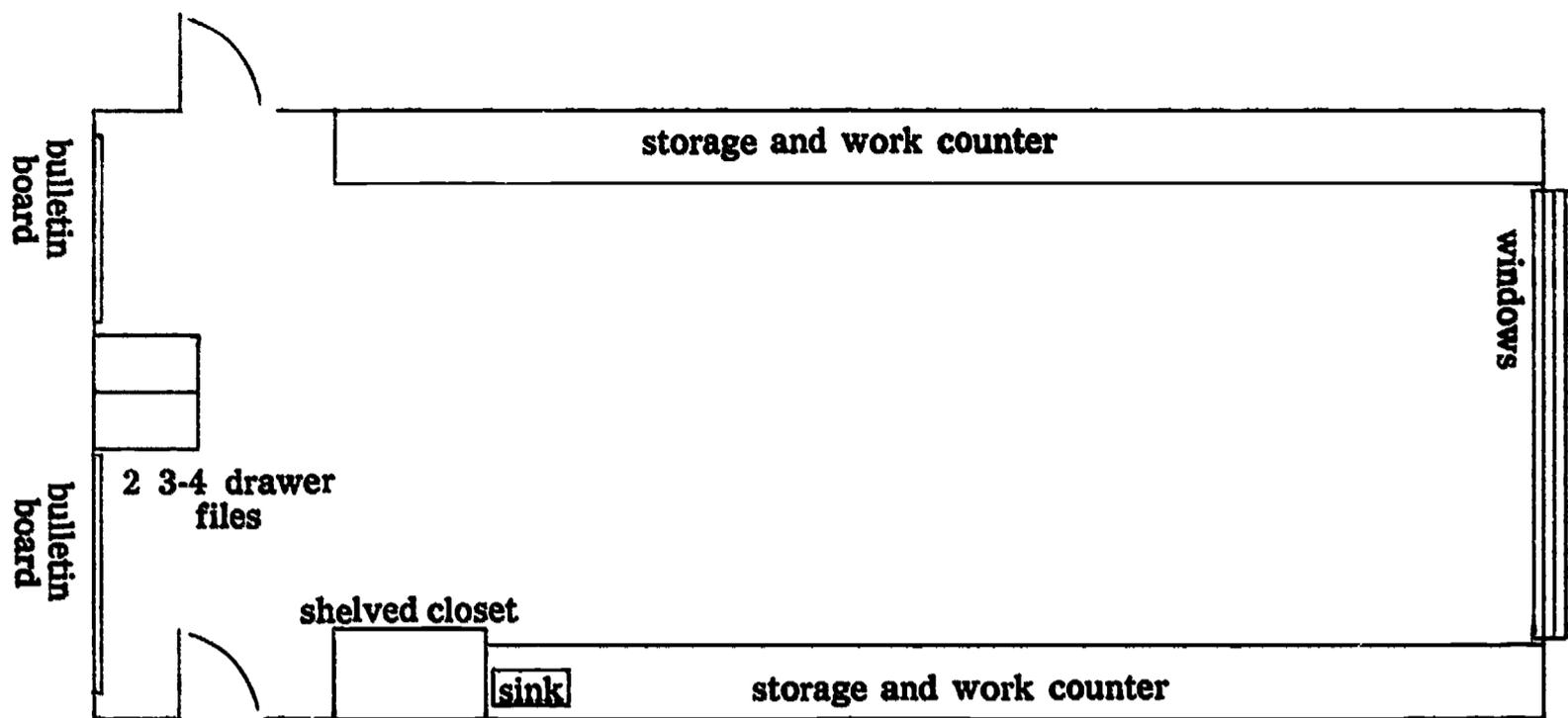


Figure 6E-4
Suggested Layout for a Typewriting Classroom
Size: 24' x 38'

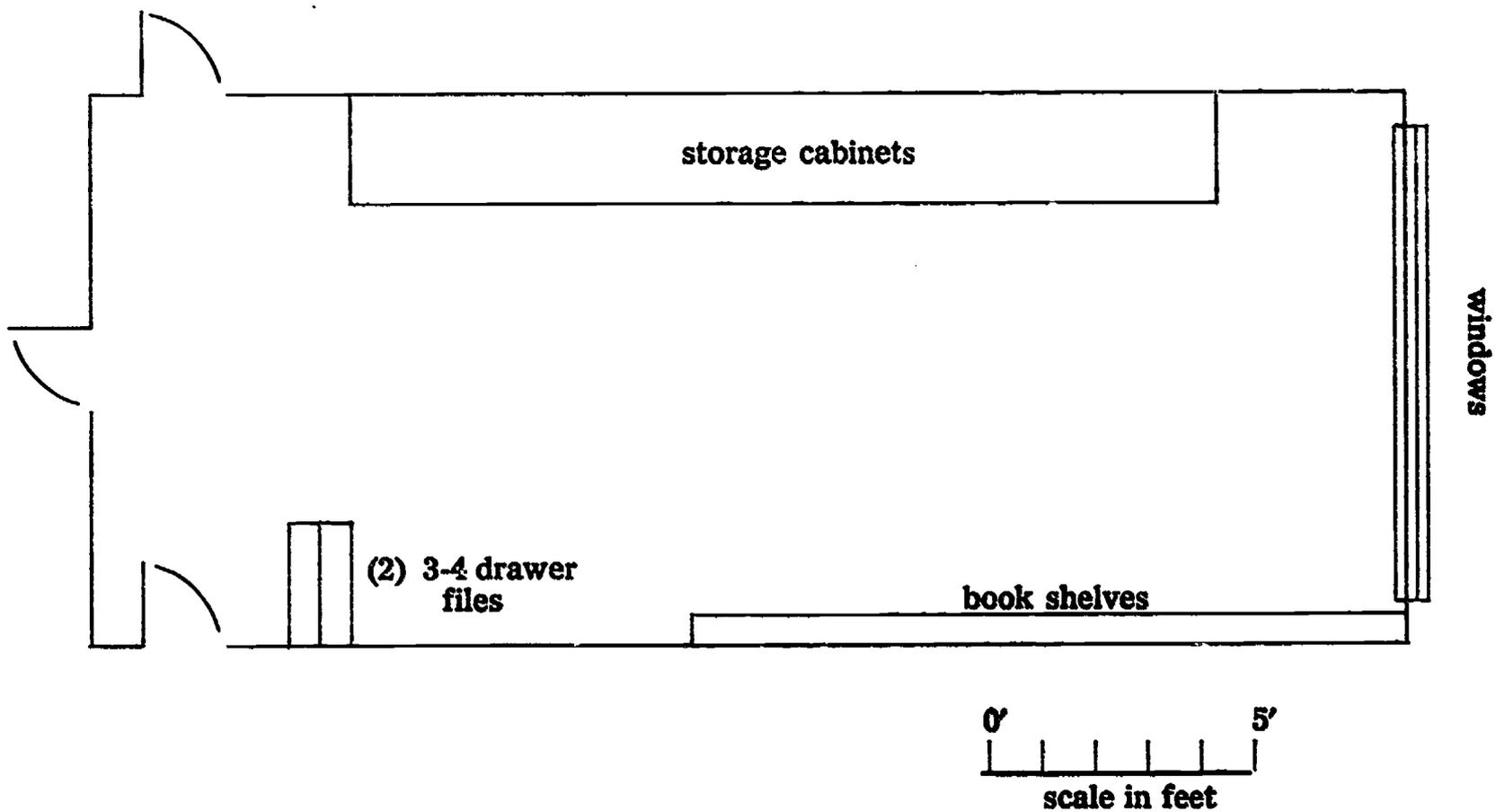


Equipment:

- 2 work tables
- chairs
- 2 3-4 drawer files
- 1 sink

- 1 liquid duplicator
- 1 electric duplicator
- 10-key adding machines
- full keyboard calculators
- rotary calculators
- electronic calculators
- 1 collating machine
- 1 copying machine
- 1 offset
- 1 postage scale
- 1 card-punch simulator
- 1 screen (mounted, pull-down)
- 1 paper cutter
- 1 mimeoscope
- 1 set of styli and lettering guides
- 1 electric long-carriage typewriter

Figure 6E-5
Suggested Layout for a Business Machines Classroom
Size: 10' x 24'



Equipment:

- 1 desk for teacher
- 1 desk chair
- 1 typewriter
- 1 typewriter stand and chair
- 1 2-drawer file
- 2 3-4 drawer files
- 2-3 chairs for conferences
- 1 telephone

Figure 6E-6
Suggested Layout for a Teacher-Coordinator's Office-Conference Room
Size: 10' x 24'

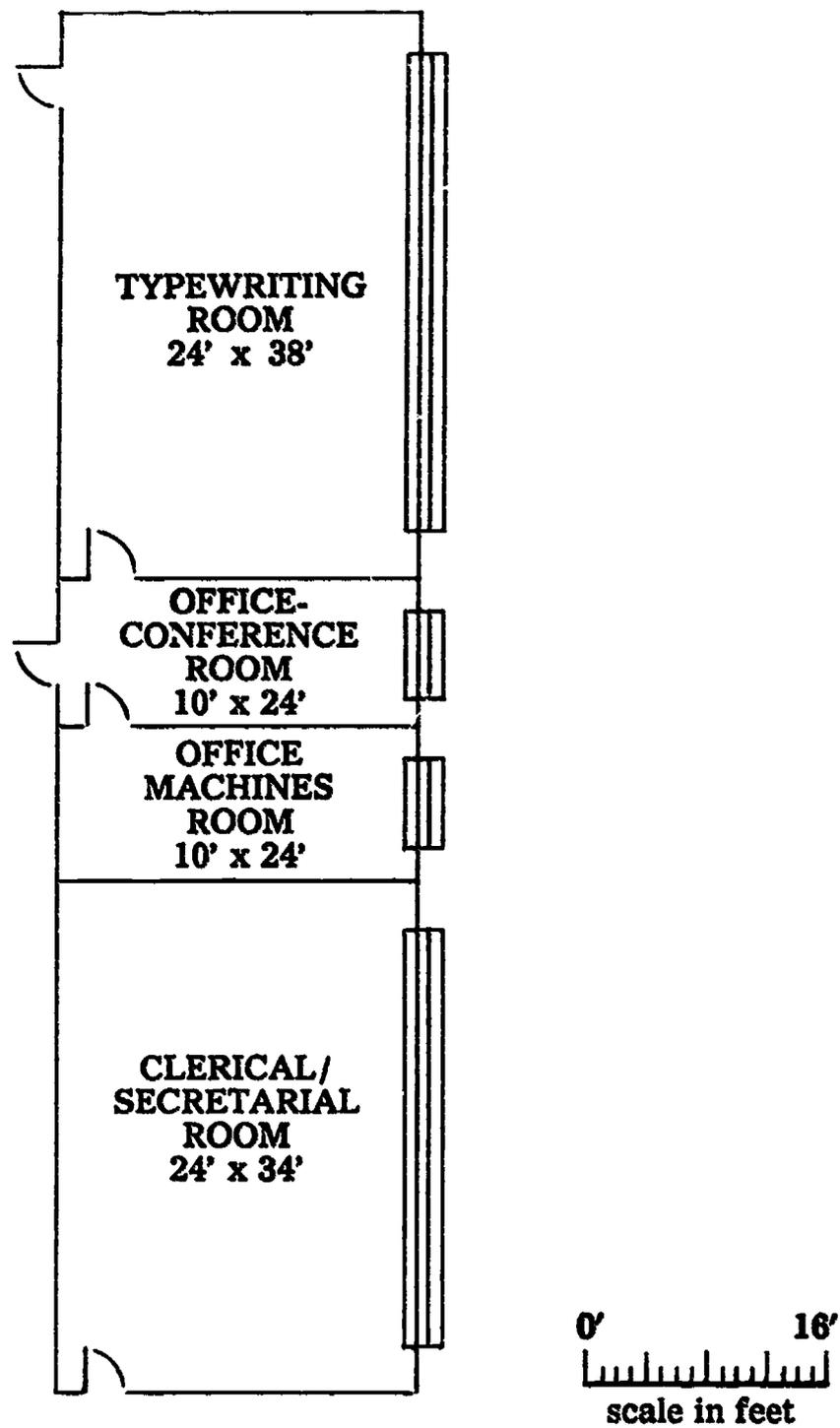


Figure 6E-7
Suggested Layout for Business and Office Occupations Classrooms

SUGGESTED BUSINESS PROGRAMS AND COURSES FOR SECONDARY SCHOOLS IN IOWA

Section 6 - E

The Office Occupations Program

Part 5 Cooperative Office Occupations Programs in the Secondary School

The Office Occupations Program

Section 6-E — Part 5

COOPERATIVE OFFICE OCCUPATIONS PROGRAMS IN THE SECONDARY SCHOOL

The first *reimbursed* cooperative Office Occupations Programs (also called Office Education) in Iowa began in 1966 with the passage of the Vocational Education Act of 1963. However, there were *nonreimbursed* cooperative programs in existence for many years prior to the passage of the Act.

This section describes only those cooperative office occupations programs in the secondary school. Currently, most of the office occupations programs are reimbursed. Information pertaining to such reimbursement may be obtained by contacting the Career Education Division of the State Department of Public Instruction.

The cooperative office occupations program is designed to prepare competent workers to enter and succeed in an office occupation. The program is guided by the career objectives of the students who are enrolled, and activities are selected to provide practical experiences in line with the students' career objectives. The program provides an opportunity for the students to develop knowledges and skills which contribute to a satisfying and productive life in addition to job skills which lead toward job competency.

Students interested in these programs have an opportunity to prepare for stenographic/secretarial, clerical, bookkeeping/ accounting and data processing positions (key-punch or machine operator). Instruction is presented primarily during the senior year with students utilizing and further developing skills previously learned in typewriting, shorthand, mathematics, and English courses as illustrated in Table 6E-2.

In general, the programs are organized in this way: The senior student spends 400 minutes per week in class as a part of the career education program for office occupations. One-half of this time is designed primarily as group instruction, and the remaining one-half is spent in supervised individual instruction.



One student practices shorthand, while another works with the transcription machine in an individual instruction class to improve skills required for their co-op jobs.

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Table 6E-2

Suggested Sequence of Offerings for Cooperative Office Occupations Programs

Student Objectives:	Bookkeeping/Accounting	Clerical	Stenographic-Secretarial
Grade 9	General Business	General Business	General Business
10	Typewriting	Typewriting	Typewriting
11	*Bookkeeping Business Law Introduction to Data Processing Typewriting Business Economics	*Typewriting Bookkeeping Business Law Business Communications Introduction to Data Processing Business Economics	*Typewriting *Shorthand Bookkeeping Business Law Business Communications Business Economics
12	*Bookkeeping* *Related Class* (Individual Instruction) Business Law Machine Accounting Business Economics *Cooperative, Directed, or Simulated Office Education Program	*Clerical Procedures* *Related Class* (Individual Instruction) Business Law Business Economics *Cooperative, Directed, or Simulated Office Education Program	*Steno-Sec. Procedures* *Related Class* (Individual Instruction) Bookkeeping Business Law Business Economics *Cooperative, Directed, or Simulated Office Education Program

* Reimbursed program

*Required to achieve the student's objective

The group instruction period is primarily for the development of skills which all students need. During the individual instruction period the student studies materials designed to help him prepare for his specific career objective.

The instruction may be classified as *remedial*—the students obtain help in the areas in which they are weak; as *regular*—the students are given work that will enable them to make normal progress on the job; or as *advanced*—in which case the students are given work that enables them to progress faster on the job than the average employee.

Practical experience is an extremely important part of the program. It may be provided as cooperative field training in an actual office or as classroom work utilizing the simulated method of instruction. (See Figures 6E-8 and 6E-9.) In the cooperative plan each student is employed in an office occupation in the local community for a minimum of 15 hours per week with the major portion on school time for a wage comparable to any part-time employee in the business. Each student is assigned to a training sponsor at his place of employment and a *training plan* is developed jointly by the student, teacher-coordinator, and training sponsor. The student is evaluated periodically by the teacher-coordinator and his training sponsor and receives credit toward graduation for his on-the-job training.

Terminal Objectives of the Program (minimal)

1. The student will be able to perform the duties required in his chosen career upon entering the world of work or to further his education in his career objective.
2. The student will be able to perform successfully in an office occupation.
3. The student will be able to perform the skills required in his position.
4. The student will be able to perform the social competencies required for his job upon entering the world of work.
5. The student will be able to communicate orally in a manner that is readily understood and acceptable to clients and associates.
6. The student will be able to communicate in writing in a manner that is

readily understood and acceptable to clients and associates.

7. The student will be able to communicate the basic economic understanding in our society.
8. The student will be able to demonstrate proficiency in the use and understanding of the terminology used in his office.
9. The student will be able to operate efficiently the machines used in his office.
10. The student will be able to meet the appropriate personal grooming standards of his office.
11. The student will be able to develop his leadership qualities through the Office Education Club organization.

Student Selection

In selection of students for the office occupations program, the teacher-coordinator should give consideration to the students' career objectives, the community needs, and the overall job requirements of the various office occupations. He should be aware that students vary in individual abilities, from the very low to the very high. Consideration should be given to the students who are disadvantaged or handicapped and to any student who needs, wants, and can benefit by the program.

Facilities

For recommended classroom size, layouts, and lists of equipment for office programs, see Figures 6E-3, 6E-4, 6E-5, 6E-6 and 6E-7 in the discussion on "Equipment and Facilities for Office Occupations." It is highly recommended that adjacent to the classroom there should be an office/conference room for the teacher-coordinator. This room should be large enough for student-teacher conferences and should be so designed that the teacher-coordinator can have eye contact with the classroom while in his office. It is imperative that the office be equipped with a telephone, because the teacher-coordinator has many contacts with the business community.

Each classroom should have an adequate number of electrical outlets. The outlets are necessary for the numerous business machines as well as for the electric typewriters.

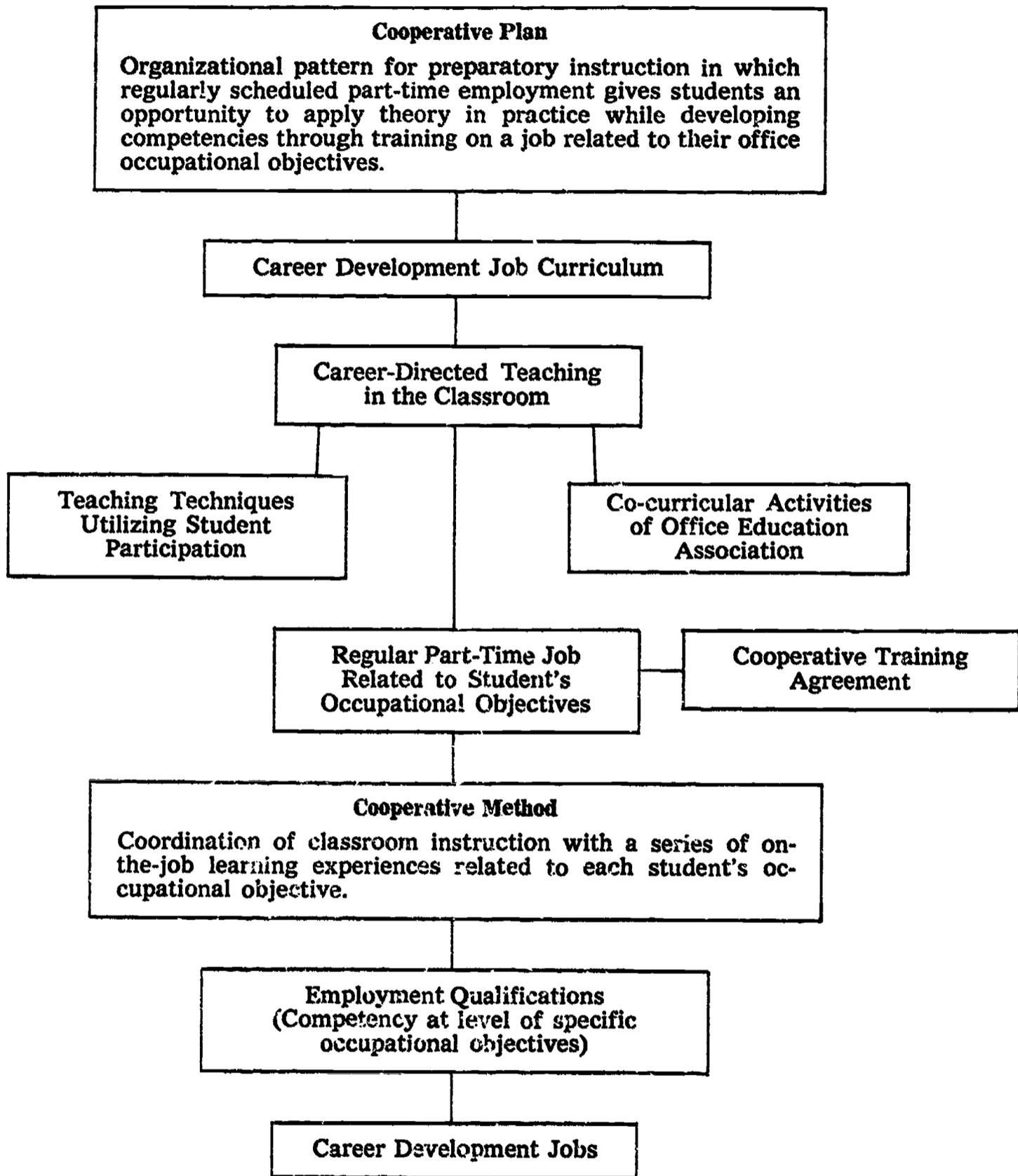


Figure 6E-8
The Cooperative Plan for Business Education Instruction in Secondary Schools

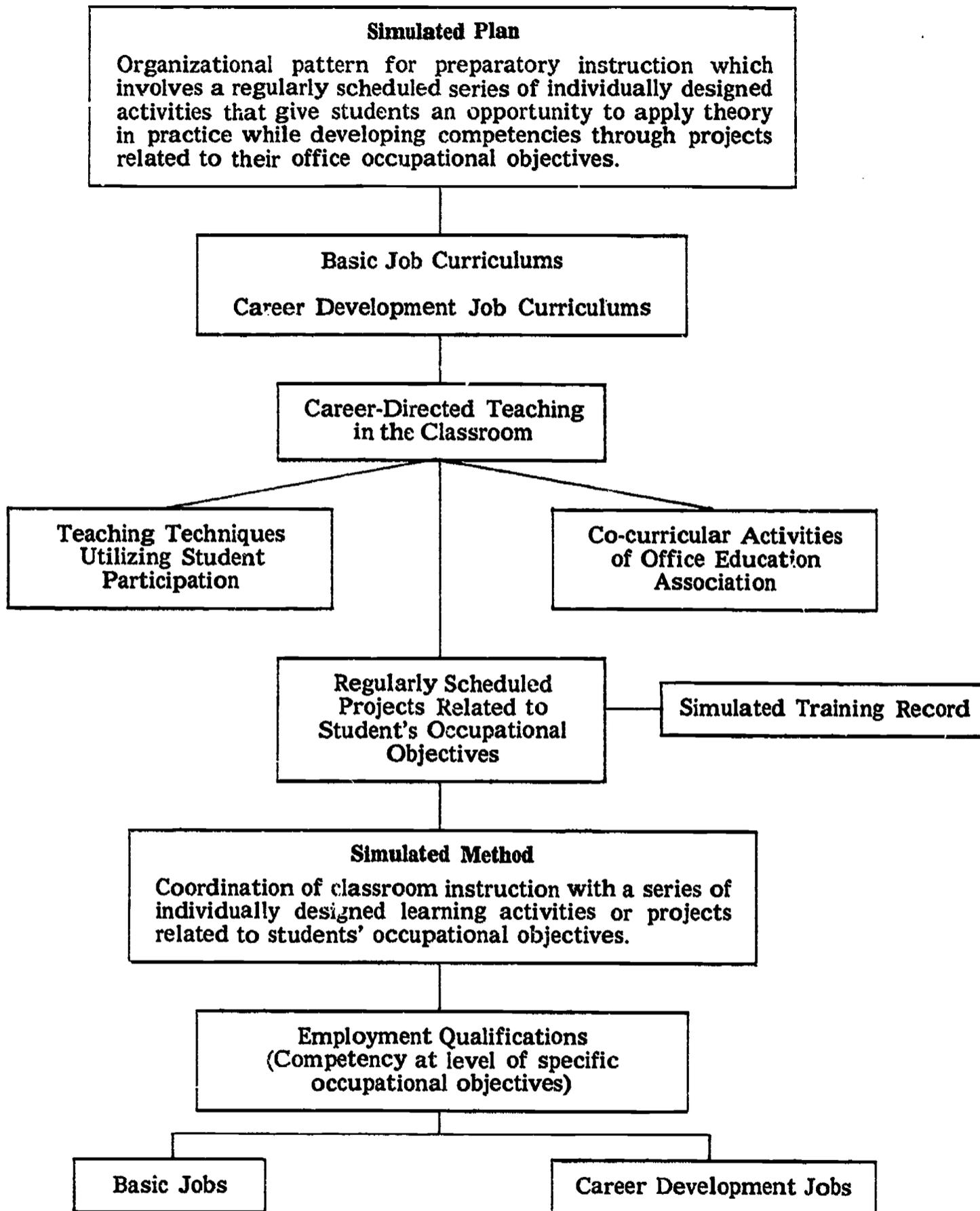


Figure 6E-9
The Project Simulation Plan for Business Education Instruction in Secondary Schools

Each classroom with a number of electrical outlets should have a master switch near the door for convenience and safety factors. A sink should also be included in each machines room.

Teacher Certification

For information on teacher certification for the Office Occupations Program, see the section on Certification of Business Teachers in the Appendix.

Club Program

The Office Occupations Club (formerly Office Education Club) which is an integral part of the program, is designed to develop future leaders in office occupations, to provide incentives and recognition for office occupations students, and to develop the social qualities of career education students. (See Figure 6E-10.)

The club program is organized on the local, state, and national levels. Students have an opportunity to attend the State Leadership Conference held annually in Des Moines and also may be eligible to participate in the annual National Office Education Association conference which is held in a different city in the United States each year.

A strong club program at the secondary level can develop a feeling of pride and unity in the students. Many times a student has not had the opportunity to be part of a group. In the club he can work with fellow students interested in similar career objectives.

Teacher-Coordinator Duties

Some of the principal duties of the office occupations teacher-coordinator are to:

1. Survey the business community.
2. Speak before civic groups in the community about the office occupations program.
3. Organize and assist advisory committees. (For a discussion of such duties, see Section 5-C on "Advisory Commit-

tees" in the General Responsibilities section of this handbook.)

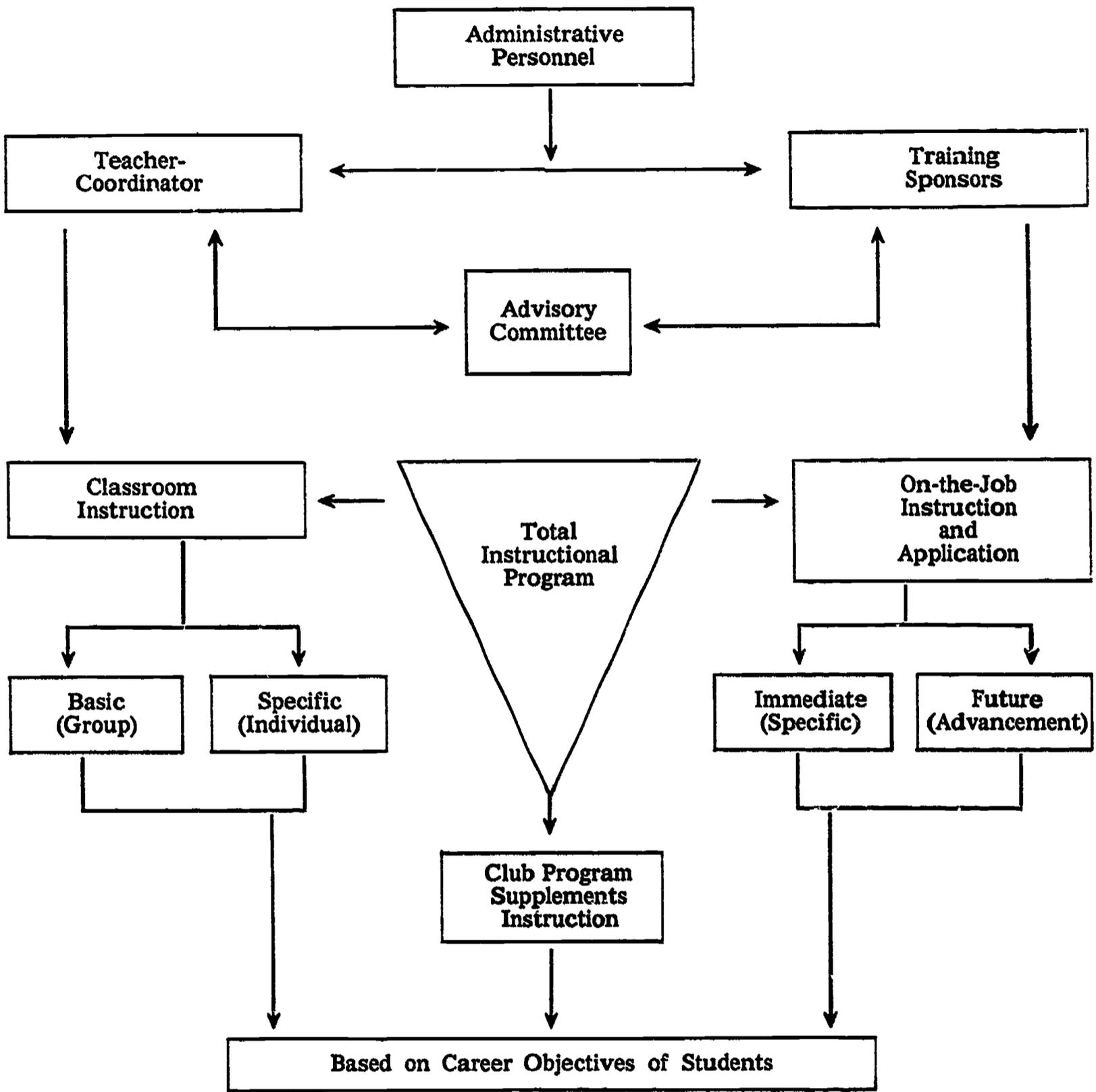
4. Plan classroom layouts.
5. Plan and order equipment and instructional materials.
6. Recruit and select student learners.
7. Establish and develop training stations.
8. Place students in the training stations.
9. Work with on-the-job training sponsors.
10. Plan specific and general instruction related to the training stations being used.
11. Evaluate the student learners, the training stations, and the classroom instruction.
12. Complete follow-up studies of former students.
13. Teach continuing education classes in office occupations subject-matter areas.
14. Serve as advisor to the Office Occupations Club.

The role of the Office Occupations teacher-coordinator is much more diversified than that of the business education classroom teacher. (See Figure 6E-11.) The traditional classroom activities are but a part of his total job. In many cases, the teacher-coordinator is a close link between the business community and the school. He may serve in the capacity of consultant to businessmen, administrator of his program, and counselor to his students. The close contact he has with his students provides a natural setting for his role as counselor.

Selection of Training Stations

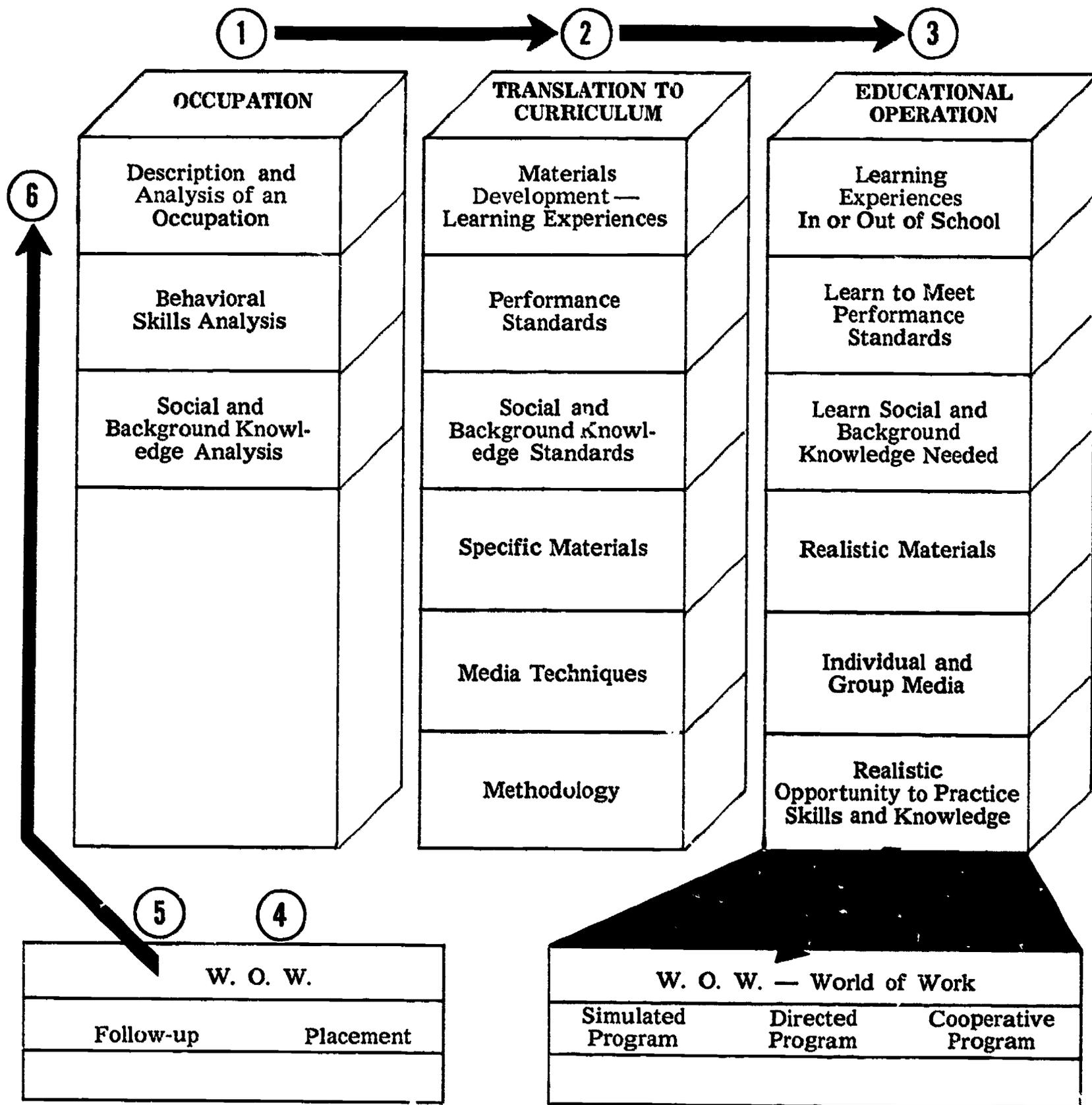
The major factors which should be considered in the selection of training stations are: the needs of the community, the training opportunities offered, and the career objectives of the students and their qualifications.

The coordinator may find the following criteria helpful in selecting training stations (Figure 6E-12).



Adapted from Ralph E. Mason and Peter G. Haines, *Cooperative Occupational Education* (Illinois: The Interstate Printers & Publishers, Inc., 1965), p. 342.

Figure 6E-10
Organization of Instruction for a Cooperative Program



The educational cycle starts with (1) an analysis of the occupation and its description in behavioral terms which is then (2) translated into educational procedures, and (3) placed into operation in and out of school through planned learning experiences and realistic opportunities to use skills and knowledges, followed by (4) placement in the world of work and concluded with (5) an evaluation based on success on the job and (6) the cycle is repeated.

Adapted from materials developed by Dr. Bruce I. Blackstone, Head, Office Occupations, U.S. Office of Education, 1967.

Figure 6E-11
THE EDUCATIONAL CYCLE
For Curriculum Development in Career Education

Criteria for Selecting Training Stations

- 1. Employer interest in cooperative training
- 2. Interest of other employees in on-the-job training experience for trainees
- 3. Employer willingness and ability to provide employment for student for entire school year
- 4. Adequacy of standards to provide a minimum number of hours of training
- 5. Desirable working conditions for the trainee
- 6. Supervision of trainees' on-the-job experience by a competent person
- 7. Objectives of local plan understood and accepted by the employer
- 8. Desirable reputation of employer within the community
- 9. Trainee not subject to hazards affecting health, morale, or work
- 10. Comparable wages paid for similar occupations in the community
- 11. Convenience of business establishment with respect to the student, the school, and for coordination activities
- 12. Opportunity for trainee to have a variety of learning experiences.

Figure 6E-12

Criteria For Selecting Training Stations

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Section 7

POST-SECONDARY BUSINESS EDUCATION IN IOWA

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Section 7

POST-SECONDARY BUSINESS EDUCATION IN IOWA

General Description

During the late 1960's post-secondary business education in Iowa experienced considerable growth. Previously, post-secondary business programs (aside from those in the four-year colleges) were mainly concerned with providing college-parallel course work although a few public and private junior colleges had started career-oriented programs. During this time, private business schools were the only schools designed to offer a multitude of business programs of varying lengths for those individuals interested in entry-level positions. The responsibility for adult business education was delegated to local school districts throughout the state, and the offerings varied widely according to the area being served.

Because of the rapid change and great expansion taking place in post-secondary education, particularly at the community college level, business curriculums have become much more comprehensive. In addition to the college-parallel offerings, much emphasis has been and is now being placed on programs in career education. These new offerings in career education include everything from middle-management preparation to basic skill development for job-entry positions. Students completing these programs receive certificates or diplomas, associate degrees of applied science degrees, or associate of arts degrees, depending on the length and intensity of the program. Curriculum development, of course, has not been limited to a few areas of business; on the contrary, many different kinds of programs are now being provided in the areas of accounting, data processing, marketing, and office education.

As a result of the growth and expansion of post-secondary education in Iowa, the following new purposes and objectives have been defined for this level of business education:

1. To serve educational needs and inter-

ests of all people of post-secondary school age without regard to educational, social, economic, racial, or religious backgrounds.

2. To provide individuals with the technical knowledge and skills necessary to enter into and progress in gainful employment.
3. To provide individuals with the knowledge, understanding, and skill to continue in their present occupations or to change to new occupations as desired or required.
4. To extend individuals' awareness of the prerogatives and responsibilities of citizenship in contemporary society.
5. To provide a setting in which individuals may increase their awareness



Part of a student's total educational program at the post-secondary level is the social interaction with faculty and students.

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of themselves and their varied environments and may examine ideas freely and critically without threat or fear of recrimination.

6. To provide individuals with avenues of exploration which lead to enjoyable and self-fulfilling use of leisure time.
7. To serve as a center for creative expression and participation in the fine and applied arts.

8. To help the local community enhance the quality of its intellectual, social, cultural and economic life through the provision of educational programs and services.

Teacher Certification

For information concerning teacher certification at the post-secondary level, see the Appendix, "Certification of Business Teachers."

POST-SECONDARY BUSINESS EDUCATION PROGRAMS IN IOWA

Post-secondary business education in Iowa is provided through community colleges, junior colleges, four-year colleges and universities, technical institutes, and private business schools. Programs in these institutions vary considerably in length, intensity, purpose, and subject matter, as described in the following section. The illustrations in this section of the handbook refer to programs organized on a *quarter* basis, but some programs doubtless are organized on a *semester* plan.

COLLEGE-PARALLEL PROGRAMS IN TWO-YEAR INSTITUTIONS

Two-year Transfer Program

The business transfer curriculum developed at the post-secondary level should be designed to prepare the student who plans to pursue a business major in a four-year college or university. Since the requirements of the four-year institutions vary, the student enrolled in a post-secondary program is advised to check carefully the requirements of the institution to which he plans to transfer. Faculty advisers and/or counselors should be available to assist each student in planning his program.

The first two years of a four-year program in business should consist primarily of liberal arts courses. Introductory business courses may also be taken and will vary according to the interest area of the student. These interest areas could include business

education, marketing, accounting, and finance. Table 7-1 shows a typical business transfer program found in a two-year institution.

The table on page 205 is an example of a program that might be taken in a two-year post-secondary institution by a student pursuing a four-year degree in business:

Students who complete a program such as that outlined above will be eligible to receive an Associate of Arts Degree. In addition, these courses will partially fulfill the requirements for a bachelor's degree in most colleges or universities.

Career-Oriented Programs

College-parallel programs in two-year institutions may also offer career-oriented curriculums that are not necessarily designed to meet the requirements of a bachelor's degree but that should prepare students with a higher degree of competencies for various careers in business.

The primary purpose of career-oriented programs is to provide an occupational curriculum that is more rigorous than most programs that would be classified as vocational-technical. In the development of these programs less emphasis should be placed on liberal arts offerings than is normally required in the business transfer program. This will permit offering more advanced courses in specialized areas, such as the accounting, marketing, secretarial, and finance programs. Table 7-2 presents an example of a career-oriented program in accounting.

Table 7-1

**A Typical Two-Year Transfer Program in Business in
Iowa Two-Year Colleges**

FRESHMAN YEAR		SOPHOMORE YEAR	
	Credit		Credit
Fall Quarter		Fall Quarter	
Composition I	4	Literature ^c	4
Science ^a	4	Principles of Accounting I	3
History and/or Art ^b	3-4	Introduction to Business	4
Principles of Economics	3	Elective ^{d-e}	5
Elective	3		
	<hr/>		<hr/>
	17-18		16
Winter Quarter		Winter Quarter	
Composition II	4	Literature ^c	4
Science ^a	4	Principles of Accounting II	3
History and/or Art ^b	3-4	Fundamentals of Statistics	4
Principles of Economics	3	Elective ^{d-e}	5-6
Elective	3		
	<hr/>		<hr/>
	17-18		16-17
Spring Quarter		Spring Quarter	
Speech I	3	Literature ^c	4
Science-Math	4-5	Principles of Accounting III	3
History and/or Art ^b	3-4	Elective ^{d-e}	9
Principles of Economics	3		
Elective	3		
	<hr/>		<hr/>
	16-18		16

^a General Biology, General Chemistry, Introduction to Chemistry, General Physics, Physical Science, College Algebra or higher.

^b History of Western Civilization, U.S. History, Art History, Art Appreciation, Music Appreciation, Introduction to Theater.

^c Introduction to Literature, Literature of Western Civilization.

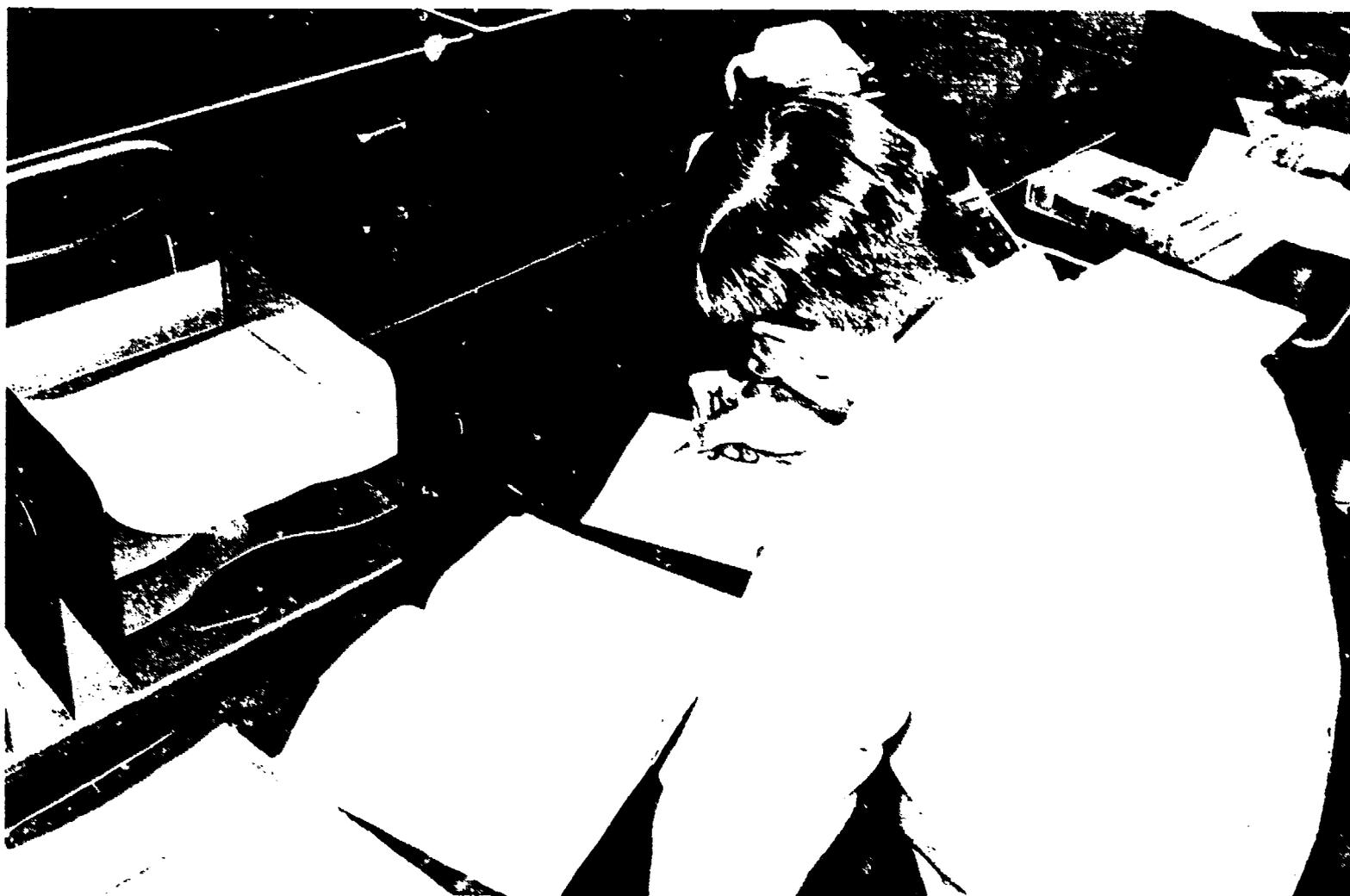
^d Majors in Business Education should include Typewriting, Shorthand, and Office Machines.

^e Majors in Business Administration or Marketing may include Principles of Selling, Principles of Marketing, Channels and Institutions, Principles of Insurance, and Principles of Finance.

Table 7-2
A Typical Two-Year Accounting Program in Iowa Two-Year Colleges

FIRST YEAR		SECOND YEAR	
Fall Quarter	Credit	Fall Quarter	Credit
Principles of Accounting I	3	Intermediate Accounting I	4
Composition I	4	Elements of Cost Accounting I	4
Office Machines	2	Principles of Finance	3
Economics I	3	Business Law I	3
Introduction to Business	4	Accounting Laboratory	2
Accounting Laboratory	2		
	18		16
Winter Quarter		Winter Quarter	
Principles of Accounting II	3	Intermediate Accounting II	4
Composition II	4	Elements of Cost Accounting II	4
Economics II	3	Business Law II	3
Intermediate Algebra	5	Electives	3
Introduction to Data Processing	3	Accounting Laboratory	2
Accounting Laboratory	2		
	20		16
Spring Quarter		Spring Quarter	
Principles of Accounting III	3	Income Tax	3
Speech I	3	Accounting Procedures	4
Economics III	3	Electives	6
Fundamentals of Statistics	5	Accounting Laboratory	2
Business Application of Data Processing	3		
Accounting Laboratory	2		
	19		15
Summer Quarter			
Business Internship	12		

Upon completion of such a program, the student will be eligible to receive an Associate of Arts Degree.



Increasing opportunity in business for people with an accounting background has resulted in many new accounting programs being offered in Iowa's post-secondary institutions.

Career Education

Career education got its first real impetus as a school program in the post-elementary school from the Vocational Education Act of 1963. Such a career-oriented curriculum should be developed with the career objectives of the student in mind. The courses of study and related activities should be designed to give the student the opportunity to develop knowledges and skills leading to job competency—a competency which, in turn, should lead to a satisfying and productive life.

The programs should vary in length depending on the entry skills and abilities possessed by students, demands of the field for which the student is preparing, and the amount of substantive subject matter to be learned. The curriculums offered should be determined by local business and student needs as interpreted by faculty, administration, and an advisory committee made up of businessmen and school staff.

Career-education programs in business are

usually categorized under the headings of accounting, data processing, marketing, and office education. The following sections describe each of these areas.

Accounting Programs

There are several types of accounting programs, depending mainly on length and intensity of the course work. Following is a general description of the kinds of programs that would be either one or two years in length.

The one-year accounting program prepares students for entry-level recordkeeping positions such as accounts clerk, bookkeeper, payroll clerk, accounts payable clerk, or junior accountant. Most of these programs include group instruction, individual instruction, laboratory practice, simulated work experience, and on-the-job training. A thorough knowledge of accounting principles is necessary, followed by practical application of these principles. Related instruction generally includes business mathematics, data process-

ing, communication skills, and office machines. Table 7-3 shows an example of a one-year accounting program.

Table 7-3
A Typical One-Year Accounting Program in Iowa Two-Year Colleges

This one-year program is designed to prepare students for entry-level positions in the accounting field. It includes fundamental knowledge of accounting, and an understanding of basic concepts, definitions, and terminologies. Group instruction, individual instruction, laboratory practice, and simulated work experience also are included.

Fall Quarter	Credit
Accounting Fundamentals I	5
Accounting Laboratory	5
Communication Skills I	3
Basic Mathematics I	3
Office Machines	2
College Typewriting I	3
Personal Development	1
	22
Winter Quarter	
Accounting Fundamentals II	5
Accounting Laboratory	5
Communication Skills II	3
Elements of Data Processing I	3
Income Tax Procedures	3
	19
Spring Quarter	
Accounting Fundamentals III	5
Accounting Laboratory	5
The American Economy	3
Elements of Data Processing II	3
Applied Business Law	3
	19
Summer Quarter	
Business Internship	12

The two-year semi-professional program may be a continuation of the one-year program, or it may be parallel or similar to the

college transfer program. Course work includes additional accounting theory, more instruction in general business courses, and more liberal arts courses than are found in the one-year program. Employment opportunities are available at the semi-professional level in cost accounting, internal auditing, general accounting, and other areas of specialized financial reporting. Students enrolled in this program will be eligible to receive an Associate of Applied Science Degree.

Data Processing Programs

Simply defined, data processing is the activity of gathering facts and figures (data) and transforming (processing) them to produce useful information. This activity is as old as man, who has always used his eyes, ears, fingers, and mind to process data. However, today when people talk about data processing, they are often referring to the use of the powerful tools of unit-record (punched-card) equipment and electronic computers. Without humans, unit-record equipment and computers are helpless. People are needed to plan, guide, instruct, direct, control, and apply these machines in order that they may be used effectively. Following is a brief description of several of the data processing positions which are directly connected with the unit-record/computer utilization:

1. *Data processing managers* who plan, organize, direct, coordinate, and control the data processing activities and personnel in an organization.
2. *Systems analysts* who conduct detailed systems studies of an organization with a view toward improving operations through the use of data processing equipment.
3. *Computer programmers* who work closely with systems analysts to analyze problems, data, and information requirements, and write the programs or instructions required to make the computers work.
4. *Operating personnel* who operate, monitor, and control a variety of unit-record machines and/or electronic computers.
5. *Keypunchers* who record data on cards by using keypunch equipment to punch holes in appropriate locations



Greater utilization of data processing in business has resulted in an increased demand for qualified people in this field. Pictured above are the data processing facilities in one of Iowa's modern community colleges.

on the cards. The same type of operator uses a keytape machine to code data directly onto magnetic tape, thereby bypassing the keypunch operation.

6. *Data processing support services* which involve various activities in and around a data processing department and which support the data processing activity.

In order to provide skilled personnel to fill these various kinds of positions, data processing educational opportunities have been made available through both public and private post-secondary education institutions. Programs of study in data processing should vary from those for high school graduates to those developed for advanced graduate students. Courses should range from beginning orientation through advanced, specialized studies. Offerings should be broad enough to allow the students to select a program of study according to their particular objectives and backgrounds.

Career-education offerings at the post-secondary level in data processing should include areas of study in business programming/systems, data processing supporting

services including keypunching, computer science courses, and individually selected courses to fit the needs of non-data processing majors. To present these areas of study, different forms of instruction are utilized, and many specific kinds of course work are necessary. The various kinds of course work that might be offered in a typical curriculum for Programmer/Programmer Analyst will be found in Table 7-4.

In data processing programs it is important that education be related to the current computers on the market. Most employers of students graduating from post-secondary data processing programs are influenced by the amount of machines or "hands-on" experience a student receives and whether or not such experience is on modern equipment.

Finally, schools offering a data processing program should have an advisory committee of businessmen involved directly with data processing. Such a group can make recommendations regarding the curriculums and how much time should be given to each area of study. They may also be useful in student selection, placement, and machine procurement problems.

Table 7-4

A Typical Programmer/Programmer-Analyst Curriculum in Iowa Two-Year Colleges

FIRST YEAR		SECOND YEAR	
	Credit		Credit
Fall Quarter		Fall Quarter	
Self-Service Aids for Programmers	1	S/360 DOS Communications Coding	3
Punched Card Data Processing	2	COBOL Projects	2
Introduction to Computers and Programming	3	On the Job or Assigned Projects	2
Introduction to S/360	3	Communication Skills I	3
Computer S/360 Assembly Language Programming I	3	Programming Systems	2
Card-Tape-Disk Projects I	2	Electives	5
Open Lab	0	Open Lab	0
Flowcharting Techniques	2		
	<hr/>		<hr/>
	16		17
Winter Quarter		Winter Quarter	
Computer S/360 Assembly Language Programming II	3	Introduction Report Program Generator	2
Card-Tape Disk Projects II	2	Introduction S/360 FORTRAN Programming	3
Computer S/360 Disk Operating System Coding	5	Installation Management I	3
Program Analysis	2	Statistics	3
Documentation I	2	Electives	6
Computer Operating Techniques	2	Open Lab	0
Related Equipment I	1		
Open Lab	0		
	<hr/>		<hr/>
	17		17
Spring Quarter		Spring Quarter	
Introduction to S/360 COBOL Programming	5	Numerical Analysis	3
Business Organization and Management	3	On the Job Systems Projects	3
Computer S/360 Disk Operating System Advanced Coding	5	Payroll/Personnel Systems	3
Electives	3	Accounting Systems	3
Open Lab	0	Material Control Systems	3
	<hr/>	Electives	2
	16	Open Lab	0
			<hr/>
			17
Summer Quarter		Summer Quarter	
Introduction to Systems	3	Introduction to Operations Research	3
Accounting Survey I	3	Production Control Systems	3
Advanced S/360 COBOL Programming	5	Project Management Systems	3
Mathematics	3	Applied Systems I	3
Electives	3	Electives	5
Open Lab	0	Open Lab	0
	<hr/>		<hr/>
	17		17

Marketing Programs

Marketing career-education programs may fall into many different specialized areas including retail marketing, fashion merchandising, food marketing, agri-business, industrial marketing, petroleum marketing, service marketing, traffic management, and advertising. Regardless of the area of specialization, most marketing curriculums include elements of group instruction, individual instruction, practical experience, and a co-curricular club program.

Group instruction should vary according to the type of marketing program being offered. However, the curriculum should include general business and marketing courses, technical courses relating to the specific areas of study, and other courses which will contribute towards improving the student for his chosen career, as well as for life in general.

Individual instruction is another integral part of the marketing program and should be incorporated in order to allow each student to pursue areas of study specifically related to his own career interests. This method of instruction can also be used to supplement group instruction or to allow the student to work on various kinds of projects relating to his course work or on-the-job work experience. Certainly, the teacher is the key to the success of this method of instruction. The teacher must be able to recognize individual differences in students and then have the ability to provide the proper materials and guidance to allow for individual growth and development. Further ideas for individual instruction may be found in the Instructional Media Center Section under General Responsibilities of Business Education.

Practical experience can be a very important part of marketing education programs. It may be provided as cooperative field training, through the use of in-school projects relating to work experiences, or through utilizing practices which allow the students to observe individuals in actual work situations relating to their field of marketing study.

Finally, an integrated activity of marketing career education is the club program. This might be a chapter of Distributive Education Clubs of America, a local club for a specific education program, or a local club for all marketing students in a particular school.



Practical work experience in retail selling is an integral part of a student's education in many of the post-secondary marketing programs in Iowa.

This co-curricular activity can provide incentive and recognition to the student at the local, state, and national levels. The various activities of a club program can help develop leadership abilities and social qualities necessary for competent employees in the business world.

Table 7-5 shows a typical career education program in marketing.

Office Occupations Programs

There are many different kinds of specialized office occupations programs, but all fall into the general categories of either clerical or secretarial curriculums. The methods of instruction that should be included in most office education curriculums are group instruction, individual instruction, practical experience, and co-curricular club program.

Group and individual instruction in the clerical programs may include the following units of study:

1. Typewriting
2. Office Machines (adding, calculating, reproduction, and transcription)
3. Filing
4. Communication skills
5. Business mathematics

Table 7-5

A Typical Fashion Merchandising Program in Iowa Two-Year Colleges

Fashion Merchandising provides technical training for individuals interested in the field of retailing fashion products. Career opportunities for trained persons include the areas of fashion coordination, fashion buying, fashion promotion, and departmental management.

FIRST YEAR		SECOND YEAR	
	Credit		Credit
Fall Quarter		Fall Quarter	
Principles of Selling	4	Principles of Display	2
Introduction to Business	4	Principles of Marketing	4
Principles of Fashion Merchandising	3	Principles of Advertising	4
Basic Mathematics I	3	Fashion Design	4
Composition I or	3	Fashion Show Procedures	3
Communication Skills I	4	Fashion Merchandising Lab	2
Personal Development I	2		
Fashion Merchandising Lab	1		
	<hr/>		<hr/>
	20-21		19
Winter Quarter		Winter Quarter	
Business Internship	6	Business Internship	6
Fashion History	3	Supervisory Development	3
Psychology of Human Relations	3	Textiles	3
Personal Development II	2	Textile Laboratory	2
Merchandise Math	3	Credit Procedures	3
	<hr/>		<hr/>
	17		17
Spring Quarter		Spring Quarter	
Principles of Retailing	4	Business Law I	3
Communications Skills II or	3	Introduction to Business	3
Composition II	4	Retail Management	5
Economics I or	3	Retail Accounting	4
Principles of Business Economics I	3	Problems in Fashion Merchandising	2
Speech I	3	Fashion Merchandising Lab	1
Fashion Buying	5		
Fashion Merchandising Lab	2		
	<hr/>		<hr/>
	20-21		18
Spring Quarter			
Business Internship	12		



Increasing business demands for clerical and stenographic personnel have resulted in the need for more extensive office programs at the post-secondary level. Pictured above is an office-occupations classroom in one of Iowa's community colleges

6. Clerical office procedures
7. Personal development
8. Clerical recordkeeping

Instruction in the secretarial programs may include the following units of study:

1. Typewriting
2. Shorthand
3. Office Machines (adding, calculating, reproduction, and transcription)
4. Records management
5. Communication skills
6. Business math
7. Secretarial office procedures
8. Personal development
9. Secretarial accounting
10. Office management

Additional units, such as introduction to data processing, introduction to business, business law, and economics, may also be

incorporated into either of these two programs to meet specific curricular objectives.

Practical experience is another extremely important part of the program. It may be provided as cooperative field training or classroom work utilizing the simulated method of instruction. More information on the use of practical experience appears in this handbook in the section on Distributive Education programs and in the section on Cooperative Office Occupations.

An integrated activity of the office occupation programs is the career office education club. It provides incentives and recognition for students at the local, state, and national levels. The annual State Leadership Conference is a culminating activity of the club program. The various activities help to develop leadership abilities and social qualities necessary for competent employees in the business world.

Post-secondary office education students often spend a majority of their classroom

hours in a simulated business setting. In such case, the classroom equipment may be comparable to that which is found in modern business offices. Each student should have an office desk, a typewriter, and one or more additional office machines—a setting which simulates more effectively the atmosphere of business than that which is usually found in a general-purpose business education classroom.

A typical simulated office classroom should have the following equipment:

1. Electric typewriters
2. Adding and calculating machines
3. Reproduction machines
4. A usable telephone network
5. Transcribing machines
6. Shorthand practice system

An example of such a career-education office program will be found in Table 7-6.

Table 7-6
A Typical Medical Secretarial
Program in Iowa Two-Year
Colleges

The Medical Secretary Program is a four-quarter program designed to give students the skills they will need as a secretary in one

of numerous health-related occupations—doctors' offices, clinics, insurance offices, hospitals, and laboratories.

Fall Quarter	Quarter Credit	Spring Quarter	
College Typewriting II	3	Medical Secretary Typewriting	4
College Shorthand II ^a	4	Medical Secretary Dictation ^a	4
Communication skills I	3	Medical Secretary Terminology and Body Structure II	4
Office Calculating Procedures	3	Medical Secretary Office Procedures	4
Elements of Data Processing I	3	Records Management	3
Medical Law	1	Office Education Laboratory	3
Office Education Laboratory	3		22
	20		
Winter Quarter		Summer Quarter	
College Typewriting III	3	Medical Secretary Machine Transcription	2
College Shorthand III ^a	4	Introduction to Business	4
Medical Secretary Terminology and Body Structure I	4	Psychology of Human Relations	3
Communication Skills II	3	Office Education Laboratory	3
Office Accounting	4	Business Internship	6
Office Procedures I	7		18
	25		

^aElectives may be taken in lieu of shorthand with approval of the coordinator.

Continuing Business Education (formerly called Adult Education)

This topic is discussed in the General Responsibilities section of this handbook.

Private Business Schools

Private business schools are vocational schools specializing entirely in instruction that leads to employment in the business world. The primary objective of most business colleges is employment for the graduate.

Generally speaking, the programs revolve about a combination of skill subjects and technical knowledge encompassing such areas as typewriting, adding and accounting machine operation, computers, keypunch and other allied business machine operation, shorthand, accounting, and the business administration fields—economics, business law, and sales.

Courses differ according to the size of the business school but usually cover such fields as private secretary, medical secretary, legal secretary, general accounting, professional accounting, business administration, and fashion merchandising. Most programs can be finished in one year's time.

The better private schools belong to the United Business Schools Association and are accredited by the Accrediting Commission for Business Schools. As such, they enjoy the recognition of public educators and the departments of public instruction of their states. They participate in state and federal programs. Their value has been especially recognized by the vocational rehabilitation division of the various state departments of public instruction with whom they have worked very closely since the inception of the rehabilitation programs.

Further information may be obtained from:

The Accrediting Commission for Business Schools
United Business Schools Association
1730 M Street, N. W.
Washington, D. C. 20036

Business Education in the Four-Year College and University

While this publication is concerned primarily with business education at the high school level, it seems appropriate to include some brief comments on business education at the four-year college and university level since some students will pursue a bachelor's degree in business education. Historically, many of the present business administration schools began as business education departments although, in reality, such departments performed dual functions:

1. The preparation of students to enter the profession of teaching; and
2. The provision of various professional programs so that the graduates could choose a career in business.

The two functions were later separated, and a distinct division was made between business administration and business education. At the present time, some schools continue to educate business teachers in the schools of business, while some schools of business maintain a joint venture with the schools of education in educating business teachers. Still others have separated their education and business programs completely, with the schools of education granting the undergraduate business education degree while the student takes certain business administration courses in the school of business.

Section 8

APPENDIX

8-A Certification of Business Teachers in Iowa

Information furnished by Division of Teacher Education and Certification, Iowa State Department of Public Instruction

8-B Taxonomy System for Business Education

Information furnished by Career Education Division, Iowa State Department of Public Instruction

8-C Definitions of Business Education Terms

Alline Staveley
Charles City Community Schools
Charles City

Appendix
Section 8-A

CERTIFICATION OF BUSINESS TEACHERS

Iowa operates on the approved program approach to teacher certification. Briefly, this means that an applicant must complete an approved program of teacher preparation at a recognized institution and be recommended by the institution for the teaching, supervisory, or administrative endorsement sought.

A recognized institution is one which is a member of the regional accrediting agency for the territory in which it is located and has approval by the state board or agency having jurisdiction over teacher education and certification within the state in which the institution is located. The institution must also have recognition from outside the state, either by national recognition through accreditation by the National Council for Accreditation of Teacher Education, or by Iowa approval of its teacher education program.

Applicants whose preparation has been completed at a regionally accredited college with teacher education programs approved by the state board or other agency having jurisdiction over teacher education and certification in the state in which the college is located, may be issued a temporary certificate valid for a one-year term. If teaching performed under such a temporary certificate is evaluated by the applicant's supervisor as successful, a professional certificate will then be issued to the applicant. The supervisor may also recommend that the temporary certificate be renewed.

Applicants who have completed their preparation at a college not regionally accredited, but which is approved by the state board or other agency having jurisdiction over teacher education and certification within the state in which the college is located, may qualify for certification after successful completion of six semester hours of graduate-level courses at a graduate school recognized by the Iowa State Board of Public Instruction. Applicants may obtain a temporary certificate valid for

one year prior to the completion of this graduate work.

Classroom teachers - secondary endorsement: The basic level of preparation for classroom teachers is a baccalaureate degree and the completion of an approved teacher education program, including supervised student teaching. The major portion of the preparatory program and the student teaching experience must have been completed at the recognized institution which recommends the applicant for certification. An applicant for authorization to teach in grades seven through twelve must have completed student teaching at the secondary level, with approval issued to teach in specific subject-matter areas upon the recommendation of the teacher education institution.

Under current approval standards, the Department of Public Instruction issues business education approval in the following areas: bookkeeping, business law, business training, shorthand, and typewriting.

An individual who has completed a teacher education program in one area and who wishes to add an additional approval area or areas should contact an institution (Iowa or non-Iowa) offering an approved business education program in his area of interest and have the institution outline the course requirements he would need to complete in order to have the institution recommend him for the appropriate approval.

More information concerning business teacher certification can be obtained from the Division of Teacher Education and Certification, Department of Public Instruction, Grimes State Office Building, Des Moines, 50319. In addition, recognized colleges and universities in the state will provide information regarding the specific certification course requirements in effect at their respective institutions.

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TEACHER CERTIFICATION FOR TEACHER-COORDINATORS OF REIMBURSED WORK-EXPERIENCE PROGRAMS

In addition to the requirements for certification of business teachers in the State of Iowa, there are additional requirements to certify teacher-coordinators of reimbursed work-experience programs (as defined in this handbook—see the part on Professional Development of the Business Teacher in the General Responsibilities section). These additional requirements, in general, may be stated as follows:

1. Additional course credit in the subject matter field of specialization. For instance, the distributive education coordinator would be required to take additional credit in the area of marketing and related programs. The office education coordinator would be required to take additional hours in office occupations courses such as secretarial skills and related office administration

courses. A similar requirement would be made for coordinating data processing programs.

2. Professional vocational education courses sufficient to qualify the teacher-coordinator to organize and administer such programs, to teach students on an individual basis, as well as to understand the basic philosophy underlying career education.
3. A stipulated number of hours of paid employment in the work field in which the teacher is instructing and coordinating such programs.

More specific information on career education certification for both secondary and post-secondary is available from the Career Education Division Department of Public Instruction, Des Moines.

Appendix
Section 8-B

TAXONOMY SYSTEM FOR BUSINESS EDUCATION

Every business teacher should be familiar with the occupations for which his students are being prepared. In addition, every business teacher should be familiar with the many subject-matter areas and activities offered in the various educational programs.

Two correlated publications printed by the United States Government provide such information:

1. Handbook VI, *Standard Terminology for Curriculum and Instruction in Local and State School Systems*, identifies, classifies, and describes a broad spectrum of subject matter areas and activities offered in elementary, secondary, junior college, and adult education programs. The coding system is intended to provide a distinct identity for each educational program area and for each of the classified items of information within it. Of particular interest to the business teacher would be Section 03, which provides for recording of Business Education Programs of a non-vocational nature; Section 04, which provides for recording of Distributive Education Programs; and Section 14, which provides for recording of Office Occupations Programs.
2. *The Dictionary of Occupational Titles*, which defines 22,000 occupations. This

reference has long been used and is normally available in any library system.

Accurate and comparable information about instructional programs offered in public schools in the United States and its territories is essential for realistic planning, efficient operation, and meaningful evaluation of such programs by state and local school systems. Such information can result in improved decision-making in areas such as administration, guidance, curriculum development, and instruction.

The differences in instructional program offerings among local school systems have long called for some method for providing a standardized means of analyzing variations in curriculum content. The codes and definitions for the instructional programs listed in the taxonomy provide a uniform basis for collecting, recording, interpreting, and transmitting meaningful data about enrollments, graduates, placements, and other significant items at the local, state, and national levels.

Persons interested in specific codes should refer to the above-named handbook since it is impractical to include the codes in this publication. Copies may be ordered from the Superintendent of Documents, Washington, D. C. - 20402.

Appendix
Section 8-C

DEFINITIONS OF BUSINESS EDUCATION TERMS

(listed in alphabetical order)

Address: The label, name, or number by which a register or storage location is identified.

Advisory Committee: A group of persons, usually outside the education profession, selected for the purpose of offering advice and counsel to the school regarding the school's business program. Members are representatives of the people in the business field with which the business program is concerned.

Analog Computer: Computer which measures physical qualities and converts them into measurable quantities.

Assemble: To prepare a machine-language program from a symbolic program by substituting machine codes for symbolic codes.

Basic Business Education: A term denoting those experiences designed to develop business competency and literacy, thereby giving the student an understanding and appreciation of the business system and an awareness of his responsibility as an economic citizen.

Binary: The arithmetic numbering system used in computers; zero and one are the only digits used in binary notation.

Block Diagram: A chart of a system, instrument, or computer program in which selected portions are represented by annotated boxes and interconnecting lines.

Block-Time Program: A method of scheduling a cooperative education program. Students attend classes full time for a certain length (or block) of time and then work full time on a specific job for a certain length (or block) of time. (Applicable to programs on the post-secondary level).

Bookkeeping/Accounting: The art of recording, classifying, and summarizing in a significant manner in terms of money and transactions which are, a part at least, of a financial character, and interpreting the results thereof. (American Institute of Certified Public Accountants).

Brainstorming: A conference and educational technique of solving specific problems, amassing information, stimulating creative thinking, and developing new items by unrestrained and spontaneous participation in discussion.

Capitalism: Economic system based on private enterprise and private ownership of all kinds of property.

Career Education: A program of education organized to prepare the learner for entrance into a particular chosen field of work or to upgrade employed workers. Commonly recognized career education programs in the broad field of business education include distributive education and office education.

Clerical Procedures: A course in which there is instruction and practice in filing, recording, duplicating, calculating, and routine communication activities in their various forms as practiced by modern business.

Community College: A publicly supported school which meets the curriculum requirements of a junior college and which offers in whole or in part the curriculum of a vocational school.

Compile: To convert a source-language program, such as COBOL (Common Business Oriented Language) to a machine-language program.

Computer Program: Sequence of steps which the computer is to follow and the specific instructions which the machine is to perform to reach the desired results.

Consumer Education: Development of an understanding of the functioning of a socio-economic system as it affects the consumer in his choice of goods and services and their use and care.

Cooperative Education: A program for persons who are enrolled in an office occupations or distributive education program and who, through a cooperative arrangement between the school and employers, receive part-time vocational instruction in the school and on-the-job training through part-time employment. It provides for alternation of study in school with a job in industry or business, the two experiences being planned and supervised by the school and employer so that each contributes definitely to the student's development in his chosen occupation. One-half of the hours at work are during the school day and are equal to or exceed the hours spent in school during the regular school year.

Coordination: The process of building and maintaining harmonious relationships among all groups involved in the cooperative program to the end that the student-learner receives the very best preparation for his chosen occupation. This includes all activities of the teacher-coordinator with the exception of the actual teaching process within the classroom.

Data Processing: Application of machine methods to gathering, collecting, and processing of information for the proper functioning of a business information system.

Digital Computer: An electronic machine which uses numbers to express quantities and variables.

Directed Program: A program for persons who are enrolled in an office occupations or distributive education program and who, through a cooperative arrangement between the school and other federal, state, or city governmental agencies, receive part-time vocational instruction in the school and on the job in these different governmental agencies. It provides for alternation of study at school with a job, the two experiences being planned and supervised by the school and employer so that each contributes definitely to the student's development in

his chosen occupation. Hours at work are scheduled during the school day.

Distributive Education: A program of education offering training in the selling, marketing, and merchandising of goods and services for the purpose of improving distribution and upgrading distributive workers, including employees, managers, and owners engaged in distributive occupations.

Plan A: A two-year program in distributive occupations which provides a minimum of 200 minutes per week of instruction plus work experience during the regular school schedule. In addition to instruction, the students are required to acquire the equivalent of 900 minutes per week of practical experience, half of which must be on school time.

Plan B: A one-year program in distributive occupations which provides a minimum of 350 minutes per week of instruction plus work experience during the regular school schedule. In addition to the 350 minutes of instruction, the students are required to acquire the equivalent of 900 minutes per week of practical experience, half of which must be on school time.

Distributive Education Clubs of America (DECA): The national organization for students enrolled in distributive education classes. The club is an integral part of the instructional program and provides opportunity for leadership, cooperation, and organizational training and further develops a professional attitude toward careers in retail, wholesale, and service occupations.

Distributive Occupations: Those occupations related to the performance of activities that direct the flow of goods and services, including their appropriate utilization from the producer to the consumer. These activities include selling and such sales supporting functions as buying, transporting, storing, promoting, financing, marketing research, and management.

Economic Risks: Risk which is taken by a person when he invests money. The risk may result in either a profit or a loss.

Field Experience: A planned activity by one or more students who observe some organi-

zation or establishment outside the classroom for the purpose of seeking first-hand information about its operation or of acquiring skills and experiences not possible in the classroom.

- File:** A collection of related records; e.g., in inventory control, one line of an invoice forms an item; complete invoice forms a record; and the complete set of such records form a file.
- Fiscal Policy:** Government policy for achieving certain goals for the nation's economy; policy concerns legislation and administrative practices with respect to taxation and the public debts, appropriations, and expenditures.
- Flow Chart:** A graphic representation for the definition, analysis, or solution of a problem in which symbols are used to represent operations, data flow, and equipment.
- Forums:** Public meetings held by an organization for the discussion of subjects of current interest.
- Free Enterprise System:** An economic order in which individuals and groups are at liberty to make their own economic decisions subject to relatively few governmental regulations and private monopolistic restraints.
- Generator:** In programming, a program that constructs another program for specially designed sets of instructions by selecting, adjusting, and arranging them in accordance with given specifications.
- Gross Words a Minute (GWAM):** A typewriting rate computed by dividing the number of standard 5-stroke words typed by the number of minutes in the writing. No deduction is made for errors; errors are merely circled.
- Housekeeping:** Operations in a computer routine which do not contribute directly to the solution of a problem but do contribute directly to the execution of a program by the computer.
- Individual Instruction:** Instruction which covers the concepts, skills, and attitudes needed by the individual student-learner to handle the duties and responsibilities at his training station and to prepare for advancement toward his career objectives.
- Instruction:** Represents each basic operation which is to be performed by a machine.
- Linkage:** The interconnections in a computer program between a main routine and a closed routine; i.e., entry and exit for a closed routine from the main routine.
- Long-Term Investment:** Investment which is made for the purpose of deriving a future return in the form of income or capital appreciation generally for a period exceeding one year.
- Memory:** The information storage section or heart of the computer.
- Microprogramming:** Machine-language coding in which the coder builds his own machine instructions for the computer from the primitive basic instructions built into the hardware.
- Monetary Policy:** Policy of the government which regulates the availability of money and credit.
- Multiplexing:** The interleaved or simultaneous transmission of two or more computer messages for a single channel.
- Net Production Rate a Minute (N-PRAM):** A typewriting rate computed by scoring production timed writings in which errors must be erased and corrected. A penalty is deducted from the gross words typed for each uncorrected error. Generally, the penalty is 10 words for each error on the original copy, 5 words for the carbon copy. Or, a more realistic penalty is one in which 26 seconds are added to the test time for each uncorrected error.
- Office Occupations Program:** A career education program for office careers through initial, refresher, and upgrading education leading to employability and advancement in office occupations—a recognized program in Iowa which is reimbursed or reimbursable from state and federal vocational funds.
- Office Education Association (OEA):** The state and national organization for students enrolled in office occupations classes. The club is an integral part of the instructional program and provides opportunity for leadership, cooperation, and organization training and further develops a

professional attitude toward careers in office occupations.

Post-Secondary Institutions: Institutions which offer education beyond the secondary level; for example, area vocational and technical schools and community colleges, private business schools, four-year colleges and universities, and junior colleges.

Programming: The overall process of preparing a machine program for the computer, which includes the preparations of the block diagram to write the program.

Random Access: An electronic data processing technique for storing and retrieving data which does not require a strict sequential storage of the data nor a sequential search of an entire file to find a specific record. A record can be addressed and accessed directly at its location in the file.

Recession: A temporary falling off of business activity during a period when such activity has been generally increasing, as during that after a depression.

Reimbursable Program: A class or curriculum, offered through a public school, teacher-education institution, or under contract, which is organized and conducted in accordance with the provisions of the state plan for career education or approved by the United States Office of Education. Such programs are eligible to receive funds from state and federal career education appropriations to cover in part certain operational costs.

Related Instruction: (a) Basic related instruction: those concepts, knowledges, skills, understandings, and attitudes needed by all the students as basic to occupational preparation; and (b) specific related instruction: those concepts, skills, and attitudes needed by the individual student-learner to handle the duties and responsibilities at his training station and to prepare for advancement toward his career objective.

Scaling: The process of changing a quantity from one notation to another in a computer system.

Secretarial Procedures: A course in which instruction and practice in taking dictation, transcribing, performing higher-

level stenographic duties, and supervising the other clerical and stenographic employees is included.

Short-Term Investment: Investment which may be made for the purpose of speculation or to provide for unexpected expenditures or interruptions to income—generally for a period of less than one year.

Shorthand I > Used to designate the first
Shorthand II: and second semesters of shorthand. Course objectives and course content are dependent upon the number of semesters offered. However, the objectives may be broadly classified as study of the theory of shorthand, presentation and practice of familiar and unfamiliar material, plus transcription integrated with the study of spelling, grammar, punctuation, etc.

Simulated Program: A program for persons who are enrolled in an office occupations or distributive education program and who receive career education instruction and practical experience through appropriate work in the school's office occupations or distributive education laboratory. It provides for alternation of study and practical experience, the two being planned and supervised by a teacher-coordinator so that each contributes definitely to the student's development in his chosen occupation.

Simulation: The process of studying the performance of an organization over an extended period of time by devising mathematical models to represent each component part of the organization, while linking these models together to account for the interrelationships.

Source Language: A language nearest to the user's usual business or professional language, which enables him to instruct a computer.

Teacher-Coordinator: A member of the school staff who coordinates classroom instruction with the practical experience (cooperative, directed, or simulated) in the office occupations or distributive education programs. This person may or may not be involved in teaching the related classes for the students participating in these programs.

Terminal Objectives: Behavioral objectives which focus on the student and the minimal performance expected of him at the end of an instructional period.

Training Agreement: A non-legal memorandum, usually signed by the parent, student, employer, and coordinator, setting forth the period of training, hours of work, salary, and other pertinent facts and information necessary to assure basic understanding of the student's position as a trainee in the cooperative part-time program.

Training Plan: A plan developed by the training sponsor, the coordinator, and possibly the student, which includes the duties to be learned on the job and in school. The student should be led toward his career objective through the provision of adequate work activities, on-the-job instruction, and classroom instruction.

Training Sponsor: The person in the training station who has been assigned the responsibility of supervising the work experiences of the student learner and for giving him the instruction he needs on the job.

Training Station: The business or industry which is used as a supervised occupational training laboratory for the student

learner in the distributive education or office occupations programs.

Typewriting I > Used to designate the first
Typewriting II and second semesters of typewriting. Course objectives and course content are dependent upon the number of semesters offered. However, the objectives may be broadly classified as mastery of the keyboard, development of correct techniques, building speed and accuracy, teaching typewriting knowledges, teaching basic typewriting applications, and the building of production-level skills.

Unit Record: Information concerning a single transaction which is recorded on a single punched card.

Word: A set of characters which have one addressable location and are treated as one unit in a computer system.

Work-Study Program: A program designed to provide part-time employment for youths who need the earnings from such employment to continue their career education program on a full-time basis. Employment under this program will be for the local school district or some other public non-profit agency, local, state, or federal, and will not replace present employees who ordinarily perform such work.