AN EVALUATION OF THE OFFICE PRACTICE COURSE AT SENTINEL HIGH SCHOOL, MISSOULA, MONTANA

by

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ABSTRACT

The purpose of this study was to evaluate the Office Practice course at Sentinel High School by comparing skills and attitudes actually taught in each unit with the skills and attitudes which employees and employers indicated as desirable for beginning employees to possess when they enter the labor market.

Methods used to arrive at the evaluation included an initial questionnaire submitted to the members of the 1965-66 Office Practice class of Sentinel High School to determine their employment status; questionnaires completed by those graduates who indicated non-clerical or clerically related employment; and, completion of questionnaires and personal interviews with the clerically employed and their employers. All of the employees rated each unit of the Office Practice course, using an A-B-C-D-E rating scale (A indicating great value and E, little value), in terms of individual on-the-job value. Employers used the same rating scale and rated each unit in terms of on-the-job value to these beginning clerical employees. Employees and clerical employers made suggestions for course content changes or additions.

Conclusions drawn as a result of this study were: (1) beginning employees lacked proficient skill and confidence in the operation of some business machines, especially the typewriter and dictating machines; (2) too much emphasis was placed on the automated data processing unit in view of the present requirements of Missoula employers; (3) additional instruction in communicative skills was needed; (4) additional emphasis needed to be placed on accuracy in all units; and, (5) some type of work experience prior to graduation and employment would be desirable.

Recommendations were made as a result of this study that (1) additional office machines be purchased for the Office Practice laboratory to insure adequate machine instruction; (2) units on production and statistical typing and oral and written communication be added to the course; (3) an introductory unit containing terms and types and uses of equipment be substituted for the present ADP unit; and (4) adoption of a three-phase plan of pre-employment work (cooperative, directed, simulated) be included to meet the needs of all students enrolled in Office Practice at Sentinel High School.

CHAPTER I

INTRODUCTION

The term office practice as used in this study refers to a terminal course of instruction in the use of office machines and duplicating equipment, in office procedures using this equipment, and in knowledges in such fields as filing, recordkeeping, and telephone techniques, and a review of office attitudes and etiquette expected of a beginning clerical employee. Upon completion of this course a student may find employment in a routine clerical position involving typing, operation of duplcating equipment, filing, and operation of simple business machines.

The Office Practice course at Sentinel High School was found to be satisfactory in content to meet the requirements of the Vocational Education Act of 1963 which stated in Part A, Section 8:

> "The term 'vocational education' means vocational or technical training . . . which is given in school or classes . . . under public supervision and control or under contract with a State board or local educational agency, and is conducted as part of a program designed to fit individuals for gainful employment as semiskilled or skilled workers or technicians in recognized occupations (including any program designed to fit individuals for gainful employment in business and office occupations . . ." (16).

Part A, Section 1 of the same Act stated in part that "it is the purpose of this part to authorize Federal grants to States to assist them to maintain, extend, and improve existing programs of vocational education, . . .' (16).

At the end of the 1965-66 school year, after one year of operation under the original proposal approved by the State Board of Vocational

Education for reimbursement from Vocational Act of 1963 funds, the administration at Sentinel High School and the instructor of the Office Practice course became concerned with the ways and means to "improve" and "extend" the existing program. It seemed advisable at that time to go directly to the persons most concerned with the course, i.e., the members of the 1965-66 Office Practice course and their employers. This evaluation is the result of the investigation conducted to determine the needs and desires of both beginning clerical employees and the employers of these inexperienced people.

Statement of the Problem

The chief purpose of this study was to evaluate the Office Practice course at Sentinel High School by comparing skills and attitudes actually taught in each unit with the skills and attitudes which employees and employers indicated as desirable for beginning employees to possess when they entered the labor market.

Procedures

The following four procedures were used to solve the problem:

1. Members of the 1965-66 Office Practice class were polled by mail to determine employment status.

2. A questionnaire, to rate each basic unit of the Office Practice course in terms of on-the-job usefulness, was sent to persons who indicated non-clerical or clerically related employment.

3. Personal interviews were held with the clerically employed and their employers to determine the usefulness of each unit of the Office Practice course and to discover recommended course changes and/or additions.

4. Personal interviews, to determine inadequacies of training, were held with the unemployed.

Limitations

The scope of the investigation was limited in size to one class and one year.

The review of literature was limited to the materials in the author's personal library and those materials available in the Montana State University Library and Montana State University Commerce Department.

Much of the comparable literature reviewed was written prior to the Vocational Act of 1963 and many of these investigations were conducted in large industrial areas.

In order to provide an understanding of the growth of vocational business education in the United States, a review of literature was made. This review is presented in Chapter II.

CHAPTER II

REVIEW OF LITERATURE ON VOCATIONAL BUSINESS EDUCATION

Most of the investigations pertaining to the problem, which were available for study, were made prior to the enactment of the Vocational Act of 1963, when, for the first time, Federal funds were specifically designated for use by classes in the various office occupations which were terminal insofar as giving the student definite basic skills, attitudes and knowledges which he would use in an entry clerical position. However, it was believed that the basic needs of students and employers remained the same even though additional funds were made available for instructional purposes.

According to Mays (10), vocational business education had its origin in apprenticeship programs in the American colonies prior to the 19th Century. The early development of the private business school in this country, and the reluctance of commercial teachers in the public schools to regard their work as vocational rather than cultural served to retard the development of adequate vocational business education in the public secondary school.

He said that many vocational leaders felt that business education should have had the same Federal financial aid that was provided for other major areas of vocational education. However, it remained for the Act of 1963 to give vocational business education its first big financial boost.

Roberts (13) said the need for clerical workers as well as bookkeepers and stenographers became apparent early in the 20th Century with the rapid expansion of business. As early as 1901 the National Education Association (NEA) recognized this need and appointed a committee to study commercial

education. In 1903 this committee recommended a four year course in commercial education.

The Federal Board of Vocational Education called attention to this need in 1917. As a result, additional business courses were offered in the high schools. Commercial education in the secondary school received an additional stimulus in 1917 with the passage of the Smith-Hughes Act. This act was the first Federal law to provide reimbursement for vocational subjects not leading to a baccalaureate degree. Business education was not specifically included; however, definite provision was made for aiding states in the solution of business education problems by means of studies, investigations, and reports. In 1918 the Federal Board for Vocational Education appointed an assistant director for commercial education as an aid to states in providing training programs in this field. Commercial education activities of the Board were curtailed in 1933 with the loss of staff personnel when duties in this field were transferred to the U. S. Commissioner of Education.

Beaumont (1), in reviewing "50 Years of Progress in Business Education," stated that "Business education merely supplemented on-the-job training up to 1950; then on-the-job training gradually supplemented business education in day schools. The growth of high school business education roughly parallels the growth of the schools themselves. Enrollments rose despite opposition from the vested interest of traditionalists."

Tate (14) believed that office practice courses were vocational business education courses, and that office practice courses should be structured so that students would think in terms of the whole office rather than in

terms of isolated jobs performed in the office. Students should possess salable skills to be employable.

He also wrote that schools in states operating under the provisions of the Vocational Act of 1963 emphasized the vocational aspect of office practice, and salable skills became the prime objective.

Specific objectives of office practice courses are as diverse as the situations under which they are taught. South-Western Publishing Company, in Monograph 91 (1954) (7), grouped office practice course objectives under four major headings:

1. Skill development and improvement
2. Development and improvement of attitudes, work habits, personality, and character traits
3. Acquisition of knowledges and understandings
4. Integration and provision for work experience

Braden (2) made a study concerned with determining the effect of varying amounts and types of vocational office training on the subsequent beginning career patterns of female high school graduates. The study was limited to female high school graduates who entered the office field within six months after graduation without having received any additional formal training.

He sent questionnaires to 366, 1956 female high school graduates from the public and parochial high schools of Lansing, Michigan. Of the 135 graduates who entered the office field and who resided in Michigan in 1962, 120 were interviewed. Six graduates submitted data by mail making a total of 126. The data received were divided into four groups according to the

amount of vocational office training the individuals had received in high school.

Braden found that there was a significant difference among the four groups in their labor market behavior after graduation. Those with more vocational office training felt prepared for work in the office field and had more stable beginning career patterns. He found there was no substitute for high school vocational office training when entering the office field after graduation without additional formal training. The findings in this study indicated that vocational office training obtained in high school was a major determinant of beginning career patterns for female high school graduates who entered the office field without additional training.

Braden's study seemed to give every indication that vocational office training is advisable at the high school level, especially for students who had no plans for further formal training in the business field.

Waters (17) conducted a similar study at Montana State College. The purpose of the Waters' study was to ascertain the need for office practice in the general business curriculum of a small high school. Professional leaders in the field of business education were interviewed to determine their views regarding the need for office practice in the business curriculum. Graduates of secondary schools who had taken office practice and were employed in the clerical field were interviewed to ascertain the values of the office practice course to them on the job. Mrs. Waters found that an office practice course was of value to students in obtaining a job and that office practice should be included in the business education curriculum of those secondary schools which are large enough to support the program.

This investigation was somewhat limited in scope as only one professor of business education at Montana State College was interviewed and the only students interviewed were those graduates of Manhattan (Montana) High School employed in the Gallatin Valley. However, it was agreed by all that office practice should be offered in a small high school of approximately 100 students.

Deeney (3) made an investigation to evaluate the Richey (Montana) High School business education curriculum. He conducted his investigation through an opinion poll of graduates. His investigation was concerned with determining the current aims and objectives of business education in small high schools; determining the similarities of the business education curriculum of Richey High School with other high schools in Eastern Montana; and, in determining what the graduates' attitudes were in regard to the effectiveness of the Richey High School business education curriculum.

He reviewed literature to determine the aims and objectives of business education in the small high schools. He sent an inquiry blank to other Eastern Montana high schools to determine similarities of curriculums. A questionnaire for determining attitudes toward the business curriculum at Richey High School was sent to 100 Richey High School graduates.

Deeney found that the respondents from other school districts concluded that small high schools should offer a general business background rather than a vocational business background. He found that nearly 50 per cent of the 80 graduates questioned started college, approximately 40 per cent of these graduated, and very few of the students studied business subjects in college. He found that Typing I, Bookkeeping and Typing II

were the courses most frequently taken by graduates and these were also the courses the graduates would take if they were to attend Richey High School again. A desire for the opportunity to have taken such courses as Salesmanship, Business Law, and Business Math was expressed.

He concluded that the business curriculum at Richey High School was not broad enough and should include more general education courses. Course content at Richey did compare with high schools of similar size which he studied. He recommended that General Business, Recordkeeping, Business Law, Business Math, Typing I, Salesmanship and Consumer Economics be offered and that Shorthand I and Typing II be dropped from the curriculum.

The author noted that office practice was not mentioned as being a part of the business curriculum of Richey High School. Richey's geographical location in a large farm-ranch area far from a large town somewhat limited employment opportunities for business graduates. Respondents were probably influenced by that fact. A course in occupational information might be offered to acquaint Richey High School students with the possibilities for employment in business and office areas. This study was done prior to the Vocational Act of 1963. A change toward a more vocational business curriculum might have been indicated if the study had been made at a later date.

Since the chief purpose of the present investigation was to ascertain the needs of students as beginning office employees and to find out the desires of the employers who hired the beginning office workers, it seemed advisable here to review some of the current literature on these subjects.

Hall (6) surveyed 19 representative businesses in Augusta, Georgia, to (1) determine the average job requirements and minimum basic skills of office

employees; (2) determine the duties and responsibilities beyond the basic skills required of office employees; (3) determine the intangible qualities considered by businessmen to be essential for their employees, and (4) help the business education teachers in the senior high school of Richmond County school system establish some of their instructional objectives. She requested the above information on secretaries, stenographers, clerks, bookkeepers, office machine operators, receptionists, and other office employees. Respondents were asked to list, in order of importance, five desirable attitudes and personality traits for office employees. Data was requested on formal education desired, additional skills required for employment, and the major duties of the job.

Hall found that all but one firm required high school graduation; clerks comprised the largest group of office employees; typewriting was the only skill required of every job classification; skills in addition to typewriting were required for employment as typist, clerk, and other office employees; and the 19 businesses contacted considered 30 different attitudes and personality traits very important for office employment. The trait most frequently mentioned was "pleasing personality" with initiative, ability, and moral honesty following.

This study seemed to indicate that office employees need a broad background offered at the secondary level rather than a great deal of specialization.

Lunley (9) examined the office standards used by businesses in hiring beginning office employees and from this study made suggestions for an improved business education program.

Fourteen businesses were chosen at random from the Madison (Wisconsin) area and surveyed. Six small offices (1 to 50 employees), two medium-sized offices (51 to 100 employees), and six large offices (over 101 employees) were included in the study.

Lunley found that businesses were not consistent in naming specific standards for employment. Only two businesses mentioned poor typewriting skills and none mentioned poor shorthand as weaknesses of beginners. Rates of 40 to 50 words per minute in typewriting and 80 to 100 words per minute in shorthand were most frequently required. Personality traits were considered important. Typewriting, filing, and office machine skills were required for more than one-half of the beginning jobs. Shorthand and bookkeeping skills were required in less than 25 per cent of the cases.

This study was conducted in a large population area. However, it appeared to be fairly representative of the desires and requirements of employers in other areas as revealed by a study of the available literature.

Sister Mary Antonine Foy (4) made a study to design a functional office practice course for senior students at Shanley High School, Fargo, North Dakota. Questionnaires were sent to 176 graduates who took the course between 1956 and 1961. The findings used for making course recommendations were based on an 88 per cent return of the questionnaire.

Foy found that the positions of general office worker and general typist were the ones held most frequently by the 106 graduates who did the office work. The position of file clerk ranked third, followed by receptionist, secretary, bookkeeper, switch-board operators, stenographer, and mail department worker. The greatest number of respondents named typewriting as the

most helpful skill developed in the high school course and ranked filing second. Further preparation in all phases of office machines was indicated as necessary or helpful on the majority of the responses. The office activities in which the greatest number of graduates engaged daily were answering the telephone, filing, and typewriting letters. The rotary calculator was used by very few.

Foy's study was done in an area of somewhat similar size and employment possibilities as this study. Many of her findings were similar to the findings made by the present investigator. Although Foy made her study prior to the enactment of the Vocational Act of 1963, it was used to design an office practice course which would meet the vocational needs of students who were potential office employees in 1962.

Muse (11), writing for the American School Board Journal, said that business education is recognized as having two separate, yet closely related, objectives. The first is concerned with the development of general business and economic concepts for all persons regardless of social or economic status. The second objective is concerned with the preparation for effective vocational service in office, sales, and service occupations.

He stated that "business education makes its greatest impact on the greatest number of pupils at the secondary level." The Act of 1963 set for business and office education the goal of initiation of improvements for better business education, not more business education. "The vocational business and office education curriculum should be described in a local plan designed to meet specific local business and office occupational career objectives." Vocational business and office experiences may be

provided through an office laboratory in the school or through work experience.

Muse believed that the implications for business and office education of the 1963 Act would mean more funds, better planned education, and better vocational business and office education in terms of need and work standards.

Hosler (8), also writing for the American School Board Journal, said business education in the secondary school has three major functions: the development of basic business and economic education; the development of personal use competencies (He believed that typewriting should be available for all students.); and, the development of vocational competencies for employment in business. This final objective will continue in the secondary curriculum even though adjustments may be necessary because of the technological changes which will take place in the business office. He stated that competent workers are always in demand. Clerical finishing courses should give terminal instruction in typewriting, filing, and extensive instruction on those business machines which are desirable for the nonstenographic, clerical worker.

The opinions business teachers and administrators had about business education were studied by Whiting and Yetka (18). They found that the thinking of business teachers and administrators in Wyoming and Colorado was representative of the ideas expressed in This We Believe about Business Education in the High School (15). In the area of office practice, This We Believe specifically stated the following:

a. The basic purpose of office practice should be the integration and development to a higher level of previously acquired skills.

b. Office practice courses should also include the teaching of some new technical and personal skills and knowledges such as filing, machine transcription, duplicating, personal development, and occupational intelligence.

c. Unless a separate course is offered in business machines, such instruction should either be integrated with other courses or be an essential part of an office practice course.

d. Office practice should be realistic in preparing students for modern-day offices. It should include visits to up-to-date offices and a study of such topics as automation, office orientation, work flow, work procedures, office routines, and supervised cooperative work experience, where feasible.

Bureau of Labor statistics reported in the Occupational Outlook Handbook (12) that over one-half of the girls who graduate from high school and do not go on to college go into office work when they first enter the labor market, and approximately ten per cent of the young men enter the world of work in an office occupation. There are approximately 10,000,000 persons employed in office work at the present time. It is estimated that by 1975 this figure will have risen to 14,000,000. Students who have completed an office practice course will become a source for trained clerical workers.

From this review of literature, the author found that most of the recommended course outlines for office or clerical practice were made prior to the Vocational Act of 1963. She also found that several of the investigations, such as Hall's (6) made in Augusta, Georgia, and Lunley's (9) made in Madison, Wisconsin, were done in large industrial areas where the demand for clerical employees would probably be greater and the skills required for a specific job more specialized than would be found in Missoula, Montana. For example, if Lunley's figures were used, less than five offices in

Missoula could be classified as large offices having over 101 employees. Most available beginning clerical jobs in Missoula are found in small offices (1 to 50 employees). Therefore, the course outlines suggested by these two investigators would vary somewhat from a practical course outline for Sentinel High School. The author noted that these course outlines did not include a unit on automated data processing, but because of the technilogical advances which are taking place in office work at the present time, it seemed advisable to include ADP in this evaluation.

Frisch (5) pp. 67, writing for the 1967 Selectected Readings for Business and Office Occupations, stated that "In many schools course content . . . has been developed, based upon the work and the employment possibilities of the community. Perhaps this is as it should be, if a large percentage of the graduates still find employment in the immediate area."

Frisch goes on to say that the great mobility of our population has changed the employment possibilities of high school graduates. If there is an indication that graduates seek employment elsewhere, "they must have extensive training in office skills so they can adapt to the work in any metropolitan center."

It should be noted here that only two of the original twenty-two respondents involved in this evaluation lived outside the Missoula employment area. These two were not employed in clerical occupations. They were away from Missoula because their husbands were in the Armed Forces.

Therefore, the evaluation of the Office Practice course at Sentinel High School was commenced with two questions in mind:

1. What changes should be made in course content to develop the skills,

attitudes and knowledges necessary for the student to secure an entry clerical job.

2. What skills, attitudes and knowledges do employers seek when they are employing a beginning clerical employee.

With these questions in mind, information for the evaluation of the Office Practice course was obtained through personal interviews with employees and their employers. The findings of these interviews are compiled in Chapter III. The ratings of the on-the-job usefulness of each unit taught are summarized in Tables I, II and III (pages 20, 22 and 27).

CHAPTER III

EVALUATION OF THE OFFICE PRACTICE COURSE BY GRADUATES AND EMPLOYERS

According to opinions found in the literature studied, employers today are concerned both with quantity and quality of production. It is the responsibility of the high school program in vocational business education to establish satisfactory standards upon which employers can depend. Employees are concerned with the possession of salable skills when they are ready to enter the labor market. The business educator has the responsibility of keeping up with technological changes which are taking place within the employment area of the students. He must continually revise and upgrade the business courses to meet these changes.

It seemed advisable to make certain changes in content of the Office Practice course at Sentinel High School so that the clerical needs of both employers and beginning employees would be met. The 1965-66 Office Practice class and their employers were chosen for this study since this was the first year the class operated under the provisions of the Vocational Act of 1963, receiving Federal reimbursement because it qualified as vocational in content and purpose.

Initially, the twenty-four members of the class were polled to determine the job status of each. (See Appendices A and B for the post card questionnaire and cover letter.)

Twenty-two (90 per cent) of the cards were returned. Eleven indicated they were employed in non-clerical or clerically related jobs; seven indicated employment in clerical jobs; two were unemployed; and two had married and had not entered the labor market.

NON-CLERICAL OR CLERICALLY RELATED EMPLOYEES

A questionnaire was sent to the eleven employees doing non-clerical or clerically related tasks (Appendices C and D) asking that they rate each unit taught in Office Practice on the basis of present on-the-job value to them. A rating scale of A-B-C-D-E was used, with A indicating that the unit was of great value and E indicating that it was of little value.

Seven (62.6 per cent) of the questionnaires were returned. Table I (page 20) is a summary of these questionnaires.

Comments on the questionnaires indicated a desire to have received more training on all machines except the key-drive calculator and to have had more time spent on filing and recordkeeping. There was complete agreement that the units on grooming, telephone techniques and office attitudes were of great value. No indication was made that additional time should have been spent on these units. Two respondents indicated a desire for additional automated data processing study. The fact that one respondent was employed in the PX at an Army base in Texas, where she came in contact with punch card ordering and inventory control, probably influenced her comment. The other respondent was employed by Mountain States Telephone and Telegraph and probably realized that additional training would enable her to get a better job. Generally respondents commented that this unit was sufficient as taught or they made no comment as to its value.

It seemed desirable to include the non-clerical ratings and comments in this study because one-half of the original respondents were not clerically employed and the administration was concerned with what appeared to

TABLE I

SUMMARY OF VALUE OF EACH UNIT

NON-CLERICAL AND CLERICALLY RELATED EMPLOYEES*

	RATING SCALE From greatest value to least value				
	A	B	C	D	E
MACHINES					
10-Key	2				2
Full-Key Board	2	1			1
Rotary Calculator					4
Key Driven Calculator				1	3
Dictating			2		2
DUPLICATING					
Fluid	1	1			2
Mimeograph		1			3
AUTOMATED DATA PROCESSING	1			1	3
FILING	3				2
RECORDKEEPING	4			1	1
TELEPHONE TECHNIQUES	5		1		
GROOMING	7				
OFFICE ATTITUDES, ETHICS, AND ETIQUETTE	6				

*There were seven respondents in this group.

be a high mortality rate at the completion of the vocational preparatory course. If these employees had indicated a lack of clerical preparation as the reason for their dropping out of the clerical field, a major change in course content and method of instruction would have resulted. The non-clerical employees gave no adverse comments, and the "E" ratings given a unit generally indicated that the unit was not used on the job. However, a brief study of the wages earned by the non-clerical employees, and a comparison made between these wages and those earned by the clerically employed clearly indicated that the graduates accepted jobs where monetary reimbursement was greatest even though these jobs were not in the area for which the graduates had been vocationally trained.

Recommendations made in Chapter IV may help to hold the clerically trained in the clerical field.

CLERICAL EMPLOYEES

Seven clerical employees were mailed questionnaires with a letter of explanation (Appendix E). Questionnaires were collected at the time of the personal interviews which were held with six of the clerical employees. One employee returned her questionnaire by mail, but was not available for a personal interview.

Table II (page 22) summarizes the ratings given each basic unit by the clerical employees. Ratings were made by the employees according to the on-the-job usefulness of each basic unit taught in the Office Practice course.

Comments, and suggested course changes, were gathered during the

TABLE II

SUMMARY OF VALUE OF EACH UNIT

CLERICAL EMPLOYEES*

	RATING SCALE From greatest value to least value				
	A	B	C	D	E
MACHINES					
10-Key	1	1	1	1	2
Full-Key Board	2	1	1		2
Rotary Calculator	2	2			2
Key Driven Calculator		1			5
Dictating	1		1		4
DUPLICATING					
Fluid	4				3
Mimeograph	2		1		3
AUTOMATED DATA PROCESSING		1			4
FILING	5	1	1		
RECORDKEEPING	5		2		
TELEPHONE TECHNIQUES	4	1	1		
GROOMING	7				
OFFICE ATTITUDES, ETHICS, AND ETIQUETTE	6	1			

*There were seven respondents in this group.

the personal interviews. Following is a compilation of these comments regarding the importance and usability of each unit taught.

Respondents rated 10-key and full-key board adding machines, and the rotary calculator according to actual on-the-job value to them. All respondents indicated that development of a proficient skill on the machines which they operated at work would have been desirable. Four respondents indicated more time should have been spent on instruction and development of skill in operating the rotary calculator. A rating of "B" given the key-driven calculator by one employee indicated that she enjoyed the instruction time spent on this machine, although it was of no value to her on the job. None of the interviewees used the key-driven calculator. The printing calculator was not available for instruction to this class.

Three of the six interviewees used a dictating machine at work. The three were in agreement that too little time was spent on this unit, because of lack of equipment. The one rating of "A" given this machine indicated the little instruction received was valuable, but a great deal more time for skill building was desirable. Two of these interviewees said they would use dictating equipment a great deal more if they possessed the required skill and speed.

All interviewees indicated the time spent on the duplicating unit had been sufficient. Two used the fluid duplicator frequently, and one used the mimeograph infrequently. Four of the employees interviewed never used either duplicating machine. Five frequently used a photocopier and suggested that a short introductory unit on operation and handling of materials for the photocopier would be a valuable addition to the Office Practice course.

None of the respondents expressed the belief that the unit on automated data processing was of use to them on the job. The five who rated the ADP unit indicated too much time was spent on this unit.

The seven employees considered the unit on filing to be the most useful to them on the job. All were involved with the finding and filing of records. One used a numeric system exclusively. One used it in addition to an alphabetic system, and she also used a partially chronological record file. These two employees suggested that it would have been valuable if more time had been spent on coding and filing by code number. Five used alphabetic filing methods. One respondent indicated that the filing unit was too complicated and should be made more realistic according to actual office standards. The interviewees said it was not difficult to transfer the knowledge of filing from the classroom to actual use in a business office.

No special comments were made regarding the recordkeeping unit.

The four employees who rated training in telephone techniques as "A" used the telephone extensively. Two of these four employees indicated that more emphasis should be placed on this unit, but that no more time should be spent on it.

All seven rated grooming "A".

The six interviewees agreed that the unit on office attitudes, ethics and etiquette was of great importance because of the general knowledge it contained. However, they emphasized that proper office conduct is acquired on the job from observation rather than in the classroom.

Only one clerical employee had taken the Advanced Shorthand and

Transcription course. She did not use this skill on the job.

It should be noted here that none of the employees indicated a desire for the addition of a unit on production typing and statistical typing. With the exception of the student who took Advanced Shorthand and Transcription, all had only the minimum requirement of one year of typing. Use of the typewriter was reported to be a main task by six of the seven respondents.

In summarizing employee comments, it would appear that they desired:

1. Proficiency skill in the operation of the 10-key, full-key board, rotary calculator, and dictating machines.

2. Operative knowledge, but not skill, for using a fluid duplicator, mimeograph, and photocopier.

3. A shortened unit of automated data processing composed of terms, kinds of equipment available, and the "why" of this equipment, not the "how."

4. A filing unit which is intermingled with some actual filing practices used by Missoula businesses.

5. Retention of the recordkeeping unit with no changes made.

6. A unit which placed emphasis on proper telephone techniques and gave practical experience in use of a six-button intercom type telephone before employment.

7. A unit on proper grooming for the office.

8. A unit on proper office attitudes, ethics and etiquette; but it was suggested that much is learned by watching, listening and doing on the job.

EMPLOYERS

Six employers were interviewed. A questionnaire was given each employer at the time of the personal interview and each point discussed with him and rated at that time. Table III (page 27) is a summary of the rating given each unit of the Office Practice course by the employers.

The "E" ratings given to the business machines generally indicated that the employee did not use this equipment in her present job situation. The ratings of "A" given to these same machines indicated that the basic skill acquired in the classroom was of value, and additional proficiency had been acquired on the job. None of the businesses employing these interviewees used or owned a key-driven calculator. Occasional use was made of a printing calculator by two businesses, but the interviewees indicated that operative skill was all that was necessary for an employee and that basic skill for using a printing calculator would be acquired from classroom instruction on the 10-key machine.

All of the interviewees indicated they used a dictating machine from "a great deal" to "once or twice a year." Three employers indicated that the employees needed additional skill on this equipment. The "A" rating by one employer indicated the training was valuable; but she said if the employee had more basic skill in the use of the dictating machine, she would have been a more valuable beginning employee and her period of training would have been shorter. The employer who rated this unit "D" was of the opinion that the employee should have acquired more skill in the classroom. The rating of "E" indicated that the specific department where the

TABLE III

SUMMARY OF VALUE OF EACH UNIT

EMPLOYERS*

	RATING SCALE From greatest value to least value				
	A	B	C	D	E
MACHINES					
10-Key	2		1		1
Full-Key Board	2				2
Rotary Calculator	3				2
Key Driven Calculator					2
Dictating	1			1	1
DUPLICATING					
Fluid	1	1			
Mimeograph	1				2
AUTOMATED DATA PROCESSING					3
FILING	5		1		
RECORDKEEPING	3	1			
TELEPHONE TECHNIQUES	3	1	1		
GROOMING	4	1			
OFFICE ATTITUDES, ETHICS, AND ETIQUETTE	3	1	1		

*There were six respondents in this group.

employee worked had only recently begun using dictating equipment, but that it would have been most valuable for the employee to have had a basic skill and operative knowledge of this machine.

Generally, employers did not rate the duplicating unit as important. The three ratings shown in Table III indicated that no additional training was needed for the employees who used a fluid duplicator or a mimeograph. All employers interviewed expressed the need for the employee to have operable knowledge of a photocopier. Four never used a fluid duplicator, and four had no need for an employee with knowledge of the operation of a mimeograph.

Although two of the businesses used automated data processing to some extent, the employers indicated that extensive pre-entry job training was unnecessary. The two graduates employed by these businesses were not involved in this type of work, and the employers indicated that only a basic knowledge of terms and kinds of equipment would be of value. The other four employers did not use ADP.

All of the employers interviewed stressed the great importance of filing. Five rated this unit "A" and said no additional training was necessary. The employer rating the unit "C" indicated that the filing unit should be simplified. This business used a very simple alphabetic system. It was agreed by the employers that, although the filing unit was sufficient, accuracy should be stressed.

Three interviewees rated recordkeeping "A",and one rated this unit "B". Generally employers commented that basic knowledge acquired from recordkeeping was of value and that this unit could be used to increase students'

accuracy awareness.

Three ratings of "A" given telephone techniques indicated that the employees needed very little additional training for on-the-job telephone usage. Two of these employers showed movies on the subject if they believed telephone techniques needed improving. The employer who rated telephone techniques "B" suggested that realistic office situations might have increased the beginning employee's proficiency and self-confidence in telephone usage. The "C" rating was evidence of a personality clash in the office rather than a lack of basic skill.

Grooming instruction was rated valuable by five interviewees. No suggestions were made regarding changes in this unit. Two businesses used a movie on good grooming when they found their employees "slipping."

Employers agreed that office attitudes, ethics and etiquette were a valuable part of an office practice course, but they were of the opinion that most of these attitudes were gained through office experience and not from high school instruction. The rating of "C" was given for personal reasons, and did not indicated that the unit was inadequate.

In summarizing employers' comments, it would appear that they desire beginning clerical employees to possess the following skills and knowledges:

1. Proficiency in operation of the 10-key, full-key board, rotary calculator and dictating machines. Operative skill in operation of the printing calculator.

2. Operable knowledge of duplicating equipment.

3. Operative knowledge of photocopying equipment and use of materials.

4. The fundamentals of filing with emphasis placed upon alphabetic

and numeric methods that are practical for a Missoula business.

5. Proper telephone techniques which include experience in telephone usage prior to employment if practical.

6. Techniques of on-the-job grooming and makeup, as well as, a knowledge of the proper dress and makeup to use when applying for a job.

7. Acceptable office attitudes, ethics and etiquette.

8. Proficiency in typing beyond that which is normally acquired in a one-year high school typing course.

9. Proficiency in written and oral communicative skills.

Employers suggested that students should receive continual encouragement toward neatness, accuracy of work, and pride in their job throughout the Office Practice course.

UNEMPLOYED

At the time the survey for this evaluation was conducted, four of the former students indicated that they were unemployed. Two of these four had married soon after graduation and had never sought employment.

The investigator telephoned the two unemployed. One lived approximately 50 miles from Missoula and had been interviewed for two jobs in Missoula--clerical employment near her home was extremely limited with Indians being given first preference. Although she was offered both jobs for which she was interviewed, she did not think the beginning salary would compensate for board, room and travel expenses.

The other student was anxiously seeking employment in the Missoula area. She indicated that she had applied for several jobs, but was having

difficulty securing employment. She believed that she was well-qualified to do any of the jobs for which she had applied.

The author had the opportunity to talk with the personnel manager of a large business in Missoula where both the unemployed girls had made application. The first girl had scored well on pre-employment tests and had successfully met other qualifications through a personal interview. The unemployed person, who believed she was well-qualified, had made low scores on the written tests and appeared to be completely disinterested in getting the job when she was interviewed. She was in a hurry, could not complete the interview and was not offered the job.

The unemployed were not asked to complete rating questionnaires since they had not had actual office experience. The interviews seemed to indicate that one would have little difficulty obtaining employment if she found a job near her home or a profitable one in Missoula. It appeared, however, that it would be necessary for the other girl to change her personal attitude before she would be employed.

COMPARISON OF THE BASIC SKILLS AND KNOWLEDGES DESIRED BY BEGINNING EMPLOYEES WITH BASIC SKILLS AND KNOWLEDGES DESIRED BY EMPLOYERS

When making a comparison between basic skills and knowledges for office practice course content desired by the beginning clerical employees who took Office Practice and the basic skills and knowledges employers desired these beginning employees to possess, there are many similarities and a few startling differences.

Although both employees and employers desired skill proficiency in

machine operation, employees tended to want speed proficiency in the operation of the 10-key, full-key board and rotary calculator, while employers desired operable skill and knowledge of the machine with classroom emphasis placed on accuracy. The opinion of the employers was that speed would be gained on the job where an employee would be using a particular machine.

Both agreed, however, that as much skill proficiency and speed as it would be possible to acquire in the instruction time allotted should be the goal for operation of dictating equipment.

They also agreed that operable knowledge of duplicating equipment was adequate except for very specialized tasks; specialization for duplicating production should be acquired on the job. They generally agreed also that the technique of handling materials was important, and that the chief value received from classroom competency in operation of a fluid duplicator and mimeograph lies in the additional emphasis placed on accurately typing masters and stencils. Both agreed that operative knowledge of photocopying equipment was desirable.

Employees and employers indicated that ADP should not be omitted entirely from the course because of the ever-increasing use of automated equipment. But, at the present time, the need in Missoula for employees with these special skills was not great and most businesses preferred to train their employees on the job for a special task. Although a few employees expressed a desire to learn the operation of some specialized automated equipment, most employees and all employers agreed that an introduction to terms and types and uses of equipment would be adequate. They did agree, however, that this unit should be kept under close observation and that unit

content and objectives probably would change yearly as use of data processing increased in Missoula.

Filing seemed to be all important to both employees and employers. A realistic, business-like approach was suggested by both groups with emphasis on accuracy desired by employers.

No recommendations for changing the recordkeeping unit were made by either group. Employers emphasized that accuracy was more important than high speed and that recordkeeping tasks differed with the job. They believed a general classroom offering, with specialized training on the job, would be adequate.

Employers indicated most telephone techniques, beyond the basics, could be learned on the job. Employees believed this also, but indicated that they needed certain classroom instruction to give them more self-confidence in telephone usage. Both groups agreed that some pre-employment practical experience with a six-button intercom type telephone would be helpful.

Employees made no suggestions regarding either the grooming unit or the office attitudes, ethics and etiquette unit. Some employers indicated that careful consideration was made of an applicant's dress and makeup at the time of the job interview. It was generally agreed that improvement in office attitudes, ethics and etiquette were acquired on the job. Neither this unit nor the one on grooming should be omitted from the course, but they are an integral and important part of the beginning employees on-the-job training, also.

Employers made two suggestions for course additions which the employees

did not mention. All employers desired good, accurate typists. Great typing speed was not a requirement for initial employment. They wanted employees to have skill in handling the typewriter and typing materials. They also desired employees to be competent in the typing of forms, reports and numerical tabulations. Employers indicated that, while it was of some importance for the beginning employee to be able to type letters at a good rate of speed, it was more probable that a beginning employee would be assigned typing tasks where complete accuracy was more important than great speed.

Secondly, employers suggested the addition of a unit on oral and written communication skills. They pointed out that misunderstood messages and poorly given directions caused thousands of hours and dollars to be wasted each year. These employers suggested that adding such a unit to the Office Practice course would be of great value to them and to beginning employees.

The content of a vocational preparatory course must be satisfactory to meet the demands of both the students who will seek employment and the employers who will employ these students upon graduation. Assuming that Tate (14) is correct in stating that "students must possess salable skills to be employable," it is of utmost importance for the Office Practice course at Sentinel High School to establish a course content that will give these students the salable skills that are desired by employers. It is also the responsibility of the staff to continue to "extend and improve" the Office Practice course under the provisions of the Vocational Act of 1963 (16).

It is the desire of the evaluator to retain in the clerical field some of the better students who leave each year to find employment in non-clerical or related areas. Reasons for the exodus have already been discussed.

Recommendations for changes in course content to better satisfy the needs of prospective beginning employees and employers are made in Chapter IV.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The writer's purpose for conducting this study was to evaluate the Office Practice course at Sentinel High School by making a comparison between the units taught and the units beginning employees and employers desired for clerical competency.

The objectives of the course at Sentinel were similar to those in Monograph 91 (7); but objectives in 1967 included some type of work experience according to Muse (11); and other vocational business education leaders.

Units taught at Sentinel were similar to those outlined in parts b, c, and d of This We Believe about Business Education in the High School (15), a listing of these units appears on page 15 of this study.

SUMMARY

In summarizing the opinions of employees, it may be noted that they expressed a need for sufficient classroom instruction to give them competence in clerical skills. They possessed a keen sense of competition when seeking employment and indicated that they needed more self-assurance in their abilities to be able to compete successfully for entry positions. As students, they gave little thought to the traits and attitudes a successful employee should possess, and as beginning employees, they still believed most of these desirable qualities were acquired on the job. Employees did not place a great deal of importance on written and oral communication, spelling, additional typing skills, ability to proof read and complete accuracy of work. They believed that speed and knowledge of clerical skills

would assure their employability and enable them to retain employment once it had been secured.

Employers indicated the great importance of accuracy of work rather than speed. They desired employees who were proficient in typing forms and numbers correctly; who possessed the basic knowledge and skill of machine operation; and, who were able to spell correctly, follow and give directions, and to communicate intelligently. Although employers desired employees who were well-groomed, had pleasing personalities, and possessed proper office attitudes, they did not place a great deal of importance on classroom instruction in grooming and office attitudes. They indicated these traits and attitudes could be learned on the job.

All employers desired employees with skill in the operation of dictating equipment. None of the employers indicated shorthand skill as being a requirement for clerical employment.

CONCLUSIONS

From this study and subsequent evaluation of the program at Sentinel High School, it may be concluded that several of the units of the Office Practice course which met the needs of employees and employers were: filing, duplicating (with the inclusion of instruction on the use of a photocopier) recordkeeping, telephone techniques, grooming, and office attitudes, ethics and etiquette. However, upgrading of some units and addition of others seemed advisable in order to give maximum classroom training to the students prior to their entry into the labor market.

It appeared that more time should be allowed for the development of

skill on the following machines: typewriter, 10-key, full-key board, rotary calculator, printing calculator, and dictating machines. One hundred per cent accuracy should be the anticipated goal for completion of each task in this unit.

Units on communicative skills and production and statistical typing should be added.

The number of graduates leaving the clerical field to find employment elsewhere seemed to indicate that consideration should be given to the basic occupational career objectives of the students and instruction should be individualized to meet specific needs.

It also appeared, as evidenced by the frequent mention of "practical experience" by both employees and employers, that cooperative clerical training should be considered, and a directed or simulated approach considered for those students who found it impractical to participate in a cooperative program.

RECOMMENDATIONS

The evaluator will make the following recommendations to the Sentinel High School Business Education Department staff and the Administration regarding changes in Office Practice course content:

1. Additional machines, listed below, should be purchased to complete the Office Practice laboratory, and standards established for each type of machine, for the satisfactory completion of classroom skill building activities.

2 rotary calculators
2 printing calculators
1 full-key board adding machine
2 - 4 dictation machines with prepared tapes
1 photocopier

Recordkeeping activities should be included with the machines unit to give the students additional experience in machine usage.

2. An introductory unit on automated data processing should be substituted for the present unit. This shortened unit should include lectures by qualified authorities on ADP, field trips, and extensive use of audio visual aids.

3. Two additional units should be added to the Office Practice course: (1) production and statistical typing, and (2) oral and written communication skills.

4. Office Practice at Sentinel High School should be structured to utilize a three-phase plan—cooperative, directed, simulated—with the instructor acting as coordinator of the cooperative activities.

The interviews brought out the need of employees for practical training in several areas before employment. Business education authorities agree that practical experience in clerical occupations can be gained in three ways. First, through a cooperative program where the student is employed by a local business to do pre-planned clerical work for a stated number of hours per week during the school year in order to supplement his classroom instruction with office experience. These activities are closely supervised by an immediate superior on the job and by a coordinator from the school.

Second, through a directed program where the classroom instruction

is as office oriented as practical and where this instruction may be supplemented occasionally with short periods of actual paid or volunteer work experience. There is no plan for this on-the-job instruction during these periods of employment.

Third, through a simulated program where the instruction is carried out in the classroom entirely, but the projects used have been drawn from the tasks of local businesses. Although the student is not away from the classroom, he is afforded the opportunity to get the "feel" of clerical work by doing activities in which local businesses are involved.

If the program at Sentinel High School were changed according to these recommendations and those of authorities in the business education field, it is believed that graduates would be better prepared to enter the labor market, and that more of them would remain in the clerical field because they would have both the classroom instruction and on-the-job experience which were desired by employers.

APPENDICES

APPENDIX A

Please indicate below which category you are in at the present time.

Employed in the clerical field_____
Employed in a clerically-related field_____
Employed in a non-related field_____
Unemployed_____
In school_____. If so, where and what curriculum_____
_____
Married and left the labor market_____
In the military service_____

Name and address of employer_____
_____
Your name and current address_____
_____

Post card questionnaire

APPENDIX B

March 22, 1967

Dear

It is necessary for me to write a Professional Paper to complete the requirements for a Master's Degree in Applied Science at Montana State University, Bozeman. I am hoping to get this paper completed this summer, but I need some help from you. The title of the paper will be "An Evaluation of the Office Practice Course at Sentinel High School."

I wish you would answer the questions on the enclosed card, and mail it to me at your convenience. After I have received and tabulated your answers, I will make an appointment with you for a personal interview. I will also interview your employer (if you are--or were--employed in the clerical field). From these interviews I hope to be able to determine what you and your employer think is worthwhile in the course, what could be eliminated, what should be emphasized, and what changes should be made to keep the Office Practice course here at Sentinel on the upgrade.

I will be looking forward to hearing from you; and you, in turn will be hearing from me again.

Sincerely,

(Mrs.) Ann Wiles
Chr., Bus. Educ. Dept.
Sentinel

APPENDIX C

Q U E S T I O N N A I R E

For employees in clerical, clerically related, or non-clerical fields.

Rating scale A-B-C-D-E. A indicates greatest value, E least value.

	On-the-job value to you
MACHINES:	
10-Key	_____
Full-Key Board	_____
Rotary Calculator	_____
Key Driven Calculator	_____
Dictating machine	_____
DUPLICATING:	
Fluid	_____
Mimeograph	_____
Automated Data Processing	_____
Filing	_____
Recordkeeping	_____
Telephone Techniques	_____
Grooming	_____
Office attitudes, ethics, and etiquette	_____

Which one or two units do you believe should have been allowed more class time, or should have been taught by some other method, to have been of greater on-the-job value to you?_____

Why?_____

_____

I would appreciate the following information, also. Feel free to omit all or part of it if you so desire.

Name and phone number of your supervisor_____

Your hourly or monthly wage_____

Your name_____

Your address_____Phone number_____

Rating questionnaire completed by all employees and clerical employers.

APPENDIX D

1024 Stephens, Apt. 11
Missoula, Montana 59801
May 5, 1967

Dear

On the card you returned to me sometime ago you indicated that you were employed in a non-clerical job or were attending college.

Nevertheless, there are some questions I would appreciate having you answer for me. Since you are a former office practice student, your opinion is of great importance to me. There are some questions concerning the value you place on each unit taught in the class which I would appreciate your answering. My main objective in making this survey is to find out the weak points and the strong points of the course; and then determine ways to improve the office practice course so it will be more useful to the students enrolled in it.

Attached is a questionnaire listing units taught. Please rate each unit, using a scale of A-B-C-D-E (A being of great value to you, E, little or no value) in terms of present on-the-job value to you. Those people attending college should rate as to value in present college course work instead of on the job.

I would appreciate a prompt reply. A self-addressed envelope is enclosed for your convenience.

Thank you all so much !

Sincerely,

(Mrs.) Ann L. Wiles

Cover letter for rating questionnaire to
non-clerically or clerically related employees

APPENDIX E

1024 Stephens, Apt. 11
Missoula, Montana 59801
May 10, 1967

Dear

Again, I am calling on you for some information.

Enclosed is a questionnaire. I wish you would look it over, and rate each question on the A-B-C-D-E scale (A being of great value, E of little value).

Do not return this questionnaire to me. In a few days I will call you for an appointment so that we may go over the ratings together.

Thanks again . . .

Sincerely,

(Mrs.) Ann L. Wiles

Encl

Cover letter for rating questionnaire
sent to clerical employees.

LITERATURE CITED

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1. Beaumont, John. "50 Years of Progress in Business Education." American Vocational Journal 31: 47-54; December 1956

2. Braden, Paul Vaughn. Effect of High School Vocational Office Training upon Subsequent Beginning Career Patterns. Doctor's Thesis. East Lansing: Michigan State University, 1963. 176 pp. (Abstract: Vol. 25, No. 2: 1022-23. 1964.)

3. Deeney, John B. Evaluation of the Business Curriculum by Graduates of Richey High School. Master's Thesis. Bozeman: Montana State College, 1961. 35 pp.

4. Foy, Sister Mary Antonine. A Design for a Functional Office Practice Course at Shanley High School, Fargo, North Dakota. Master's Thesis. Grand Forks: University of North Dakota. 1962. 97 pp.

5. Frisch, Vern. "Preparing Students for Office Occupations." Selected Readings in Business and Office Occupations. NBEA Yearbook No. 5: 67-72. National Business Education Association. Washington, D. C. 1967.

6. Hall, Mary E. "Standards for Office Workers." The Journal of Business Education 39: 287; April 1964.

7. Handbook for Office Practice Teachers. Monograph 91. South-Western Publishing Co. Cincinnati. 3; 1954.

8. Hosler, Russell J. "Business Millions to Grow--Education Must Serve." American School Board Journal 152: 46-7; February 1966.

9. Lunley, Theodore R. A Survey of Madison, Wisconsin, Businesses to Determine the Office Employment Standards Used in Hiring the Beginning Office Employee. Master's Thesis. Madison: University of Wisconsin. 1962. 47 pp.

10. Mays, Arthur E. "50 Years of Progress in Vocational and Practical Arts Education." American Vocational Journal 31: 29-38; December 1956.

11. Muse, Paul F. "Federal $$ Offer Challenge." American School Board Journal 152: 26-27; February 1966.

12. Occupational Outlook Handbook. "Clerical Related Occupations." Bureau of Labor Statistics Bulletin 1450. U. S. Department of Labor, Washington, D. C. 1966-67.

13. Roberts, Roy W. Vocational and Practical Arts Education. New York: Harper & Brothers, Publishers, 1957. 626 pp.

14. Tate, Donald J. "Salable Skills Aim of Office Practice Courses." American School Board Journal 152: 40-1; February 1966.

15. This We Believe About Business Education in the High School. Policies Commission for Business and Economic Education, UBEA. Washington, D. C. 1961.

16. United Statutes at Large. Vocational Education Act of 1963, Public Law 88-210. 88th Congress First Session. Vol 77; Public Laws: 403-18; December 1963.

17. Waters, Louise Harris. The Role of Clerical Office Practice in the General Business Curriculum. Master's Thesis. Bozeman: Montana State College, 1961.

18. Whiting, Vernon C., and Yetka, Alice M. A Comparison of the Beliefs and Practices of Business Teachers and Administrators in Colorado and Wyoming with the Publication "This We Believe About Business Education in the High School." Doctor's Thesis. Greeley: Colorado State College, 1963. 344 pp.